



Product Catalogue | edition

9



EverFocus®



Learn more about us.



With more than 10 years experience as a renowned manufacturer of excellent CCTV products, EverFocus offers a comprehensive product range geared to system integration. EverFocus Electronics Corp. with residence in Taipei, Taiwan, guarantees the worldwide distribution of CCTV products through branch offices in China, Japan, USA and Europe. The European distribution centre, EverFocus Electronics AG, is located in Emmerich am Rhein, Germany, where 25 employees are dedicated to fulfilling customer demands. Sometimes even the impossible ones. That's how we ensure your satisfaction. We offer you mutual success, a pleasant cooperation and a promise: **We are here for you.**

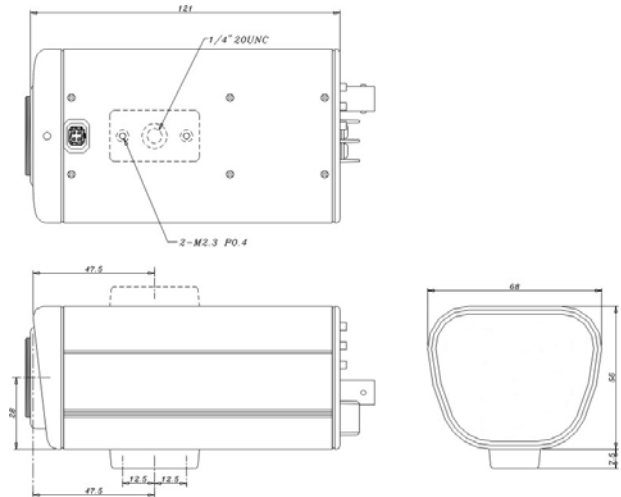


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Polestar Series



EQ 550 T - 1/3" day / night camera, high resolution, automatic IR cut filter

Specifications

Sensor: 1/3" SONY IT Colour CCD
Picture element: 752 (H) x 582 (V)
Horizontal resolution: 530 TV lines
Sensitivity: 0,002 lux (sens-up x128), 0,25 lux / F=1.2
S/N ratio: > 50 dB (AGC off)
Gamma correction: 0,45
OSD: yes
Day/night control: automatically swiveling IR cut filter and enhanced b/w sensitivity

IR cut filter automatic swivel control: high lux / low lux / OFF switchable by internal / external light sensor

External light sensor: optional (3,5mm jack)
Lens selection: direct drive (DC) / manual
Shutter selection: automatic / manual / flickerless
Back light compensation: off / low / middle / high
Colour temperature BIAS: adjustable
White balance: ATW (2500~8300°K) / AWC / manual
AGC: off / low / middle / high
DNR (Dynamic Noise Reduction): off / low / middle / high

Digital slow shutter: off / auto: x2 ~ x128 selectable
Camera ID: on / off
Privacy zones: on / off (4 zones, position/size/zone)
Sharpness: on / off (adjustable level)
Horizontal mirror: on / off
Video output: BNC VBS, 1,0 Vp-p, 75 Ohm
Sync. mode: internal / line lock
Audio: microphone output 500 mV max. / 47 kOhm, cinch
Serial interface: RS-485 (Protocols: EverFocus / Pelco-D)

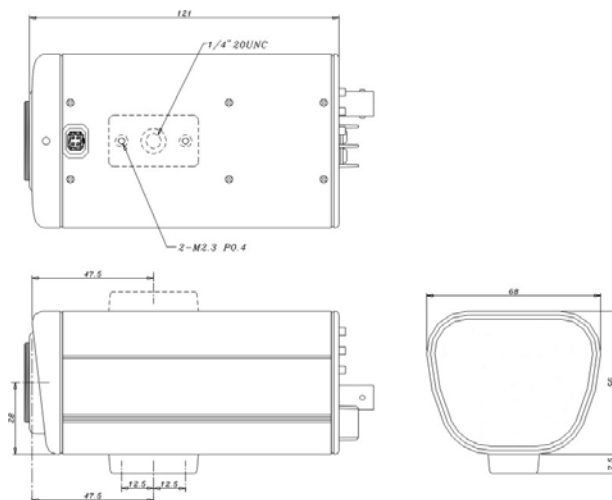
Power source: EQ 550 T A/P: 12 V DC / 24 V AC,
EQ 550 T/P: 100 ~ 240 V AC

Power consumption: EQ 550 T A/P: 7 W,
EQ 550 T/P: 11 W

Ambient temperature: 0°C ~ +50°C
Dimensions: 68 (W) x 56 (H) x 101 (D) mm
Weight: 600 g

Features

- ✓ super-high resolution technology (530 TV lines)
- ✓ built-in DNR (dynamic noise reduction)
- ✓ day/night function with automatically swiveling IR cut filter
- ✓ optimized for correction of focus shift with IR illumination
- ✓ advanced 16-bit digital signal processor (DSP)
- ✓ on-screen programming
- ✓ 4 adjustable privacy zones
- ✓ high infrared sensitivity
- ✓ support of both C-mount and CS-mount lenses



► EQ 550 D - 1/3" day / night camera, high resolution, static IR cut filter

Specifications

Sensor: 1/3" SONY IT Colour CCD
Picture element: 752 (H) x 582 (V)
Horizontal resolution: 530 TV lines
Sensitivity: 0,002 lux (sens-up x128), 0,25 lux / F=1.2
S/N ratio: > 50 dB (AGC off)
Gamma correction: 0,45
OSD: yes
Day/night control: automatic colour - b/w switching, 2 sensitivity levels / OFF

Lens selection: direct drive (DC) / manual
Shutter selection: automatic / manual / flickerless
Back light compensation: off / low / middle / high
Colour temperature BIAS: adjustable
White balance: ATW (2500~8300°K) / AWC / manual
AGC: off / low / middle / high
DNR (Dynamic Noise Reduction): off / low / middle / high

Digital slow shutter: off / auto: x2 ~ x128 selectable
Camera ID: on / off
Privacy zones: on / off (4 zones, position/size/tone)
Sharpness: on / off (adjustable level)
Horizontal mirror: on / off
Video output: BNC VBS, 1,0 Vp-p, 75 Ohm
Sync. mode: internal / line lock
Audio: microphone output 500 mV max. / 47 kOhm, cinch
Serial interface: RS-485 (Protocols: EverFocus / Pelco-D)

Power source: EQ 550 D A/P: 12 V DC / 24 V AC,
 EQ 550 D / P: 100 ~ 240 V AC

Power consumption: EQ 550 D A/P: 7 W,
 EQ 550 D / P: 11 W

Ambient temperature: 0°C ~ +50°C
Dimensions: 68 (W) x 56 (H) x 101 (D) mm
Weight: 600 g

Features

- ✓ super-high resolution technology (530 TV lines)
- ✓ built-in DNR (dynamic noise reduction)
- ✓ static IR cut filter, optimized for applications without IR lamps
- ✓ advanced 16-bit digital signal processor (DSP)
- ✓ on-screen programming
- ✓ 4 adjustable privacy zones
- ✓ support of both C-mount and CS-mount lenses



Colour Cameras

WD//
Wide-Dynamic



520
TVL



EQ 600 WD// - 1/3" Wide Dynamic colour camera, high resolution

Specifications

Sensor: 1/3" DPS (Digital Pixel System™)
Picture element: 720 (H) x 540 (V)
Horizontal resolution: 480 TV lines
Sensitivity: 1,0 lux / F = 1.2 (50 IRE)
Low speed shutter: up to 32x (2, 4, 8, 16, 32)
S/N ratio: > 48 dB
Auto exposure: yes
Auto white balance range: 2500 K ~ 9500 K
Back light compensation: yes
AGC: yes
Lens control: DD direct drive
Video outputs: 1 x 1 Vp-p composite, 1 x S-Video (Y/C output)
Gamma correction: 0,45
Dynamic range: 95 dB typical, 120 dB max.
Programming: on-screen / RS-232
Image flip: yes, horizontal reverse
Lens mount: C/CS mount
Power source: 12 V DC / 24 V AC
Power consumption: 7 W max.
Ambient temperature: 0°C ~ +40°C
Dimensions: 68 (W) x 57 (H) x 106 (D) mm
Weight: 600 g

EQ 350 HQ - 1/3" digital colour camera, high resolution

Specifications

Sensor: 1/3" SONY CCD
Picture element: 752 (H) x 582 (V)
Horizontal resolution: 520 TV lines
Sensitivity: 0,5 lux / F = 1.2
Video output: 1 Vp-p composite PAL, BNC
Audio: microphone output 500 mV max. / 47 kOhm, cinch
S/N ratio: over 48 dB
Gamma correction: > 0,45
White balance: automatic
Back light compensation: on / off
AGC: on / off
Synchronisation: internal or line lock with V-setup
Electronic shutter: on / off, 1:50 ~ 1:100.000
Flickerless function: on / off
Lens control: VD / DD switchable
Lens mount: C/CS mount, full range backfocus mechanism
Power source:
EQ 350 HQ A / P: 12 V DC / 24 V AC
EQ 350 HQ / P: 90 ~ 260 V AC
Power consumption:
EQ 350 HQ A / P: 5 W max.
EQ 350 HQ / P: 9 W max.

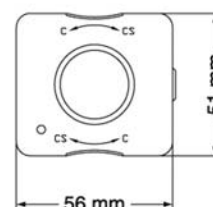
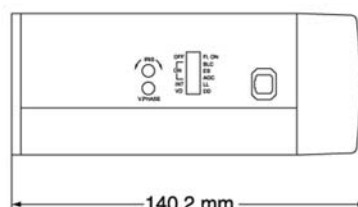
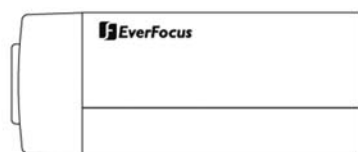
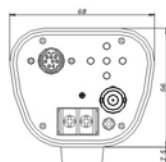
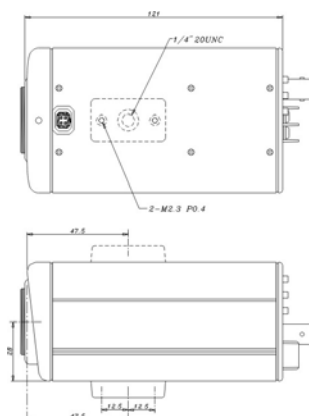
Ambient temperature: 0°C ~ +50°C
Dimensions: 57 (W) x 51 (H) x 140 (L) mm
Weight: 600 g (EQ 350 HQ), 500 g (EQ 350 HQ A)

EQ 250 HQ - 1/3" digital colour camera, standard resolution

Specifications

Sensor: 1/3" SONY CCD
Picture element: 500 (H) x 582 (V)
Horizontal resolution: 380 TV lines
Sensitivity: 0,3 lux / F = 1.2
Video output: 1 Vp-p composite PAL, BNC
Audio: microphone output 500 mV max. / 47 kOhm, cinch
S/N ratio: over 48 dB
Gamma correction: > 0,45
White balance: digital auto tracing
Back light compensation: on / off
AGC: on / off
Synchronisation: internal or line lock with V-setup
Electronic shutter: on / off, 1:50 ~ 1:100.000
Flickerless function: on / off
Lens control: VD / DD switchable
Lens mount: C/CS mount, full range backfocus mechanism
Power source:
EQ 250 HQ A / P: 12 V DC / 24 V AC
EQ 250 HQ / P: 90 ~ 260 V AC
Power consumption:
EQ 250 HQ A / P: 5 W max.
EQ 250 HQ / P: 9 W max.

Ambient temperature: 0°C ~ +50°C
Dimensions: 57 (W) x 51 (H) x 140 (L) mm
Weight: 600 g (EQ 250 HQ), 500 g (EQ 250 HQ A)





EQ 2700 - 1/4" day / night camera with 27 x motorzoom lens, high resolution

Specifications

Signal system: PAL
Scanning system: 2:1 interlaced
Scanning frequency (H): 15.625 KHz
Scanning frequency (V): 50 Hz
Sensor: 1/4" CCD
Total pixels no: 795 (H) x 596 (V), 470K
Effective pixels no: 752 (H) x 582 (V), 440K
S/N ratio: over 48dB
Horizontal resolution: more than 450 TV lines
Lens: aspherical 27 x zoom $f = 3,25 \sim 88,0$ mm,
F 1.5 (W), F 3.8 (T) Video AF

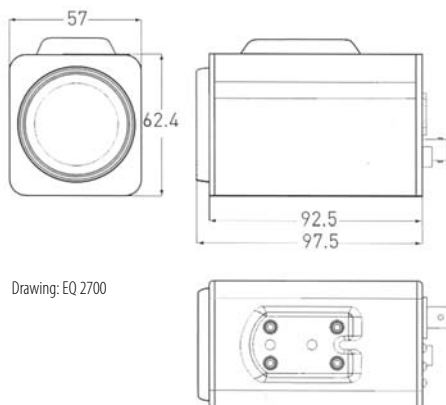
Minimum autofocus distance: WIDE 0,01 m, TELE 1,0 m
Minimum illumination: 1 lux (30IRE), AGC on,
0,01 lux with DSS Digital Slow Shutter, 0,05 lux night mode

Digital zoom: 10 x (total zoom ratio x270)
Synchronisation: internal
Electronic shutter: 1:50 ~ 1:10.000
Video output: 1 Vp-p composite PAL, BNC
S-video mini DIN

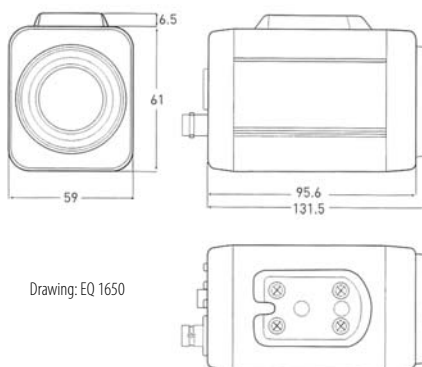
Camera control: local, DC control, RS-232, remote key
Zoom speed: 3 sec.
Zoom/focus preset: 64
Zoom mode: manual, push auto, auto
Power source: 9 ~ 15 V DC
Power consumption: 5,3 W max.
Ambient temperature: 0°C ~ +45°C
Operating humidity: 0% RH ~ 60% RH
Dimensions: 57 (W) x 62,4 (H) x 97,5 (D) mm
Weight: 330 g

Features

- ✓ 27 x optical and 10 x digital zoom
- ✓ automatic IR-Cut filter
- ✓ high IR sensitivity
- ✓ aspherical zoom lens
- ✓ integrated motion detection
- ✓ WDR - Wide Dynamic Range
- ✓ DSS - enhanced light sensitivity with Digital Slow Shutter function
- ✓ remote control with RS-232 interface and DC lens remote control



Drawing: EQ 2700



Drawing: EQ 1650

EQ 1650 - 1/4" colour camera with 16x motorzoom lens, high resolution

Specifications

Signal system: PAL
Scanning system: 2:1 interlaced
Scanning frequency (H): 15.625 KHz
Scanning frequency (V): 50 Hz
Sensor: 1/4" CCD
Total pixels no: 795 (H) x 596 (V), 470K
Effective pixels no: 752 (H) x 582 (V), 440K
S/N ratio: over 48 dB

Horizontal resolution: more than 450 TV lines
Lens: 16 x zoom, F1.6, $f = 3,9$ mm ~ 63 mm, video AF
Minimum AF distance: WIDE 0,01 m, TELE 1,0 m
Minimum illumination: 1 lux (30IRE), AGC on
Digital zoom: 8 x (total zoom ratio x128)
Synchronisation: internal
Electronic shutter: 1:50 ~ 1:10.000
Video output: 1 Vp-p composite PAL BNC
S-video mini DIN

Camera control: local, DC control, remote key
Zoom speed: 3 sec.
Zoom mode: manual, push auto, auto
Power source: 9 ~ 15 V DC
Power consumption: 4,7 W max.
Ambient temperature: 0°C ~ +45°C
Operating humidity: 0% RH ~ 60% RH
Dimensions: 59 (W) x 61 (H) x 101 (D) mm
Weight: 345 g

Features

- ✓ 16 x optical and 8 x digital zoom
- ✓ aspherical zoom lens
- ✓ OSD setup
- ✓ DC lens remote control
- ✓ pin-compatible to phase-out model EQ-1600
- ✓ 6 different white balance modes



Colour Cameras

520
TVC



520
TVC



EHD 525 EX - 1/3" day / night rugged dome camera, high resolution

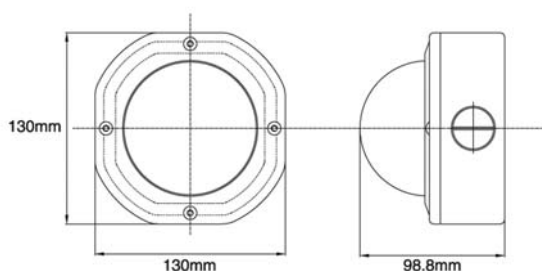
Specifications

Sensor: 1/3" SONY Exview™ CCD
Picture element: 752 x 582 (PAL)
Horizontal resolution: 520 TV lines
Sensitivity: 0,5 lux / F = 1.2 colour (day mode)
0,1 lux / F = 1.2 b/w (night mode)

Day/night control: automatic swiveling IR cut filter
Video output: 1 Vp-p composite PAL
S/N Ratio: over 48 dB
Gamma correction: 0,45
Synchronisation: internal / line-lock (only 24 V AC)
Line lock (24 V AC): on / off
Back light compensation: on / off
Auto white balance: yes
AGC: on / off
Electronic shutter: 1:50 ~ 1:100.000
Tamper contact: micro switch
Lens: DC varifocal lens, f=3,6 ~ 9 mm
Heater: 12 W thermostat controlled
Heater activating temperature: +10°C
Casing: zinc diecasted, dome polycarbonate, clear
Weatherproof rating: IP 66

Power source: 12 V DC +/- 10%, 24 V AC +/- 10%
Power consumption: 5 W max. (15 W with activated heater)

Ambient temperature: -40°C ~ +50°C
Dimensions: 130 (W) x 130 (H) x 99 (D) mm
Weight: 1,7 kg



EHD 350 HQ - 1/3" colour rugged dome camera, high resolution

Specifications

Sensor: 1/3" SONY CCD
Picture element: 752 x 582 (PAL)
Horizontal resolution: 520 TV lines
Sensitivity: 0,5 lux / F = 1.2
Video output: 1 Vp-p composite PAL
S/N Ratio: over 48 dB
Gamma correction: 0,45
Synchronisation: internal / line-lock (only 24 V AC)
Line lock (24 V AC): on / off
Back light compensation: on / off
Auto white balance: yes
AGC: on / off
Electronic shutter: 1:50 ~ 1:100.000
Tamper contact: micro switch
Lens:
EHD 350 HQ V1: DC varifocal lens, f=3,8 ~ 9,5 mm (IR-corrected)
EHD 350 HQ V2: DC varifocal lens, f=9 ~ 22 mm

Heater: 12 W thermostat controlled
Heater activating temperature: +10°C
Casing: zinc diecasted, dome polycarbonate, clear
Weatherproof rating: IP 66

Power source: 12 V DC +/- 10%, 24 V AC +/- 10%
Power consumption: 5 W max. (15 W with activated heater)

Ambient temperature: -40°C ~ +50°C
Dimensions: 130 (W) x 130 (H) x 99 (D) mm
Weight: 1,7 kg

EHD 300 - 1/3" colour rugged dome camera

Specifications

Sensor: 1/3" SONY CCD
Picture element: 752 x 582 (PAL)
Horizontal resolution: 480 TV lines
Sensitivity: 1,0 lux / F = 1.2
Video output: 1 Vp-p composite PAL
S/N Ratio: over 48 dB
Gamma correction: 0,45
Synchronisation: internal
Back light compensation: on / off
Auto white balance: yes
AGC: on / off
Electronic shutter: 1:50 ~ 1:100.000
Tamper contact: micro switch
Lens: DC varifocal lens, f=4 ~ 9 mm
Alignment: 3-axis adjustment of camera module
Casing: aluminium, dome polycarbonate, clear
Weatherproof rating: IP 66

Power source: 12 V DC +/- 10%, 24 V AC +/- 10%
Power consumption: 5 W max.

Ambient temperature: -10°C ~ +50°C
Dimensions: 130 (W) x 130 (H) x 99 (D) mm
Weight: 1,0 kg



EHD WMA - wall mount bracket

Material: aluminium
Dimensions: 150 (W) x 110 (H) x 170 (D) mm
Weight: 600 g
Max. load: 4 kg
Application: with EHD camera series

520
TVL



► EZ 350 HQ - 1/3" weatherproof colour camera, high resolution

Specifications

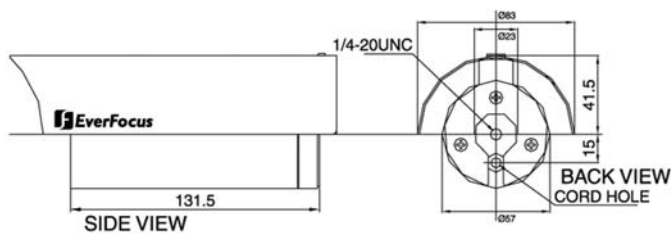
Sensor: 1/3" SONY CCD
Picture element: 752 (H) x 582 (V)
Horizontal resolution: 520 TV lines
Sensitivity: 0,5 lux / F = 1.2
Video output: 1 Vp-p composite PAL, BNC
S/N ratio: over 48 dB
Gamma correction: > 0,45
White balance: automatic
Back light compensation: on / off
AGC: on / off
Synchronisation: internal or line-lock with V-setup (24 V AC)
Electronic shutter: on / off, 1:50 ~ 1:100.000
Flickerless function: on / off
Lens:
EZ 350 HQ V1: DC varifocal lens 3,8 ~ 9,5 mm (IR-corrected)
EZ 350 HQ V2: DC varifocal lens 9 ~ 22 mm

Heater: 12 W thermostat controlled
Heater activating temperature: +10°C
Weatherproof rating: IP 66
Power source: 12 V DC / 24 V AC
Power consumption: 5 W max., 12 W with activated heater

Ambient temperature: -35°C ~ +50°C (at 12 V DC)
-40°C ~ +50°C (at 24 V AC)

Dimensions:
83 (W) x 70 (H) x 172 (D) mm (with sunshield),
57 (W) x 57 (H) x 132 (D) mm (without sunshield)

Bracket: zinc diecasted, silver colour, included
Weight: 1,1 kg



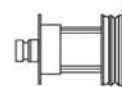
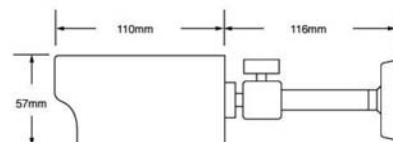
► EZ 200 N - 1/3" weatherproof colour camera, standard resolution

Specifications

Sensor: 1/3" SONY CCD
Picture element: 500 x 582 (PAL)
Horizontal resolution: 340 TV lines
Sensitivity: 0,3 lux / F = 1.2
S/N ratio: over 48 dB
Video output: 1 Vp-p composite PAL
Gamma correction: > 0,45
Synchronisation: internal
Back light compensation: yes
Auto white balance: yes
AGC: yes
Electronic shutter: 1:50 ~ 1:100.000
Lens: f=4,3 mm*
Lens mount: M12 x P 0,5
Weatherproof rating: IP 66

Power source: 12 V DC +/- 10%, 200 mA

Ambient temperature: -10°C ~ +50°C
Dimensions: 57 (D) x 110 (L) mm
Bracket: zinc diecasted, silver colour, included
Weight: 385 g



* Further lenses see table page 24



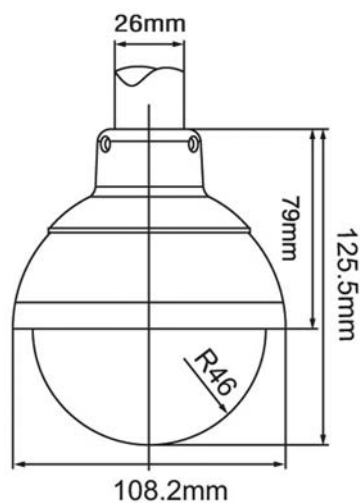
Colour Cameras



EPD 200 N - 1/3" colour pendent camera, standard resolution

Specifications

Sensor: 1/3" SONY CCD
 Picture element: 500 x 582 (PAL)
 Horizontal resolution: 340 TV lines
 Sensitivity: 0,3 lux / F = 1.2
 Video output: 1 Vp-p composite PAL, BNC
 S/N ratio: over 48 dB
 Gamma correction: >0,45
 Synchronisation: internal
 Back light compensation: on/off
 Auto white balance: yes
 AGC: on/off
 Flickerless function: on/off
 Electronic shutter: 1:50 ~ 1:100.000
 Lens: DC varifocal lens $f = 3,8 \sim 9,5$ mm (IR-corrected)
 Power source: 12 V DC / 24 V AC
 Power consumption: 3 W max.
 Ambient temperature: 0°C ~ +50°C
 Dimensions: 108 (D) x 125,5 (H) mm
 Weight: 200 g



BA 18 - bracket

Material: mounting plate steel,
tube aluminium

Length: 300 mm
 Max. load: 1 kg
 Application: with EPD 200 N



BA 19 - bracket

Material: mounting plate steel,
tube aluminium

Length: 700 mm
 Max. load: 1 kg
 Application: with EPD 200 N



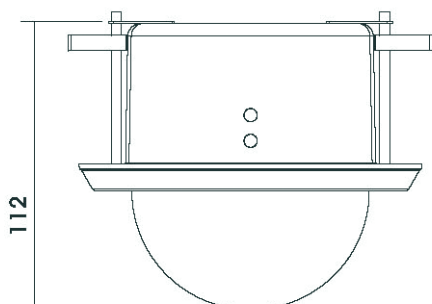
► EFD 300 A - 1/3" colour flush dome camera, high resolution

Specifications

Sensor: 1/3" SONY CCD
 Picture element: 752 x 582 (PAL)
 Horizontal resolution: 480 TV lines
 Sensitivity: 0,4 lux / F = 1.2
 Video output: 1 Vp-p composite PAL, BNC
 Monitor output pin: 1 Vp-p / 75 Ohm, test point pin
 S/N ratio: over 48 dB (AGC off)
 Gamma correction: >0,45
 Synchronisation: internal
 Back light compensation: on / off
 Auto white balance: yes
 AGC: on / off
 Flickerless function: on / off
 Electronic shutter: 1:50 ~ 1:100.000
 Lens: DC varifocal lens f= 4~9 mm, F=1.4~1.8
 Colour: black base, smoked cover

Power source:
 12 V DC +/- 10%, 300 mA

Ambient temperature: 0°C ~ +50°C
 Dimensions: 135 (D) x 112 (H) mm
 Weight: 460 g



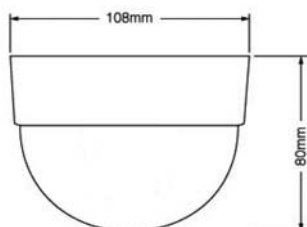
► ED 300 A - 1/3" colour mini dome camera, high resolution

Specifications

Sensor: 1/3" SONY CCD
 Picture element: 752 x 582 (PAL)
 Horizontal resolution: 480 TV lines
 Sensitivity: 1,0 lux / F = 1.2
 Video output: 1 Vp-p composite PAL, BNC
 S/N ratio: over 48 dB
 Gamma correction: >0,45
 Synchronisation: internal
 Back light compensation: on / off
 Auto white balance: yes
 AGC: on / off
 Electronic shutter: 1:50 ~ 1:100.000
 Lens: DC varifocal lens f=2,6~6,0mm, F=1.4~1.8
 Colour: black or white base

Power source:
 12 V DC +/- 10%, 300 mA / 24 V AC, 200 mA

Ambient temperature: 0°C ~ +50°C
 Dimensions: 108 (D) x 80 (H) mm
 Weight: 460 g



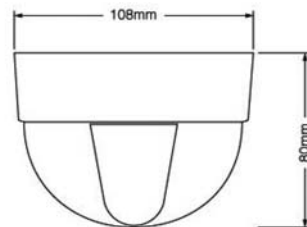
► ED 200 N - 1/3" colour mini dome camera, standard resolution

Specifications

Sensor: 1/3" SONY CCD
 Picture element: 500 x 582 (PAL)
 Horizontal resolution: 340 TV lines
 Sensitivity: 0,3 lux / F = 1.2
 Video output: 1 Vp-p composite PAL, BNC
 S/N ratio: over 48 dB
 Gamma correction: >0,45
 Synchronisation: internal
 Auto white balance: yes
 AGC: yes
 Electronic shutter: 1:50 ~ 1:100.000
 Lens: f=3,6 mm*
 Lens mount: M12 x P0,5
 Colour: black or white base

Power source: 12 V DC +/- 10%, 200 mA

Ambient temperature: 0°C ~ +50°C
 Dimensions: 108 (D) x 80 (H) mm
 Weight: 420 g



* Further lenses see table page 24



Colour Cameras



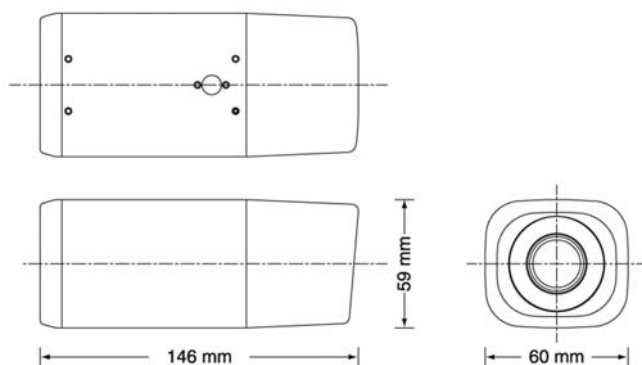
► EI 300 - 1/3" lens integrated colour camera, high resolution

Specifications

Sensor: 1/3" SONY CCD
 Picture element: 752 x 582 (PAL)
 Horizontal resolution: 480 TV lines
 Sensitivity: 1,0 lux / F = 1.2
 Video output: 1 Vp-p composite PAL
 S/N Ratio: over 48 dB
 Gamma correction: 0,45
 Synchronisation: internal
 Back light compensation: on / off
 Auto white balance: yes
 AGC: on / off
 Electronic shutter: 1:50 ~ 1:100.000
 Lens: DC varifocal lens, f=3,8 ~ 9,5 mm (IR-corrected),
 F= 1,4 ~ 1,8

Power source: 12 V DC +/- 10%, 300 mA

Ambient temperature: 0°C ~ +50°C
 Dimensions: 66 (W) x 59 (H) x 146 (L) mm
 Weight: 650 g
 Bracket: zinc, 155 (H) x 45 (D) mm, included



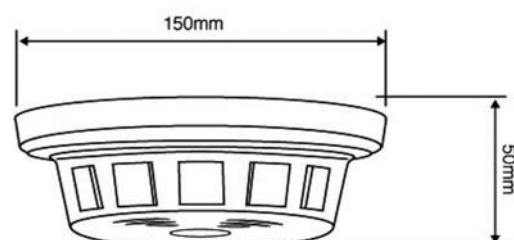
► ESD 200 N - 1/3" colour smoke detector camera

Specifications

Sensor: 1/3" SONY CCD
 Picture element: 500 x 582 (PAL)
 Horizontal resolution: 340 TV lines
 Sensitivity: 0,3 lux / F = 1.2
 Video output: 1 Vp-p composite PAL, BNC
 S/N ratio: over 48 dB
 Gamma correction: >0,45
 Synchronisation: internal
 Back light compensation: yes
 Auto white balance: yes
 AGC: yes
 Electronic shutter: 1:50 ~ 1:100.000
 Number of cameras: 1
 Lens: f=4,3mm*
 Lens mount: M12 x P 0,5

Power source: 12 V DC +/- 10%, 200 mA

Ambient temperature: 0°C ~ +50°C
 Dimensions: 150 (D) x 50 (H) mm
 Weight: 135 g



* Further lenses see table page 24

e13



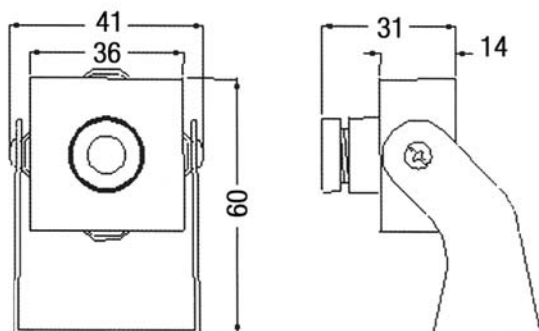
EM 200 N - 1/3" colour metal case camera

Specifications

Sensor: 1/3" SONY CCD
 Picture element: 500 x 582 (PAL)
 Horizontal resolution: 340 TV lines
 Sensitivity: 0,3 lux / F = 1.2
 Video output: 1 Vp-p composite PAL, BNC
 S/N ratio: over 48 dB
 Gamma correction: >0,45
 Synchronisation: internal
 Back light compensation: yes
 Auto white balance: yes
 AGC: yes
 Electronic shutter: 1:50 ~ 1:100.000
 Lens: f=3,6mm, Pinhole lens f=3,7mm*
 Lens mount: M12 x P0,5
 e13 certificate no.: e13*72/245*95/54*3038*00

Power source: 12 V DC +/- 10%, 200 mA

Ambient temperature: 0°C ~ +50°C
 Dimensions: 41 (W) x 60 (H) x 31 (D) mm
 Weight: 180 g



Drawing: EM 200 N with 3,6mm lens



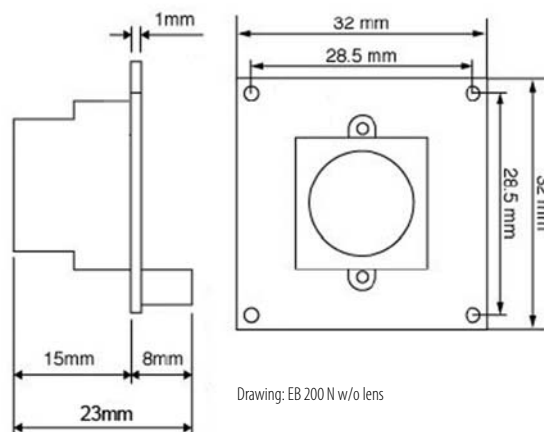
EB 200 N - 1/3" colour PCB camera

Specifications

Sensor: 1/3" SONY CCD
 Picture element: 500 x 582 (PAL)
 Horizontal resolution: 340 TV lines
 Sensitivity: 0,3 lux / F = 1.2
 Video output: 1 Vp-p composite PAL, BNC
 S/N ratio: over 48 dB
 Gamma correction: >0,45
 Synchronisation: internal
 Back light compensation: yes
 Auto white balance: yes
 AGC: yes
 Electronic shutter: 1:50 ~ 1:100.000
 Lens: f=3,6mm*
 Lens mount: M12 x P0,5

Power source: 12 V DC +/- 10%, 200 mA

Ambient temperature: 0°C ~ +50°C
 Dimensions: 32 (W) x 32 (H) x 23 (D) mm
 Weight: 30 g



Drawing: EB 200 N w/o lens

* Further lenses see table page 24



Colour IR Cameras



► EBD 330 - 1/3" day / night camera with IR-LED, high resolution

Specifications

Sensor: 1/3" SONY CCD
Picture element: 752 x 582 (PAL)
Horizontal resolution: 480 TV lines
Sensitivity: 0,5 lux / F = 1.2 (IR-LED off)
IR-LED: 14 x, controlled by internal twilight switch, splitted front glass for low internal IR reflection

IR-LED lifetime: up to 50.000 h
IR range: 5~20 m*
Video output: 1 Vp-p composite PAL
S/N Ratio: over 48 dB
Gamma correction: 0,45
Synchronisation: internal
Back light compensation: yes
Auto white balance: yes
AGC: yes
Electronic shutter: 1:50 ~ 1:100.000
Lens: 4,3mm / F2, M12 x P0,5
Mounting: ceiling or wall mounting, 3-axis adjustment of camera module
Casing: aluminium
Weatherproof rating: IP 66

Power source: 12 V DC +/- 10%
Power consumption: 6 W max.

Ambient temperature: -10°C ~ +50°C
Dimensions: 94 (diam.) x 82 (H) mm
Weight: 450 g



► EBD 230 - 1/3" day / night camera with IR-LED

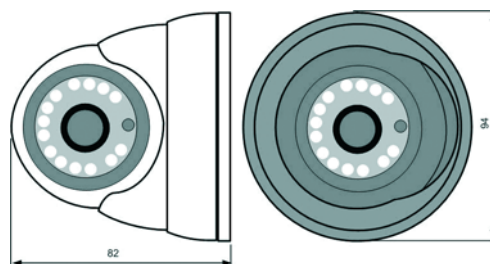
Specifications

Sensor: 1/3" SONY CCD
Picture element: 500 x 582 (PAL)
Horizontal resolution: 380 TV lines
Sensitivity: 0,3 lux / F = 1.2 (IR-LED off)
IR-LED: 14 x, controlled by internal twilight switch, splitted front glass for low internal IR reflection

IR-LED lifetime: up to 50.000 h
IR range: 5~20 m*
Video output: 1 Vp-p composite PAL
S/N Ratio: over 48 dB
Gamma correction: 0,45
Synchronisation: internal
Back light compensation: yes
Auto white balance: yes
AGC: yes
Electronic shutter: 1:50 ~ 1:100.000
Lens: 4,3mm / F2, M12 x P0,5
Mounting: ceiling or wall mounting, 3-axis adjustment of camera module
Casing: aluminium
Weatherproof rating: IP 66

Power source: 12 V DC +/- 10%
Power consumption: 6 W max.

Ambient temperature: -10°C ~ +50°C
Dimensions: 94 (diam.) x 82 (H) mm
Weight: 450 g



* The IR illumination range depends on the location, particularly with regard to the reflections of the installation's surroundings. Locating the device near to highly absorbent surfaces can result in a significantly reduced range.



► ECZ 330 - 1/3" day / night camera with IR-LED, high resolution

Specifications

Sensor: 1/3" SONY CCD
 Picture element: 752 x 582 (PAL)
 Horizontal resolution: 480 TV lines
 Sensitivity: 0,5 lux / F = 1.2 (IR-LED off)
 IR-LED: 14 x, controlled by internal twilight switch
 IR-LED lifetime: up to 50.000 h
 IR range: 5~20 m*
 Video output: 1 Vp-p composite PAL
 S/N Ratio: over 48 dB
 Gamma correction: 0,45
 Synchronisation: internal
 Back light compensation: yes
 Auto white balance: yes
 AGC: yes
 Electronic shutter: auto 1:50 ~ 1:100.000
 Lens: 4,3mm / F2, M12 x P0,5
 Mounting: 1/4" mounting hole at lower and upper side for camera bracket (included)
 Casing: aluminium
 Weatherproof rating: IP 66

Power source: 12 V DC +/- 10%
 Power consumption: 6 W max.

Ambient temperature: -10°C ~ +50°C
 Dimensions: 55 (diam.) x 72 (D) mm (without sunshield)
 62 (W) x 58,5 (H) x 82 (D) mm (with sunshield)

Weight: 245 g



► ECZ 230 - 1/3" day / night camera with IR-LED

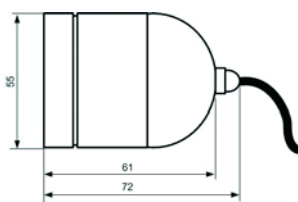
Specifications

Sensor: 1/3" SONY CCD
 Picture element: 500 x 582 (PAL)
 Horizontal resolution: 380 TV lines
 Sensitivity: 0,3 lux / F = 1.2 (IR-LED off)
 IR-LED: 14 x, controlled by internal twilight switch
 IR-LED lifetime: up to 50.000 h
 IR range: 5~20 m*
 Video output: 1 Vp-p composite PAL
 S/N Ratio: over 48 dB
 Gamma correction: 0,45
 Synchronisation: internal
 Back light compensation: yes
 Auto white balance: yes
 AGC: yes
 Electronic shutter: auto 1:50 ~ 1:100.000
 Lens: 4,3mm / F2, M12 x P0,5
 Mounting: 1/4" mounting hole at lower and upper side for camera bracket (included)
 Casing: aluminium
 Weatherproof rating: IP 66

Power source: 12 V DC +/- 10%
 Power consumption: 6 W max.

Ambient temperature: -10°C ~ +50°C
 Dimensions: 55 (diam.) x 72 (D) mm (without sunshield)
 62 (W) x 58,5 (H) x 82 (D) mm (with sunshield)

Weight: 245 g



* The IR illumination range depends on the location, particularly with regard to the reflections of the installation's surroundings.
 Locating the device near to highly absorbent surfaces can result in a significantly reduced range.



b/w Cameras



EQ 150 - 1/3" b/w DSP camera, high resolution

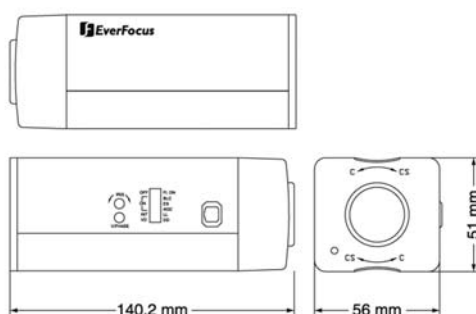
Specifications

Sensor: 1/3" SONY CCD
 Picture element: 752 (H) x 582 (V)
 Horizontal resolution: 560 TV lines
 Sensitivity: 0,04 lux / F = 1.2
 Video output: 1 Vp-p CCIR, BNC
 Audio: microphone output 500 mV / 47 kOhm, cinch
 S/N ratio: over 48 dB
 Gamma correction: >0,45
 Back light compensation: on / off switch
 AGC: on / off switch
 Synchronisation: 1. line-locked with LL on,
 2. internal with LL off
 Electronic shutter: 1:50 ~ 1:100.000
 Lens control: VD / DD switchable
 Lens mount: C/CS mount, full range backfocus mechanism

Power source: EQ 150: 90 ~ 260 V AC
 EQ 150 A: 12 V DC / 24 V AC

Power consumption: EQ 150: 9 W max.
 EQ 150 A: 5 W max.

Ambient temperature: 0°C ~ +50°C
 Dimensions: 51 (W) x 57 (H) x 140 (L) mm
 Weight: 600 g (EQ 150), 500 g (EQ 150 A)



EHD 150 - 1/3" b/w rugged dome DSP camera, high resolution

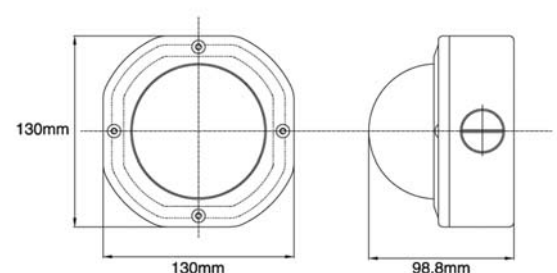
Specifications

Sensor: 1/3" SONY CCD
 Picture element: 752 x 582 (CCIR)
 Horizontal resolution: 560 TV lines
 Sensitivity: 0,06 lux / F = 1.6
 Video output: 1 Vp-p CCIR
 S/N ratio: over 48 dB
 Gamma correction: 0,45
 Synchronisation: internal / line lock (only 24 V AC)
 Line lock (24 V AC): on / off
 Back light compensation: on / off
 AGC: on / off
 Electronic shutter: 1:50 ~ 1:100.000
 Tamper contact: micro switch
 Lens:
 EHD 150 V1: DC varifocal lens f=3,6~9 mm
 EHD 150 V2: DC varifocal lens f=9~22 mm

Heater: 12 W thermostat controlled
 Heater activating temperature: +10°C
 Casing: zinc diecasted, dome polycarbonate, clear
 Weatherproof rating: IP 66

Power source: 12 V DC / 24 V AC
 Power consumption: 5 W max. (15 W with activated heater)

Ambient temperature: -46°C ~ +50°C
 Dimensions: 130 (W) x 130 (H) x 99 (D) mm
 Weight: 1,7 kg





► EZ 180 - 1/3" b/w weatherproof DSP camera, high resolution

Specifications

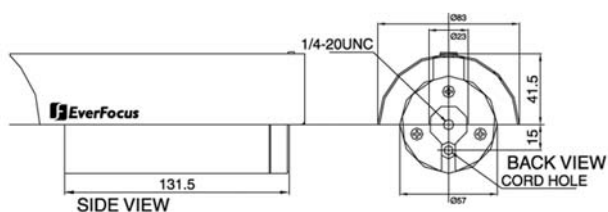
Sensor: 1/3" SONY CCD
 Picture element: 752 (H) x 582 (V)
 Horizontal resolution: 560 TV lines
 Sensitivity: 0,1 lux / F = 1.2
 Video output: 1 Vp-p CCIR, BNC
 S/N ratio: over 48 dB
 Gamma correction: > 0,45
 Back light compensation: on / off
 AGC: on / off
 Synchronisation: internal or line-lock with V-setup (24 V AC)
 Electronic shutter: on / off, 1:50 ~ 1:100.000
 Flickerless function: on / off
 Lens:
 EZ 180 V1: DC varifocal lens 3,5 ~ 8 mm
 EZ 180 V2: DC varifocal lens 9 ~ 22 mm
 Heater: 12 W thermostat controlled
 Heater activating temperature: +10°C
 Weatherproof rating: IP 66

Power source: 12 V DC / 24 V AC
 Power consumption: 3 W max., 12 W with activated heater

Ambient temperature: -35°C ~ +50°C (at 12 V DC)
 -45°C ~ +50°C (at 24 V AC)

Dimensions:
 83 (W) x 70 (H) x 172 (D) mm (with sunshield)
 57 (W) x 57 (H) x 132 (D) mm (without sunshield)

Bracket: zinc diecasted, silver colour, included
 Weight: 1,1 kg



► EZ 100 N - 1/3" b/w weatherproof DSP camera, standard resolution

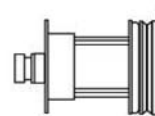
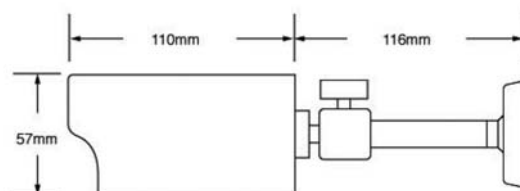
Specifications

Sensor: 1/3" SONY CCD
 Picture element: 500 x 582 (CCIR)
 Horizontal resolution: 420 TV lines
 Sensitivity: 0,04 lux / F = 1.2
 Video output: 1 Vp-p CCIR, BNC
 S/N ratio: over 48 dB
 Gamma correction: >0,45
 Synchronisation: internal
 Back light compensation: yes
 AGC: yes
 Electronic shutter: 1:50 ~ 1:100.000
 Lens: f=4,3mm*
 Lens mount: M12 x P 0,5
 Weatherproof rating: IP 66

Power source: 12 V DC +/- 10%, 150 mA

Ambient temperature: -10°C ~ +50°C
 Dimensions: 57 (D) x 110 (L) mm

Bracket: zinc diecasted, silver colour, included
 Weight: 385 g



* Further lenses see table page 24



b/w Cameras



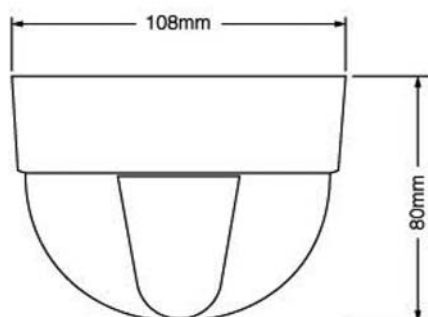
ED 100 N - 1/3" b/w mini dome DSP camera

Specifications

Sensor: 1/3" SONY CCD
Picture element: 500 x 582 (CCIR)
Horizontal resolution: 420 TV lines
Sensitivity: 0,04 lux / F = 1.2
Video output: 1 Vp-p CCIR, BNC
S/N ratio: over 48 dB
Gamma correction: >0,45
Synchronisation: internal
Back light compensation: yes
AGC: yes
Electronic shutter: 1:50 ~ 1:100.000
Lens mount: M12 x P0,5
Lens: f=3,6mm*
Colour: black or white base

Power source: 12 V DC +/- 10%, 150 mA

Ambient temperature: 0°C ~ +50°C
Dimensions: 108 (D) x 80 (H) mm
Weight: 330 g



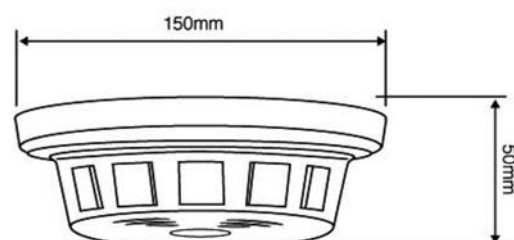
ESD 100 N - 1/3" b/w DSP smoke detector camera

Specifications

Sensor: 1/3" SONY CCD
Picture element: 500 x 582 (CCIR)
Horizontal resolution: 420 TV lines
Sensitivity: 0,04 lux / F = 1.2
Video output: 1 Vp-p CCIR, BNC
S/N ratio: over 48 dB
Gamma correction: >0,45
Synchronisation: internal
Back light compensation: yes
AGC: yes
Electronic shutter: 1:50 ~ 1:100.000
Number of cameras: 1
Lens mount: M12 x P0,5
Lens: f=4,3mm*

Power source: 12 V DC +/- 10%, 150 mA

Ambient temperature: 0°C ~ +50°C
Dimensions: 150 (D) x 50 (H) mm
Weight: 135 g



* Further lenses see table page 24



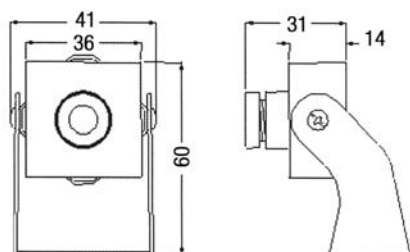
EM 100 N - 1/3" b/w metal case DSP camera

Specifications

Sensor: 1/3" SONY CCD
Picture element: 500 x 582 (CCIR)
Horizontal resolution: 420 TV lines
Sensitivity: 0,04 lux / F = 1.2
Video output: 1 Vp-p CCIR, BNC
S/N ratio: over 48 dB
Gamma correction: >0,45
Synchronisation: internal
Back light compensation: yes
AGC: yes
Electronic shutter: 1:50 ~ 1:100.000
Lens mount: M12 x P0,5
Lens: f=3,6mm, Pinhole lens f=3,7mm*

Power source: 12 V DC +/- 10%, 150 mA

Ambient temperature: 0°C ~ +50°C
Dimensions: 41 (W) x 60 (H) x 31 (D) mm
Weight: 110 g



Drawing: EM 100 N with 3,6mm lens



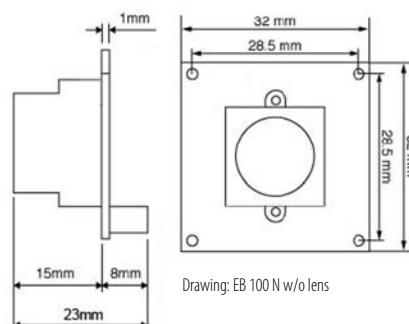
EB 100 N - 1/3" b/w DSP camera module

Specifications

Sensor: 1/3" SONY CCD
Picture element: 500 x 582 (CCIR)
Horizontal resolution: 420 TV lines
Sensitivity: 0,04 lux / F = 1.2
Video output: 1 Vp-p CCIR
S/N ratio: over 48 dB
Gamma correction: >0,45
Synchronisation: internal
Back light compensation: yes
AGC: yes
Electronic shutter: 1:50 ~ 1:100.000
Lens mount: M12 x P0,5
Lens: f=3,6mm*

Power source: 12 V DC +/- 10%, 150 mA

Ambient temperature: 0°C ~ +50°C
Dimensions: 32 (W) x 32 (H) x 23 (D) mm
Weight: 30 g



Drawing: EB 100 N w/o lens

* Further lenses see table page 24



Speed Dome System

► EPTZ 3000 - 1/4" day / night outdoor speed dome camera

Specifications

Camera

Sensor: 1/4" CCD SONY Exview HAD

Effective pixels: 440.000

Horizontal resolution: 520 TV lines (colour mode) / 570 TV lines (b/w mode)

Sensitivity: 0,3 lux (F 1.6, 50 IRE - colour mode) / 0,05 lux (F 1.6, 50 IRE - b/w mode)

Video output: 1 Vp-p (sync. negative)

S/N ratio: over 50 dB

Sync. system: internal

Electronic shutter: 1/1 ~ 1/10.000 sec., 22 steps

White balance: auto / indoor / outdoor / manual

Back light compensation: on / off

Gain: auto

Exposure control: automatic

Flicker cancel: automatic

WDR Wide Dynamic Range: 52 dB max.

Lens

Zoom ratio: 30x optical zoom (+ 8x digital zoom, max. 240x)

Focus length: f=3,3 (wide) ~ 99 (tele) mm

Aperture: F 1.6 (wide) ~ F 3.2 (tele)

Viewing angle: 56,0° (wide end) to 2,1° (tele end)

Minimum object distance: 35mm (wide end) to 800mm (tele end)

Focusing method: auto, one-push AF, manual

Housing

Weatherproof rating: IP 66

Power source: 24 V AC, via included power supply 230 V AC

Power consumption: 18 W without heater, 70 W with heater

Fan / heater: thermostat-controlled

Ambient temperature: -40°C ~ +40°C

Humidity: ~ 90%

Dimensions: 310 (H) x 220 (D) mm

Weight: 5,6 kg



Functions

Communication: RS-485

Built-in protocols: Pelco-P / Pelco-D / EverFocus / ED 2200 / ED 2250

Communication speed: 1200 / 2400 / 4800 / 9600 bps

Address editable through DIP switch: yes

Speed dome address range: 1 ~ 255

Horizontal rotation speed: 0,1° / sec. ~ 360° / sec.

Horizontal rotation range: 360° unlimited rotation

Tilt rotation range: 180° pendulum motion with electronic auto flip

Day/night switching: manual / automatic / by external contact (via alarm in)

Auto zoom speed control: auto-adjustment of PT control speed according to zoom position

Auto pan, 2 points scanning: adjustable speeds, adjustable end stops

Auto pan speed: 1 ~ 128 steps

Dwell time (2 points): 1 ~ 60 sec.

Preset positions: 128

Running to position speed: up to 360°/sec.

Manual pan speed: 0,1° ~ 120° / sec.

Manual tilt speed: 0,1° ~ 60° / sec.

Dwell time at preset position: 1 ~ 60 sec.

Tours: 16

Presets per tour: 16 preset positions

Position accuracy: +/- 0,1°

Alarm: 4 inputs, 1 output, with tour / position auto triggering

Proportional pan speed: yes

Privacy zones: 1, free adjustable

Built-in menu for functions: yes, OSD

Video output: BNC

Delivery scope: speed dome camera, outdoor housing, wall mount bracket, indoor power supply

► EPTZ 1000 - 1/4" outdoor colour speed dome camera

Specifications

Camera

Sensor: 1/4" CCD SONY Exview HAD
 Effective pixels: 440.000
 Horizontal resolution: 470 TV lines
 Sensitivity: 0,7 lux (F 1.4, 50 IRE)
 Video output: 1 Vp-p (sync. negative)
 S/N ratio: over 50 dB
 Sync. system: internal
 Electronic shutter: 1/1 ~ 1/10.000 sec., 22 steps
 White balance: auto / indoor / outdoor / manual
 Back light compensation: on / off
 Gain: auto / -3 ~ 28 dB
 Exposure control: automatic
 Flicker cancel: automatic

Lens

Focus length: $f=4,1$ (wide) ~ 73,8 (tele) mm (18x zoom) + 12x digital
 Aperture: F 1.4 (wide) ~ F 3.0 (tele)
 Viewing angle: 48,0° (wide end) to 2,8° (tele end)
 Minimum object distance: 35mm (wide end) to 800mm (tele end)
 Focusing method: auto, one-push AF, manual

Housing

Weatherproof rating: IP 66
 Power source: 24 V AC, via included power supply 230 V AC
 Power consumption: 18 W without heater, 70 W with heater
 Fan / heater: thermostat-controlled
 Ambient temperature: -40°C ~ +40°C
 Humidity: ~ 90%
 Dimensions: 310 (H) x 220 (D) mm
 Weight: 5,6 kg



Functions

Communication: RS-485
 Built-in protocols: Pelco-P / Pelco-D / EverFocus / ED 2200 / ED 2250
 Communication speed: 1200 / 2400 / 4800 / 9600 bps
 Address editable through DIP switch: yes
 Speed dome address range: 1 ~ 255
 Horizontal rotation speed: 0,1° / sec. ~ 360° / sec.
 Horizontal rotation range: 360° unlimited rotation
 Tilt rotation range: 90°
 Auto flip: 180° rotation when camera tilts to vertical position
 Auto zoom speed control: auto-adjustment of PT control speed according to zoom position

Auto pan, 2 points scanning: adjustable speeds, adjustable end stops

Auto pan speed: 1 ~ 128 steps

Dwell time (2 points): 1 ~ 60 sec.

Preset positions: 192

Running to position speed: up to 360°/sec.

Manual pan speed: 0,1° ~ 120° / sec.

Manual tilt speed: 0,1° ~ 60° / sec.

Dwell time at preset position: 1 ~ 60 sec.

Tours: 16

Presets per tour: 16 preset positions

Position accuracy: +/- 0,1°

Alarm: 4 inputs, 1 output, with tour / position auto triggering

Proportional pan speed: yes

Built-in menu for functions: yes, OSD

Video output: BNC

Delivery scope: speed dome camera, outdoor housing, wall mount bracket, indoor power supply



Speed Dome System

► EPTZ 500 - 1/4" indoor colour speed dome camera

Specifications

Camera

Sensor: 1/4" CCD SONY Exview HAD
 Effective pixels: 440,000
 Horizontal resolution: 470 TV lines
 Sensitivity: 0,7 lux (F 1.4, 50 IRE)
 Video output: 1 Vp-p (sync. negative)
 S/N ratio: over 50 dB
 Sync. system: internal
 Electronic shutter: 1/1 ~ 1/10,000 sec., 22 steps
 White balance: auto / indoor / outdoor / manual
 Back light compensation: on / off
 Gain: auto / -3 ~ 28 dB
 Exposure control: automatic
 Flicker cancel: automatic

Lens

Focus length: $f=4,1$ (wide) ~ 73,8 (tele) mm (18x zoom) + 12x digital
 Aperture: F 1.4 (wide) ~ F 3.0 (tele)
 Viewing angle: 48,0° (wide end) to 2,8° (tele end)
 Minimum object distance: 35mm (wide end) to 800mm (tele end)
 Focusing method: auto, one-push AF, manual

Housing

Power source: 24 V AC, via included power supply 230 V AC
 Power consumption: 18 W
 Ambient temperature: 0°C ~ +40°C
 Humidity: ~ 90%
 Dimensions: 220 (H) x 210 (D) mm
 Weight: 3,2 kg



Functions

Communication: RS-485
 Built-in protocols: Pelco-P / Pelco-D / EverFocus / ED 2200 / ED 2250
 Communication speed: 1200 / 2400 / 4800 / 9600 bps
 Address editable through DIP switch: yes
 Speed dome address range: 1 ~ 255
 Horizontal rotation speed: 0,1° / sec. ~ 360° / sec.
 Horizontal rotation range: 360° unlimited rotation
 Tilt rotation range: 90°
 Auto flip: 180° rotation when camera tilts to vertical position
 Auto zoom speed control: auto-adjustment of PT control speed according to zoom position

Auto pan, 2 points scanning: adjustable speeds, adjustable end stops
 Auto pan speed: 1 ~ 128 steps
 Dwell time (2 points): 1 ~ 60 sec.
 Preset positions: 192
 Running to position speed: up to 360°/sec.
 Manual pan speed: 0,1° ~ 120° / sec.
 Manual tilt speed: 0,1° ~ 60° / sec.
 Dwell time at preset position: 1 ~ 60 sec.
 Tours: 16
 Presets per tour: 16 preset positions
 Position accuracy: +/- 0,1°
 Alarm: 4 inputs, 1 output, with tour / position auto triggering
 Proportional pan speed: yes
 Built-in menu for functions: yes, OSD
 Video output: BNC

Delivery scope: speed dome camera, indoor housing, indoor power supply



► EKB 500 - multi-function keyboard

Specifications

Keys: 48

Joystick: 3D PTZ function control

Jog/Shuttle: DVR control

Display: LCD 2 lines with 20 characters each

Baud rate: 1.200 ~ 38.400

Serial interfaces: RS-232 (service) / 2 x RS-485

Protocols: Pelco-P / Pelco-D / EverFocus / ED 2200 / ED 2250

Devices: control of speed dome and DVR

Cascading: up to 8 keyboards addressable

Wiring box: yes

Supported DVR models:

EDR 1640 / 1610 / 920 / 910

EDR 810 H / 810 M / 410 H / 410 M

EDSR 1600 / 900 / 600 / 400 H / 400 M / 100 H / 100 M

Power source: 12 V DC, via included power supply 230 V AC

Power consumption: 10 W max.

Ambient temperature: 0°C ~ +40°C

Dimensions: 360 (W) x 110 (H) x 200 (D) mm

Weight: 1,5 kg

Features

- ✓ use of EEPbus for simultaneous control of DVRs and speed domes on one single RS-485 bus
- ✓ capable of controlling speed dome cameras and DVR
- ✓ 3D joystick control of PTZ function
- ✓ jog/shuttle DVR control
- ✓ matrix control (EverFocus DVR series' products)
- ✓ LCD display (20 x 2 lines), illuminated
- ✓ multi-protocol support (EverFocus, Pelco-P/D, ED 2200, ED 2250)
- ✓ password protection
- ✓ ergonomic buttons placement with sound indication for easy usage
- ✓ OSD access to connected devices
- ✓ two independent RS-485 communication ports with selectable baud rate
- ✓ camera / monitor mapping for easy reorganization
- ✓ housing allows countersunk installation

► EPTZ CMA - corner mount adaptor



Specifications

Material: steel powder-coated

Height: 170 mm

Width mounting plate: 115 mm

Width side plate: 80 mm

Weight: 1,4 kg

► EPTZ PMA - pole mount adaptor



Specifications

Material: steel, powder-coated

Diameter pole: 90 mm min., 155 mm max.

Dimensions: 166 (W) x 205 (H) x 47 (D) mm

Weight: 1,4 kg

► EPTZ CPMA - ceiling pendent mount adaptor



Specifications

Material: steel, powder-coated

Length tube: 340 mm

Diameter ceiling adaptor: 108 mm

Diameter tube: 32 mm

Weight: 1,5 kg (incl. tube)

► ED PS 24 - outdoor power supply



Specifications

Input voltage: 230 V AC

Output voltage: 24 V AC

Max. output current: 3 A

Power consumption: 90 VA max.

Weatherproof rating: IP 66

Dimensions: 180 (W) x 180 (H) x 90 (D) mm

Weight: 1,7 kg



Varifocal / Board Lenses



▶ EFV-550 / EFV-550 DC



▶ EFV-358 / EFV-358 DC



▶ EFV-416 / EFV 416 DC



▶ EFV-3010 DC



▶ EFV-2810 / EFV-2810 DC

Varifocal lenses

Item code	Sensor format	Focal length (f)	Aperture (F)	Mount	Horiz. viewing angle at 1/3"	Operation		Weight (g)
						IRIS	Focus	
EFV-550	1/3"	5 ~ 50	1,7 ~ C	CS	51°-5,5°	manual	manual	130,0
EFV-550 DC	1/3"	5 ~ 50	1,7 ~ 360	CS	51°-5,5°	DC	manual	140,0
EFV-416	1/3"	4 ~ 16	1,4 ~ C	CS	65,4°-17,8°	manual	manual	67,0
EFV-416 DC	1/3"	4 ~ 16	1,4 ~ 360	CS	65,4°-17,8°	DC	manual	67,0
EFV-358	1/3"	3,5 ~ 8	1,4 ~ C	CS	69°-33°	manual	manual	44,0
EFV-358 DC	1/3"	3,5 ~ 8	1,4 ~ 360	CS	69°-33°	DC	manual	57,0
EFV-3010 DC	1/3"	3 ~ 8	1,0 ~ 360	CS	91°-67°	DC	manual	47,0
EFV-2810	1/3"	2,8 ~ 10	1,4 ~ C	CS	81°-27°	manual	manual	51,0
EFV-2810 DC	1/3"	2,8 ~ 10	1,4 ~ 360	CS	81°-27°	DC	manual	61,0



▶ EFL-3620



▶ EFL-4320



▶ EFL-6020



▶ EFL-8020

Board lenses for camera series EB / EM / ED

Item code	Sensor format	Focal length (f)	Aperture (F)	Mount	Horiz. viewing angle at 1/3"	Operation		Weight (g)
						IRIS	Focus	
EFL-3620	1/3"	3,6	2,0	-	67°	fix	manual	5,5
EFL-4320	1/3"	4,3	2,0	-	58°	fix	manual	6,0
EFL-6020	1/3"	6,0	2,0	-	43°	fix	manual	5,0
EFL-8020	1/3"	8,0	2,0	-	33°	fix	manual	6,0

CCTV Lenses

- F - Aperture ratio:** In lenses with adjustable irises, the range of iris opening is expressed as a ratio (focal length of the lens) / (maximum diameter of aperture).
- f - Focal length:** The distance between the optical centre of a lens and the second principal convergent focus point.

W/H: Object height, object width

L: Object distance

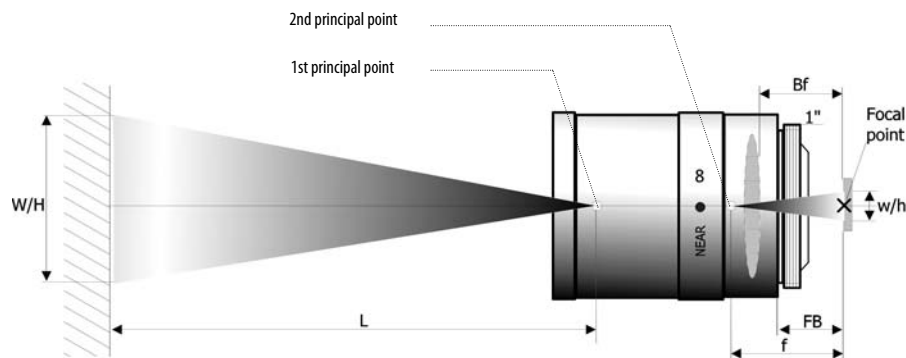
f: Focal length

FB: Flange back

Bf: Back focus length

w/h: Image height / image width at CCD sensor

$$\frac{w}{W} = \frac{h}{H} = \frac{f}{L}$$



C-mount: Standard for CCTV lens screw mounting. It is defined with the thread of 1" (25,4mm) in diameter and 32 threads/inch, and the back flange-to-CCD distance of 17,526mm (0,69").

The C-mount description applies to both lenses and cameras. C-mount lenses can be put on both C-mount and CS-mount cameras, an adaptor is required for the latter version only.

CS-mount: Newer standard for lens mounting. It uses the same physical thread as the C-mount, but the back flange-to-CCD distance is reduced to 12,5mm in order to have the lenses made smaller, more compact and less expensive. CS-mount lenses can only be used on CS-mount cameras.

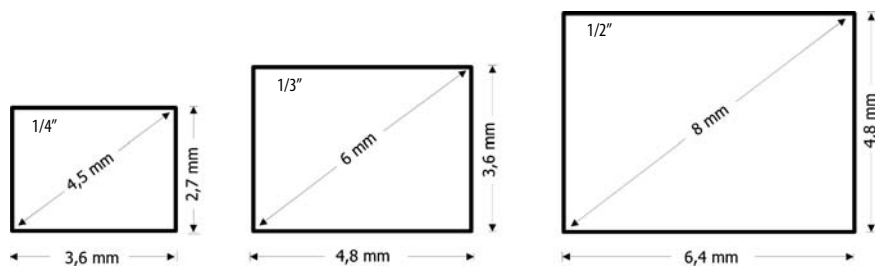
CS-to-C-mount adaptor: An adaptor used to convert a CS-mount camera to C-mount to accommodate a C-mount lens.

The newer EQ 120 / 150 / 250 / 350 cameras are equipped with a wide range backfocal mechanism, the adaptor ring is not required.

DC iris control: The lens iris mechanism is controlled by a DC voltage, which is generated depending on the video signal level in the camera.

All EverFocus cameras with C/CS mount support lenses with DC iris control

Sensor format: Physical size of the camera CCD chip. The most common chip sizes in CCTV industry are 1/3" and 1/4". The specified value at the lenses defines the maximum possible chip size for lens application. So, a 1/3" lens may be used for 1/3" and 1/4" cameras, but not for 1/2" cameras.



Horizontal field of view for 1/3" cameras

Horizontal field of view (m)					
f (mm)	Hor. angle of view (°)	Object distance (m)			
		2	5	10	20
2,8	81	3,4	8,6	17,1	34,3
3,5	69	2,7	6,9	13,7	27,4
3,6	67	2,7	6,7	13,3	26,7
4,3	58	2,2	5,6	11,2	22,3
5	51	1,9	4,8	9,6	19,2
8	33	1,2	3,0	6,0	12,0
10	27	1,0	2,4	4,8	9,6
15	18	0,6	1,6	3,2	6,4
50	5,5	0,2	0,5	1,0	1,9



Camera Housings



► FH 7154 H - outdoor housing HEM with sunshield and heater

Specifications

Outer dimensions: 105 (W) x 95 (H) x 355 (L) mm

Inner dimensions: 70 (W) x 65 (H) x 300 (L) mm

Dimensions sunshield: 113 (W) x 71 (H) x 410 (L) mm

Material: extruded and die-cast aluminium

Colour: powder-coated RAL 9002

Weatherproof rating: IP 66

Ambient temperature: -20°C ~ +50°C

Heater: thermostat controlled, 115 ~ 240 V AC, 40 W

Weight: 1,9 kg



► FH 7156 H/B - outdoor housing HEB with sunshield, heater and cable channel

Specifications

Outer dimensions: 138 (W) x 128 (H) x 410 (L) mm

Inner dimensions: 90 (W) x 85 (H) x 320 (L) mm

Dimensions sunshield: 144 (W) x 90 (H) x 470 (L) mm

Material: extruded and die-cast aluminium

Colour: powder-coated RAL 9002

Weatherproof rating: IP 66

Ambient temperature: -20°C ~ +50°C

Heater: thermostat controlled, 115 ~ 240 V AC, 40 W

Weight: 2,2 kg



► FH 7160 - dustproof housing HEM

Specifications

Outer dimensions: 105 (W) x 95 (H) x 355 (L) mm

Inner dimensions: 70 (W) x 65 (H) x 300 (L) mm

Material: extruded and die-cast aluminium

Colour: powder-coated RAL 9002

Ambient temperature: 0°C ~ +50°C

Weight: 1,4 kg



► FH 7161 / B - dustproof housing HEB with cable channel

Specifications

Outer dimensions: 138 (W) x 128 (H) x 410 (L) mm

Inner dimensions: 90 (W) x 85 (H) x 320 (L) mm

Material: extruded and die-cast aluminium

Colour: powder-coated RAL 9002

Ambient temperature: 0°C ~ +50°C

Weight: 1,8 kg



► FH 7165 - sunshield HEM

Specifications

Dimensions: 113 (W) x 71 (H) x 410 (D) mm

Weight: 0,5 kg

Material: extruded aluminium

Colour: powder-coated RAL 9002



► FH 7101 H - thermostat heater HEM

Specifications

Power supply input: 12 V DC / 24 V AC

Consumption: 20 W



► FH 7167 - power supply HEM

Specifications

Power supply input: 230 V AC

Power supply output: 12 V DC / 400 mA, stabilized

► FH 7166 / B - sunshield HEB

Specifications

Dimensions: 144 (W) x 90 (H) x 470 (D) mm

Weight: 0,9 kg

Material: extruded aluminium

Colour: powder-coated RAL 9002

► FH 7109 H/B - thermostat heater HEB

Specifications

Power supply input: 12 V DC / 24 V AC

Consumption: 20 W

► FH 7168 / B - power supply HEB

Specifications

Power supply input: 230 V AC

Power supply output: 12 V DC / 400 mA, stabilized



PTZ Control



FH PTH 311 - pan tilt head

Specifications

Maximum load: 12 kg balanced
 Horizontal speed: 6° / s
 Vertical speed: 3° / s
 Horizontal torque: 6 Nm
 Vertical torque: 6 Nm
 Autopan: contact controlled with delayed inversion
 Power source: 24 V AC / 50 Hz
 Power consumption: 7 W max.
 Weatherproof rating: IP 66
 Ambient temperature: - 20°C ~ +50°C
 Material housing: aluminium
 Colour: grey RAL9002
 Dimensions: 279 (W) x 180 (H) x 161 (D) mm
 Weight: 3,4 kg
 Recommended housings:
 FH 7154 H, FH 7156 H/B, FH 7160, FH 7161 / B

Mounting: wall mounting with BA- PTAC,
 pole mounting with BA PTAC+ BA 15



KS DTMRX224 - telemetry receiver

Specifications

Functions: 12: pan left/right, tilt up/down, zoom in/out,
 focus near/far, iris open/close, autopan, aux
 Interface: RS-485, RS-232, coax telemetry
 Protocol types: Videotec macro / standard / coaxial,
 Pelco-D
 Address range: 1 ~ 99
 Power source: 24 V AC / 50 Hz
 Power consumption: 10 W max. (w/o connected PT head)
 PT control outputs: relay contacts 24 V AC / 50 Hz,
 100 W max.
 Lens control outputs: 6 V DC ~ 16 V DC adjustable,
 80 mA max.
 Aux output: clean N.O. contact max. 230 VAC / 1A
 Housing: ABS, IP-56
 Colour: grey
 Dimensions: 150 (W) x 195 (H) x 70 (D) mm
 Weight: 900 g



EL CBZ 220 - 230 V AC telemetry keyboard

Specifications

Functions:
 Pan left/right
 Tilt up/down
 Autopan on/off
 Zoom in/out
 Iris open/close
 Focus near/far
 Power source: 230 V AC / 50/60 Hz
 Power consumption: 4 W max.
 Max. switching power: 45 W
 Protection fuses: F1 50 mA F 250 V;
 F2 (motors protection) 630 mA T 250 V
 P&T control voltage: 230 V AC / 50 Hz
 Material: extruded aluminium body, membrane keyboard
 Colour: anthracite
 Dimensions: 120 (W) x 60 (H) x 185 (D) mm
 Weight: 1,1 kg



BA PTAC - wall mount bracket for FH PTH 311

Specifications

Material: aluminium
 Colour: grey, RAL 9002
 Length: 445 mm
 Max. load: 50 kg

EL CBZ 24 - 24 V AC telemetry keyboard

Specifications

Functions: see EL CBZ 220
 Power source: 24 V AC / 50/60 Hz
 Power consumption: 4 W max.
 Max. switching power: 45 W
 Protection fuses: F1 500 mA F 250 V;
 F2 (motors protection) 1,6 A T 250 V
 P&T control voltage: 24 V AC / 50 Hz
 Material: extruded aluminium body, membrane keyboard
 Colour: anthracite
 Dimensions: 120 (W) x 60 (H) x 185 (D) mm
 Weight: 1 kg

Brackets



BA 17 - bracket

Material: steel / aluminium, grey metallic
Length: 150 mm
Max. load: 3 kg



BA 14 / BA 11 - bracket

Material: zinc diecasted, silver colour
Length: BA 14: 165 mm / BA 11: 95 mm
Max. load: 3 kg



BA 01 / BA 01 L - bracket

Material: zinc diecasted, powder-coated beige
 mounting plate plastic
Length: BA 01: 95 mm, BA 01 L: 150 mm
Max. load: 3 kg



BA 15 - pole mount adaptor WSFP

Pole diameter: 65 ~ 110 mm
Material: cast aluminium, stainless steel
Application: with BA 09, BA 12, BA PTAC



BA 12 - bracket WBOV

Material: aluminium, RAL 9002
Length: 226 mm
Max. load: 25 kg
Application: with FH 7156 H/B and FH 7161 / B



BA 09 - bracket WBM

Material: aluminium, RAL 9002
Length: 226 mm
Max. load: 25 kg
Application: with FH 7154 H, FH 7156 H/B, FH 7160 and FH 7161 / B

Twisted Pair Transmission



EL TTM 102 - active mini video twisted pair transmitter

Specifications

Video input: 1 Vp-p, FBAS, 75 Ohm BNC-plug
Twisted pair output: 2 x 2 Vp-p max. at 120 Ohm
Bandwidth: 30 Hz ~ 5 MHz (-0,5 dB)
Surge / overvoltage protection: Class 4 15/8 KV
 Class 3 3015-6, ESD 8/25 μ s: 25 A

Max. recommended cable length: 1500 m with active receiver

Power source: 12 VDC ~ 20 VDC, 20 mA max.
Ambient temperature: -10°C ~ +60°C
Dimensions: 17,5 (Diameter) x 44 (Depth) mm
Weight: 25 g



EL TR 102 - active video twisted pair receiver

Specifications

Twisted pair video input: 0,12 - 2 Vp-p
Video output: 1 Vp-p max. FBAS at 75 Ohm termination
Input impedance: 45 ~ 75 Ohm
Bandwidth: 50 Hz ~ 5 MHz (3 dB)
Disturbance reduction: > 70 dB, 50 Hz
Signal-noise ratio: -50dB at +40dB gain adj.
 -47dB at +60dB gain adj.
Gain adjustment: +6 dB ~ +60 dB at 5 MHz
Power source: 12 VDC, 150 mA max., with included power supply 230 VAC

Ambient temperature: 0°C ~ +40°C
Dimensions: 138 (W) x 28 (H) x 86 (D) mm
Weight: 125 g



EL TT 102 - active video twisted pair transmitter

Specifications

Video input: 1 Vp-p, FBAS, 75 Ohm termination
Twisted pair output: 2 x 2 Vp-p max. at 120 Ohm
Bandwidth: 30 Hz ~ 5 MHz (-0,5 dB)
Max. recommended cable length: 1200 m with active receiver

Power source: 12 VDC, 40 mA max., with included power supply 230 VAC

Ambient temperature: 0°C ~ +40°C
Dimensions: 42 (W) x 46 (H) x 73 (D) mm
Weight: 65 g



EL TRR 102 - active video twisted pair receiver, rack mount card version

Specifications

Twisted pair video input: 0,12 Vp-p ~ 2 Vp-p
Input impedance: 45 ~ 75 Ohm
Video output: 1 Vp-p max. FBAS at 75 Ohm termination
Bandwidth: 50 Hz ~ 5 MHz (-3dB)
Disturbance reduction: > 70 dB, 50 Hz
Signal-noise ratio: -50dB at +40dB gain adj.
 -47dB at +60dB gain adj.

Gain adjustment: +6dB ~ +60dB at 5 MHz

Power source: 12 VDC, max. 150 mA
Ambient temperature: 0°C ~ +40°C
Dimensions: 138 (W) x 28 (H) x 139 (D) mm
Weight: 125 g



EL TT 103 - passive video twisted pair transmitter

Specifications

Video input: 1 Vp-p, FBAS, 75 Ohm termination, BNC
Twisted pair output: 2 x 2 Vp-p max. at 120 Ohm, screw terminal

Bandwidth: 40 Hz ~ 5 MHz (-1 dB)

Max. recommended cable length: 200 m with active receiver

Ambient temperature: 0°C ~ +50°C
Dimensions: 15 (W) x 19 (H) x 60 (L) mm
Weight: 60 g



EL TR Rack 2 - 19" rack for twisted pair video receiver EL TRR 102

Specifications

Receiver card slots: 15, with 15 metal slot covers for unused slots
Material: steel, black

Power supply: 230 VAC, 80 VA max.
 internal: 15 x 12 VDC, 150 mA max.

Ambient temperature: 0°C ~ +50°C
Dimensions: 19", 3U, 482 (W) x 133 (H) x 205 (D) mm
Weight: 6,5 kg

Video Distribution



► EP TD 108 - video signal distributor 1 x 8

Specifications

Video input: 1 x 0,8 ~ 1,2 Vp-p Composite, BNC, 75 Ohm terminated

Video output: 8 x 1 Vp-p Composite to 75 Ohm, BNC

Distribution: 1 in : 8 out

Video bandwidth: 10 Hz ~ 10 MHz

Power source: 12 VDC, 500 mA max.

Ambient temperature: 0°C ~ +50°C

Dimensions: 150 (W) x 44 (H) x 133 (D) mm

Weight: 750 g



► EP TD 408 A - video signal distributor 4 x 8

Specifications

Video input: 4 x 0,8 ~ 1,2 Vp-p Composite, BNC, 75 Ohm terminated

Video output: 8 x 1 Vp-p Composite to 75 Ohm, adjustable, BNC

Distribution: 4 x 1 in : 2 out

Video bandwidth: 10 Hz ~ 10 MHz

Power source: 12 VDC, 500 mA max.

Ambient temperature: 0°C ~ +50°C

Dimensions: 150 (W) x 44 (H) x 133 (D) mm

Weight: 750 g



► EP TD 816 A - video signal distributor 8 x 16

Specifications

Video input: 8 x 0,8 ~ 1,2 Vp-p Composite, BNC, 75 Ohm terminated

Video output: 16 x 1 Vp-p Composite to 75 Ohm, adjustable, BNC

Distribution: 8 x 1 in : 2 out

Video bandwidth: 10 Hz ~ 10 MHz

Power source: 12 VDC, 500 mA max.

Ambient temperature: 0°C ~ +50°C

Dimensions: 10", 1U, 482 (W) x 44 (H) x 170 (D) mm

Weight: 2,6 kg



► EP TD 816 PRO - programmable video signal distributor 8 x 16

Specifications

Video input: 8 x 0,8 ~ 1,2 Vp-p Composite, BNC, 75 Ohm terminated

Video output: 16 x 1 Vp-p Composite to 75 Ohm, BNC, 1 output with programmable sequence

Distribution: free input / output assignment

Video bandwidth: 10 Hz ~ 10 MHz

Display: 2 x 7 segment LED displays

Setup: 4 front keys with lock function

Power source: 12 VDC, 500 mA max.

Ambient temperature: 0°C ~ +50°C

Dimensions: 10", 1U, 482 (W) x 44 (H) x 170 (D) mm

Weight: 2,6 kg

Quads



► **EP 4BQ - 4-channel b/w
quad Processor**

Specifications

Video format: CCIR

Video input: 4 inputs with loop-through
1 VCR input, 1 Vp-p, 75 Ohm

Video output: 1 monitor output
1 quad output for VCR, 1 Vp-p at 75 Ohm

Refresh rate: 15-30 fields / sec.

VCR playback: yes

Alarm input: 4 alarm inputs

Alarm output: 1x NO/NC relay output

Power source: 24 V AC, 230 V AC via included power supply

Power consumption: max. 5 W

Ambient temperature: 0°C ~ +50°C

Dimensions: 239 (W) x 55 (H) x 166 (D) mm

Weight: 2,0 kg



► **EP 4CQ - 4-channel colour
quad processor**

Specifications

Video format: PAL

Video input: 4 inputs, 1 Vp-p, 75 Ohm
1 VCR input, 1 Vp-p, 75 Ohm

Video output: 2 video outputs, 1 Vp-p at 75 Ohm

Title: 6-characters title generator for each camera

Timer: built-in real time clock

Alarm input: 4 alarm inputs

Alarm output: 1 NO/NC relay output

Power source: 12 V DC / 24 V AC,
230 V AC via included power supply

Power consumption: 17 W max.

Ambient temperature: 0°C ~ +50°C

Dimensions: 239 (W) x 55 (H) x 166 (D) mm

Weight: 2,4 kg

Video Sensors

EP DMD-4 - digital 4-channel indoor / outdoor video sensor

Specifications

Video input: 4 x FBAS 1 Vp-p, 75 Ohm, BNC

Video output: 4 loop-through outputs BNC

Serial interfaces: 1 x RS-232, 1 x RS-422/RS-485 (galvanic isolated)

Network interface: Ethernet 10/100 MB

Switch inputs: 6 x switch input (4 alarm), N.O., N.C.

Relay outputs: 6 x NO/NC

Display: 6 x status LED

Colour: RAL 7035, powder-coated

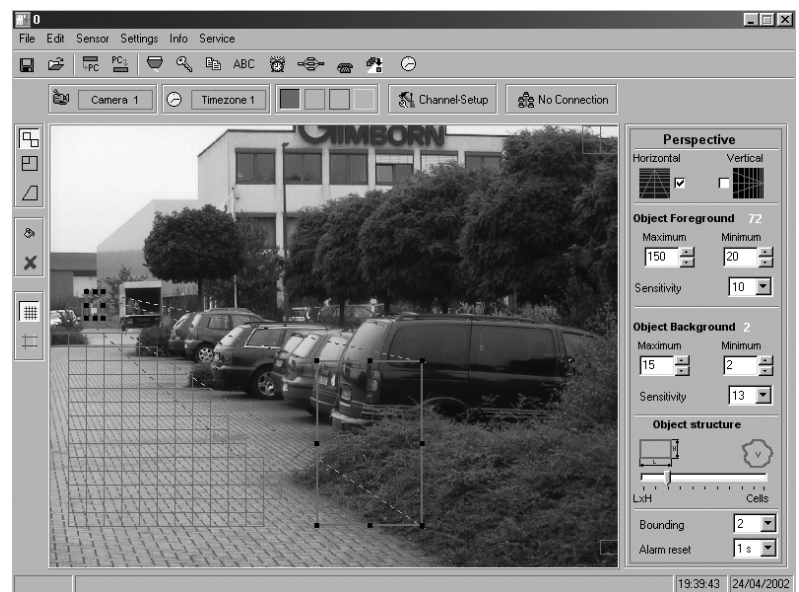
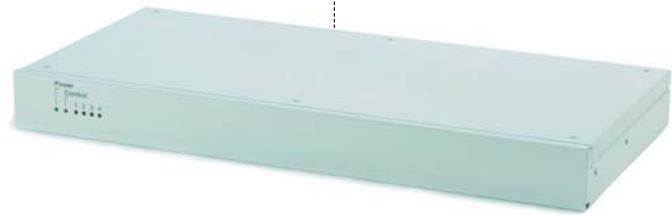
Power source: 9 V DC, 230 V AC via included power supply

Dimensions: 19", 1 HU, 200 (D) mm

Weight: 4,6 kg

Features

- ✓ PC setup via network with live video, saving of parameters, parameter up- / download, password protection
- ✓ integration of several sensors in network
- ✓ 4 sensor areas per camera with each up to 6480 fields
- ✓ tracking detection of up to 16 objects per channel
- ✓ max. 8 scans / second of all sensor fields
- ✓ automatic speed dome tracking via preset
- ✓ speed dome telemetry control
- ✓ camera perspective analysis
- ✓ various filter functions for motion detection to avoid false alarms
- ✓ logical link between sensor fields, alarm inputs and timer
- ✓ sabotage detection (analysis of signal characteristic)
- ✓ integrated timer with automatic daylight saving time adjustment, calendar function
- ✓ 4 time zones, day / night switch
- ✓ four week timers with 96 possible switches for each day
- ✓ date and time display
- ✓ release of one relay contact per channel and individual programming of serial command sequences per field
- ✓ text / field indication with up to 24 x 12 characters per channel
- ✓ German / English menu



Tracking function for speed dome control!



MPEG-4 Series



Delivery includes IR remote control EDA 966!



EDR 1640 - 16-channel duplex MPEG-4 digital video recorder

Specifications

Video format: PAL / CCIR

Display format:

1, 4, 7, 9, 10, 13, 16x multiscreen, 2x2 zoom, PiP (live mode)
1, 4, 7, 9, 10, 13, 16x multiscreen, 2x2 zoom (playback mode)

Video input: 16 video inputs 1 Vp-p composite PAL, BNC,
automatic 75 Ohm termination
1 cascade input, 1 Vp-p composite PAL, BNC

Video output:

16 loop-through outputs 1 Vp-p at 75 Ohm, BNC
1 main monitor output, 1 Vp-p at 75 Ohm, BNC
1 S-video output mini DIN, for main monitor
1 call monitor output, 1 Vp-p at 75 Ohm, BNC
4 matrix monitor outputs, 1 Vp-p at 75 Ohm, BNC
1 cascade output, 1 Vp-p at 75 Ohm, BNC

Video compression: MPEG-4

Display resolution: 720 x 576

Harddisk storage: 2 x 3,5" IDE HDD

SCSI controller for external storage via disk array EDA 800 s

Recording resolution: Full D1 size: 720 x 576

Half D1 size: 720 x 288

CIF size: 360 x 288

Recording rate: 1 ~ 400 IPS (360 x 288)

1 ~ 200 IPS (720 x 288)

1 ~ 100 IPS (720 x 576)

Recording modes: continuous, timer, schedule
or event recording

Playback search: via time/date or event

Video pause: yes

Video loss detection: yes

Motion detection: yes, with configurable detection area
(30x24) and sensitivity

Event log: yes (10240 entries per HD)

Alarm input: 16 alarm inputs

Alarm output: 4 alarm outputs

Audio input: 4 mono (line) inputs

Audio output: 1 mono (line) output

Setup: on-screen display

Control: front panel control with jog/shuttle, IR remote control
optional: mouse control, network, RS-485 keyboard EKB 500

Timer: built-in real time clock with automatic time
synchronisation via global NTP server through Internet

Title: 12-characters title generator for each camera

Archive: USB 2.0 interface

Ethernet: RJ45 network connector

RS-232: 9-pin Sub-D

RS-485: 2 x RJ45 connector for remote control and PTZ

Watchdog function: for processing, cooler fan,
HDD temperature and HDD activity

Password protection: 3 level

Power source: 100 ~ 240 V AC

Power consumption: 185 W max.

Ambient temperature: 0°C ~ +40°C

Dimensions: 19", 2 HU, 430 (W) x 88 (H) x 300 (D) mm

Weight: 6,24 kg

Features

- ✓ built-in MPEG-4 compression / decompression with configurable quality
- ✓ variable recording speeds up to 400 IPS
- ✓ duplex operation for simultaneous recording and playback
- ✓ data archiving via USB 2.0 port
- ✓ programmable motion detection area (30 x 24) for each channel
- ✓ colour, brightness and contrast setting per channel
- ✓ two removable hard disks for internal storage
- ✓ extended recording capacity via max. 6 optional hard disk arrays EDA 800 s
- ✓ individual recording settings for each channel
- ✓ on-screen menu operation with multi-language support
- ✓ real time audio recording at any video recording speed
- ✓ Ethernet interface for remote network viewing and controlling
- ✓ fast network video transmission through either Internet Explorer (ActiveX application) or optional PowerCon 4.0 software
- ✓ cascading of EDR's in remote keyboard applications
- ✓ network operation independent from local operation
- ✓ e-mail alarm
- ✓ network alarm with optional PowerCon 4.0 software
- ✓ speed dome control via network
- ✓ optional RS-485 remote control (EKB 500)



Delivery includes IR remote control EDA 966!



EDR 920 - 9-channel duplex MPEG-4 digital video recorder

Specifications

Video format: PAL / CCIR

Display format:

1, 4, 7, 9x multiscreen, 2x2 zoom, PiP (live mode)

1, 4, 7, 9x multiscreen, 2x2 zoom (playback mode)

Video input: 9 video inputs 1 Vp-p composite PAL, BNC, automatic 75 Ohm termination

1 cascading input, 1 Vp-p composite PAL, BNC

Video output:

9 loop-through outputs 1 Vp-p at 75 Ohm, BNC

1 main monitor output, 1 Vp-p at 75 Ohm, BNC

1 S-video output mini DIN, for main monitor

1 call monitor output, 1 Vp-p at 75 Ohm, BNC

4 matrix monitor outputs, 1 Vp-p at 75 Ohm, BNC

1 cascading output, 1 Vp-p at 75 Ohm, BNC

Video compression: MPEG-4

Display resolution: 720 x 576

Harddisk storage: 2 x 3,5" IDE HDD

SCSI controller for external storage via disk array EDA 800 s

Recording resolution: Full D1 size: 720 x 576

Half D1 size: 720 x 288

CIF size: 360 x 288

Recording rate: 1 ~ 200 IPS (360 x 288)

1 ~ 100 IPS (720 x 288)

1 ~ 50 IPS (720 x 576)

Recording modes: continuous, timer, schedule or event recording

Playback search: via time/date or event

Video pause: yes

Video loss detection: yes

Motion detection: yes, with configurable detection area (30x24) and sensitivity

Event log: yes (10240 entries per HD)

Alarm input: 9 alarm inputs

Alarm output: 4 alarm outputs

Audio input: 4 mono (line) inputs

Audio output: 1 mono (line) output

Setup: on-screen display

Control: front panel control with jog/shuttle, IR remote control optional: mouse control, network, RS-485 keyboard EKB 500

Timer: built-in real time clock with automatic time synchronisation via global NTP server through Internet

Title: 12-characters title generator for each camera

Archive: USB 2.0 interface

Ethernet: RJ45 network connector

RS-232: 9-pin Sub-D

RS-485: 2x RJ45 connector for remote control and PTZ

Watchdog function: for processing, cooler fan, HDD temperature and HDD activity

Password protection: 3 level

Power source: 100 ~ 240 V AC

Power consumption: 185 W max.

Ambient temperature: 0°C ~ +40°C

Dimensions: 19", 2 HU, 430 (W) x 88 (H) x 300 (D) mm

Weight: 6,24 kg

Features

- ✓ built-in MPEG-4 compression / decompression with configurable quality
- ✓ variable recording speeds up to 200 IPS
- ✓ duplex operation for simultaneous recording and playback
- ✓ data archiving via USB 2.0 port
- ✓ programmable motion detection area (30 x 24) for each channel
- ✓ colour, brightness and contrast setting per channel
- ✓ two removable hard disks for internal storage
- ✓ extended recording capacity via max. 6 optional hard disk arrays EDA 800 s
- ✓ individual recording settings for each channel
- ✓ on-screen menu operation with multi-language support
- ✓ real time audio recording at any video recording speed
- ✓ Ethernet interface for remote network viewing and controlling
- ✓ fast network video transmission through either Internet Explorer (ActiveX application) or optional PowerCon 4.0 software
- ✓ cascading of EDR's in remote keyboard applications
- ✓ network operation independent from local operation
- ✓ e-mail alarm
- ✓ network alarm with optional PowerCon 4.0 software
- ✓ speed dome control via network
- ✓ optional RS-485 remote control (EKB 500)

MPEG-4 "Ease" Series



Delivery includes IR remote control EDA 966!



EDR 1610 A - 16-channel duplex MPEG-4 digital video recorder

Specifications

Video format: PAL / CCIR

Display format: 1, 4, 7, 9, 10, 13, 16x multiscreen, PiP, 2x2 zoom

Video input: 16 video inputs, 1 Vp-p composite PAL, BNC, automatic 75 Ohm termination

Video output: 16 loop-through outputs, 1 Vp-p at 75 Ohm
1 main monitor output, 1 Vp-p at 75 Ohm, BNC
1 call monitor output, 1 Vp-p at 75 Ohm, BNC
1 monitor output VGA

Video compression: MPEG-4

Display resolution: 720 x 576 or 720 x 288 or 360 x 288

Harddisk storage: 1 x internal 3,5" IDE HDD

Recording resolution: Full D1 size: 720 x 576

Half D1 size: 720 x 288

CIF size: 360 x 288

Recording rate: 1 ~ 100 IPS (360 x 288)

1 ~ 50 IPS (720 x 288)

1 ~ 25 IPS (720 x 576)

Recording modes: continuous, timer, schedule
or event recording

Playback search: via time/date or event

Video pause: yes

Video loss detection: yes

Motion detection: yes, with configurable detection area (30x24)
and 6 sensitivity levels

Event log: yes (10240 entries)

Alarm input: 16 alarm inputs

Alarm output: 1 alarm output

Setup: on-screen display

Control: front panel control with jog/shuttle, IR remote control
optional: keyboard control, RS-485 keyboard EKB 500

Timer: built-in real time clock with automatic time
synchronisation via global NTP server through Internet

Title: 12-characters title generator for each camera

Archive: USB 2.0 interface (for USB stick or EPR200 DVD-RW drive),
internal DVD-RW drive (EDR 1610 D only)

Ethernet: RJ45 network connector

RS-232: 9-pin Sub-D

RS-485: 2x RJ45 connector for remote control and PTZ

Watchdog function: for processing, cooler fan,
HDD temperature and HDD activity

Password protection: for menu and record function

Remote control: optional

Media: DVD+RW media, UDF formatted

Power source: 100 ~ 240 V AC

Power consumption: 90 W max.

Ambient temperature: 0°C ~ +40°C

Dimensions: 430 (W) x 83 (H) x 385 (D) mm

Weight: 6,0 kg (EDR 1610 A), 6,4 kg (EDR 1610 D)

Features:

- ✓ built-in MPEG-4 compression/decompression with configurable quality
- ✓ variable recording speeds up to 100 IPS
- ✓ data archiving via USB 2.0 port
- ✓ internal DVD-RW drive for easy video export (EDR 1610 D)
- ✓ programmable motion detection area (30x24) for each channel
- ✓ one internal hard disk for data storage
- ✓ individual recording settings for each channel
- ✓ on-screen menu operation with multi-language support
- ✓ Ethernet interface for remote network viewing and controlling
- ✓ fast network video transmission through either Internet Explorer (ActiveX application) or optional PowerCon 4.0 software
- ✓ network operation independent from local operation mode
- ✓ e-mail alarm
- ✓ network alarm with optional PowerCon 4.0 software
- ✓ speed dome control via network
- ✓ optional RS-485 remote control (EKB 500)

EDR 1610 D - 16-channel duplex MPEG-4 digital video recorder with DVD-RW drive





Delivery includes IR remote control EDA 966!



EDR 910 A - 9-channel duplex MPEG-4 digital video recorder

Specifications

Video format: PAL / CCIR

Display format: 1, 4, 7, 9, x multiscreen, PiP, 2x2 zoom

Video input: 9 video inputs, 1 Vp-p composite PAL, BNC, automatic 75 Ohm termination

Video output: 9 loop-through outputs, 1 Vp-p at 75 Ohm
1 main monitor output, 1 Vp-p at 75 Ohm, BNC
1 call monitor output, 1 Vp-p at 75 Ohm, BNC
1 monitor output VGA

Video compression: MPEG-4

Display resolution: 720 x 576 or 720 x 288 or 360 x 288

Harddisk storage: 1 x internal 3,5" IDE HDD

Recording resolution: Full D1 size: 720 x 576
Half D1 size: 720 x 288
CIF size: 360 x 288

Recording rate: 1 ~ 100 IPS (360 x 288)
1 ~ 50 IPS (720 x 288)
1 ~ 25 IPS (720 x 576)

Recording modes: continuous, timer, schedule or event recording

Playback search: via time/date or event

Video pause: yes

Video loss detection: yes

Motion detection: yes, with configurable detection area (30x24) and 6 sensitivity levels

Event log: yes (10240 entries)

Alarm input: 9 alarm inputs

Alarm output: 1 alarm output

Setup: on-screen display

Control: front panel control with jog/shuttle, IR remote control
optional: keyboard control, RS-485 keyboard EKB 500

Timer: built-in real time clock with automatic time synchronisation via global NTP server through Internet

Title: 12-characters title generator for each camera

Archive: USB 2.0 interface (for USB stick or EPR200 DVD-RW drive), internal DVD-RW drive (EDR 910 D only)

Ethernet: RJ45 network connector

RS-232: 9-pin Sub-D

RS-485: 2x RJ45 connector for remote control and PTZ

Watchdog function: for processing, cooler fan, HDD temperature and HDD activity

Password protection: for menu and record function

Remote control: optional

Media: DVD+RW media, UDF formatted

Power source: 100 ~ 240 V AC

Power consumption: 90 W max.

Ambient temperature: 0°C ~ +40°C

Dimensions: 430 (W) x 83 (H) x 385 (D) mm

Weight: 6,0 kg (EDR 910 A), 6,4 kg (EDR 910 D)

Features

- ✓ built-in MPEG-4 compression/decompression with configurable quality
- ✓ variable recording speeds up to 100 IPS
- ✓ data archiving via USB 2.0 port
- ✓ internal DVD-RW drive for easy video export (EDR 910 D)
- ✓ programmable motion detection area (30x24) for each channel
- ✓ one internal hard disk for data storage
- ✓ individual recording settings for each channel
- ✓ on-screen menu operation with multi-language support
- ✓ Ethernet interface for remote network viewing and controlling
- ✓ fast network video transmission through either Internet Explorer (ActiveX application) or optional PowerCon 4.0 software
- ✓ network operation independent from local operation mode
- ✓ e-mail alarm
- ✓ network alarm with optional PowerCon 4.0 software
- ✓ speed dome control via network
- ✓ optional RS-485 remote control (EKB 500)

EDR 910 D - 9-channel duplex MPEG-4 digital video recorder with DVD-RW drive



MPEG-4 "Ease" Series



Delivery includes IR remote control EDA 966!



EDR 410 D - 4-channel duplex MPEG-4 digital video recorder with DVD-RW drive

Specifications

Video format: PAL / CCIR

Display format: 1, 4x multiscreen, PIP, 2x2 zoom

Video input: 4 video inputs, 1 Vp-p composite PAL, BNC, automatic 75 Ohm termination

Video output: 4 loop-through outputs, 1 Vp-p at 75 Ohm

1 main monitor output, 1 Vp-p at 75 Ohm, BNC

1 call monitor output, 1 Vp-p at 75 Ohm, BNC

1 monitor output VGA

Video compression: MPEG-4

Display resolution: 720 x 576 or 720 x 288 or 360 x 288

Harddisk storage: 1 x internal 3,5" IDE HDD

Recording resolution: Full D1 size: 720 x 576

Half D1 size: 720 x 288

CIF size: 360 x 288

Recording rate: 1 ~ 100 IPS (360 x 288)

1 ~ 50 IPS (720 x 288)

1 ~ 25 IPS (720 x 576)

Recording modes: continuous, timer, schedule or event recording

Playback search: via time/date or event

Video pause: yes

Video loss detection: yes

Motion detection: yes, with configurable detection area (30x24) and 6 sensitivity levels

Event log: yes (10240 entries)

Alarm input: 4 alarm inputs

Alarm output: 1 alarm output

Setup: on-screen display

Control: front panel control with jog/shuttle, IR remote control

optional: keyboard control, RS-485 keyboard EKB 500

Timer: built-in real time clock with automatic time synchronisation via global NTP server through Internet

Title: 12-characters title generator for each camera

Archive: USB 2.0 interface (for USB stick or EPR200 DVD-RW drive), internal DVD-RW drive

Ethernet: RJ45 network connector

RS-232: 9-pin Sub-D

RS-485: RJ45 connector for remote control and PTZ

Watchdog function: for processing, cooler fan, HDD temperature and HDD activity

Password protection: for menu and record function

Remote control: optional

Media: DVD+RW media, UDF formatted

Power source: 100 ~ 240 V AC

Power consumption: 90 W max.

Ambient temperature: 0°C ~ +40°C

Dimensions: 430 (W) x 83 (H) x 385 (D) mm

Weight: 6,4 kg

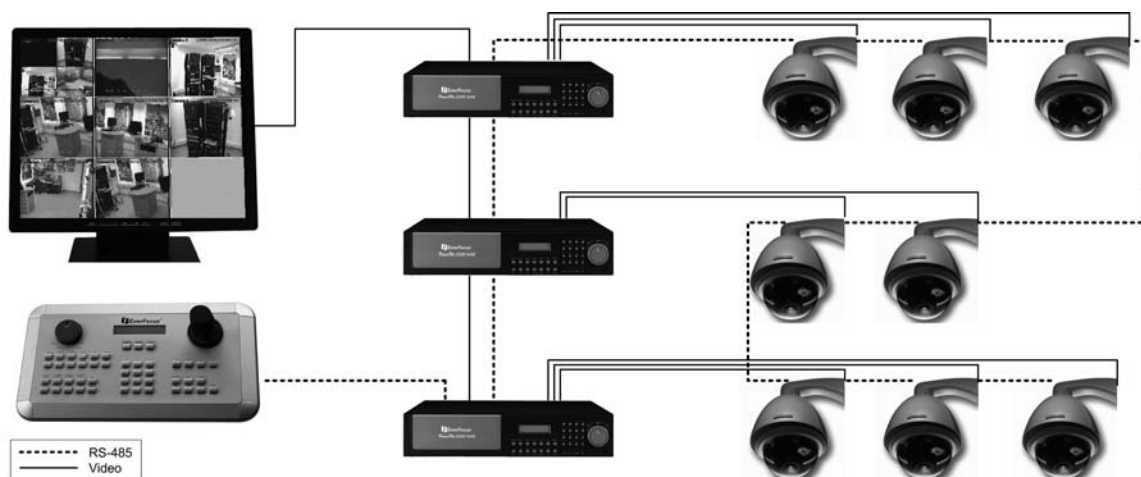
Features:

- ✓ built-in MPEG-4 compression/decompression with configurable quality
- ✓ variable recording speeds up to 100 IPS
- ✓ data archiving via USB 2.0 port
- ✓ internal DVD-RW drive for easy video export
- ✓ programmable motion detection area (30x24) for each channel
- ✓ one internal hard disk for data storage
- ✓ individual recording settings for each channel
- ✓ on-screen menu operation with multi-language support
- ✓ Ethernet interface for remote network viewing and controlling
- ✓ fast network video transmission through either Internet Explorer (ActiveX application) or optional PowerCon 4.0 software
- ✓ network operation independent from local operation mode
- ✓ e-mail alarm
- ✓ network alarm with optional PowerCon 4.0 software
- ✓ speed dome control via network
- ✓ optional RS-485 remote control (EKB 500)

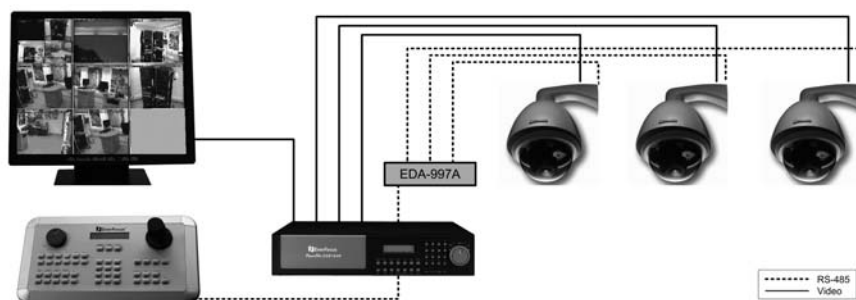


System Examples

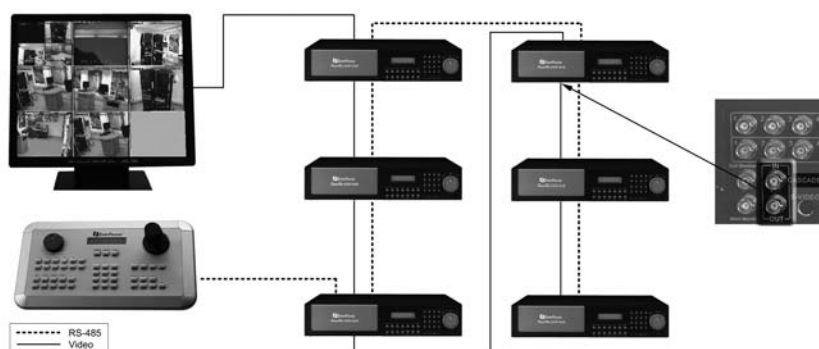
EEFbus system example with speed dome EPTZ 1000, 3 cascaded EDR 1640 and TFT monitor FH 7517 T



EEFbus remote control with speed dome star wiring



Multi-DVR remote control using cascading function



MPEG-4 "Half size" Series



Delivery includes IR remote control EDA 966!

EDR 810 H - 8-channel half size MPEG-4 digital video recorder

Specifications

Video format: PAL / CCIR

Display format main monitor:

1, 4, 7, 8/9x multiscreen, SEQ, PIP, 2x2 zoom

Display format call monitor:

1, 4x display, SEQ

Video input: 8 video inputs, 1 Vp-p composite PAL, BNC, automatic 75 Ohm termination

Video output: 1 main monitor output, 1 Vp-p at 75 Ohm, BNC
1 call monitor output, 1 Vp-p at 75 Ohm, BNC

Video compression: MPEG-4

Display resolution: 720 x 576 or 720 x 288 or 360 x 288

Harddisk storage: 1 x 3,5" IDE HDD

Recording resolution: Full D1 size: 720 x 576

Half D1 size: 720 x 288

CIF size: 360 x 288

Recording rate: 1 ~ 100 IPS (360 x 288)

1 ~ 50 IPS (720 x 288)

1 ~ 25 IPS (720 x 576)

Recording modes: continuous, timer, schedule
or event recording

Playback search: via time/date or event

Video pause: yes

Video loss detection: yes

Motion detection: yes, with configurable detection area (30x24)
and 6 sensitivity levels

Event log: yes (10240 entries)

Alarm input: 8 alarm inputs

Alarm output: 1 alarm output

Audio input: 2 mono (line) inputs

Audio output: 2 mono (line) outputs

Setup: on-screen display

Control: front panel control with jog/shuttle, IR remote control
optional: keyboard control, network, RS-485 keyboard EKB 500

Timer: built-in real time clock with automatic time
synchronisation via global NTP server through Internet



Title: 12-characters title generator for each camera

Archive: USB 2.0 interface

Ethernet: RJ45 network connector

RS-232: 9-pin Sub-D

RS-485: 2x RJ45 connector for remote control and PTZ

Watchdog function: for processing, cooler fan,
HDD temperature and HDD activity

Password protection: 3 level

Power source: 12 / 24 V DC,
via included power supply 230 V AC

Power consumption: 60 W max.

Ambient temperature: 0°C ~ +40°C

Dimensions: 215 (W) x 100 (H) x 321 (D) mm

Weight: 5,0 kg

Features:

- ✓ built-in MPEG-4 compression/decompression with configurable quality
- ✓ variable recording speeds up to 100 IPS
- ✓ data archiving via USB 2.0 port
- ✓ programmable motion detection area (30x24) for each camera
- ✓ one hard disk for internal storage
- ✓ quad output for call monitor
- ✓ individual recording settings for each channel
- ✓ on-screen menu operation with multi-language support
- ✓ real time audio recording at any video recording speed
- ✓ Ethernet interface for remote network viewing and controlling
- ✓ fast network video transmission through either Internet Explorer (ActiveX application) or optional PowerCon 4.0 software
- ✓ network operation independent from local operation mode
- ✓ e-mail alarm
- ✓ network alarm with optional PowerCon 4.0 software
- ✓ speed dome control via network
- ✓ optional RS-485 remote control (EKB 500)



Delivery includes IR remote control EDA 966!



► EDR 410 H - 4-channel half size MPEG-4 digital video recorder

Specifications

Video format: PAL / CCIR

Display format main monitor:

1, 4x multiscreen, SEQ, PIP, 2x2 zoom

Display format call monitor:

1, 4x display, SEQ

Video input: 4 video inputs, 1 Vp-p composite PAL, BNC, automatic 75 Ohm termination

Video output: 4 loop-through outputs, 1 Vp-p at 75 Ohm, BNC

1 main monitor output, 1 Vp-p at 75 Ohm, BNC

1 call monitor output, 1 Vp-p at 75 Ohm, BNC

Video compression: MPEG-4

Display resolution: 720 x 576 or 720 x 288 or 360 x 288

Harddisk storage: 1 x 3,5" IDE HDD

Recording resolution: Full D1 size: 720 x 576

Half D1 size: 720 x 288

Clf size: 360 x 288

Recording rate: 1 ~ 100 IPS (360 x 288)

1 ~ 50 IPS (720 x 288)

1 ~ 25 IPS (720 x 576)

Recording modes: continuous, timer, schedule
or event recording

Playback search: via time/date or event

Video pause: yes

Video loss detection: yes

Motion detection: yes, with configurable detection area (30x24)
and 6 sensitivity levels

Event log: yes (10240 entries)

Alarm input: 4 alarm inputs

Alarm output: 1 alarm output

Audio input: 2 mono (line) inputs

Audio output: 2 mono (line) outputs

Setup: on-screen display

Control: front panel control with jog/shuttle, IR remote control
optional: keyboard control, network, RS-485 keyboard EKB 500

Timer: built-in real time clock with automatic time
synchronisation via global NTP server through Internet

Title: 12-characters title generator for each camera

Archive: USB 2.0 interface

Ethernet: RJ45 network connector

RS-232: 9-pin Sub-D

RS-485: 2x RJ45 connector for remote control and PTZ

Watchdog function: for processing, cooler fan,
HDD temperature and HDD activity

Password protection: 3 level

Power source: 12 / 24 V DC,

via included power supply 230 V AC

Power consumption: 60 W max.

Ambient temperature: 0°C ~ +40°C

Dimensions: 215 (W) x 100 (H) x 321 (D) mm

Weight: 5,0 kg

Features:

- ✓ built-in MPEG-4 compression/decompression with configurable quality
- ✓ variable recording speeds up to 100 IPS
- ✓ data archiving via USB 2.0 port
- ✓ programmable motion detection area (30x24) for each camera
- ✓ one hard disk for internal storage
- ✓ quad output for call monitor
- ✓ individual recording settings for each channel
- ✓ on-screen menu operation with multi-language support
- ✓ real time audio recording at any video recording speed
- ✓ Ethernet interface for remote network viewing and controlling
- ✓ fast network video transmission through either Internet Explorer (ActiveX application) or optional PowerCon 4.0 software
- ✓ network operation independent from local operation mode
- ✓ e-mail alarm
- ✓ network alarm with optional PowerCon 4.0 software
- ✓ speed dome control via network
- ✓ optional RS-485 remote control (EKB 500)

MPEG-4 "Mobile" Series



Delivery includes IR remote control EDA 966!



EDR 810 M - 8-channel mobile MPEG-4 digital video recorder

Specifications

Video format: PAL / CCIR

Display format main monitor:

1, 4, 7, 8/9x multiscreen, SEQ, PiP, 2x2 zoom

Display format call monitor:

1, 4x display, SEQ

Video input: 8 video inputs, 1 Vp-p composite PAL, BNC, automatic 75 Ohm termination

Video output: 1 main monitor output, 1 Vp-p at 75 Ohm, BNC
1 call monitor output, 1 Vp-p at 75 Ohm, BNC

Video compression: MPEG-4

Display resolution: 720 x 576 or 720 x 288 or 360 x 288

Harddisk storage: 1 x 2,5" IDE HDD

Recording resolution: Full D1 size: 720 x 576

Half D1 size: 720 x 288

CIF size: 360 x 288

Recording rate: 1 ~ 100 IPS (360 x 288)

1 ~ 50 IPS (720 x 288)

1 ~ 25 IPS (720 x 576)

Recording modes: continuous, timer, schedule
or event recording

Playback search: via time/date or event

Video pause: yes

Video loss detection: yes

Motion detection: yes, with configurable detection area (30x24)
and 6 sensitivity levels

Event log: yes (10240 entries)

Alarm input: 8 alarm inputs

Alarm output: 1 alarm output

Audio input: 2 mono (line) inputs

Audio output: 2 mono (line) outputs

Setup: on-screen display

Control: front panel control with jog/shuttle, IR remote control
optional: keyboard control, network, RS-485 keyboard EKB 500

Timer: built-in real time clock with automatic time
synchronisation via global NTP server through Internet

Title: 12-characters title generator for each camera

Archive: USB 2.0 interface

Ethernet: RJ45 network connector

RS-232: 9-pin Sub-D

RS-485: 2x RJ45 connector for remote control and PTZ

Watchdog function: for processing, cooler fan,
HDD temperature and HDD activity

Password protection: 3 level

e9 certificate no.: e9*72/245*2004/104*6077*00

Power source: 12 / 24 V DC
(230 V AC power supply not included)

Power consumption: 60 W max.

Ambient temperature: -10°C ~ +50°C

Operating shock: 8G, 11 ms (20 per 5 seconds max.)

Operating vibration: 5 ~ 20 Hz, 0,037" (double amplitude),
5~500 Hz, 0,75 G (0 to peak)

Dimensions:

215 (W) x 100 (H) x 321 (D) mm (without mobile mounting kit)

320 (W) x 108 (H) x 321 (D) mm (with mobile mounting kit)

Weight: 5,0 kg

Features:

- ✓ built-in MPEG-4 compression/decompression with configurable quality
- ✓ variable recording speeds up to 100 IPS
- ✓ data archiving via USB 2.0 port
- ✓ programmable motion detection area (30x24) for each camera
- ✓ one hard disk for internal storage
- ✓ quad output for call monitor
- ✓ individual recording settings for each channel
- ✓ on-screen menu operation with multi-language support
- ✓ real time audio recording at any video recording speed
- ✓ Ethernet interface for remote network viewing and controlling
- ✓ fast network video transmission through either Internet Explorer (ActiveX application) or optional PowerCon 4.0 software
- ✓ shock- and vibration-proof mounting kit
- ✓ network operation independent from local operation mode
- ✓ e-mail alarm
- ✓ network alarm with optional PowerCon 4.0 software
- ✓ speed dome control via network
- ✓ optional RS-485 remote control (EKB 500)



Delivery includes IR remote control EDA 966!



► EDR 410 M - 4-channel mobile MPEG-4 digital video recorder

Specifications

Video format: PAL / CCIR

Display format main monitor:

1, 4x multiscreen, SEQ, PiP, 2x2 zoom

Display format call monitor:

1, 4x display, SEQ

Video input: 4 video inputs, 1 Vp-p composite PAL, BNC, automatic 75 Ohm termination

Video output: 4 loop-through outputs, 1 Vp-p at 75 Ohm, BNC
1 main monitor output, 1 Vp-p at 75 Ohm, BNC
1 call monitor output, 1 Vp-p at 75 Ohm, BNC

Video compression: MPEG-4

Display resolution: 720 x 576 or 720 x 288 or 360 x 288

Harddisk storage: 1 x 2,5" IDE HDD

Recording resolution: Full D1 size: 720 x 576

Half D1 size: 720 x 288

CIF size: 360 x 288

Recording rate: 1 ~ 100 IPS (360 x 288)

1 ~ 50 IPS (720 x 288)

1 ~ 25 IPS (720 x 576)

Recording modes: continuous, timer, schedule
or event recording

Playback search: via time/date or event

Video pause: yes

Video loss detection: yes

Motion detection: yes, with configurable detection area (30x24)
and 6 sensitivity levels

Event log: yes (10240 entries)

Alarm input: 4 alarm inputs

Alarm output: 1 alarm output

Audio input: 2 mono (line) inputs

Audio output: 2 mono (line) outputs

Setup: on-screen display

Control: front panel control with jog/shuttle, IR remote control

optional: keyboard control, network, RS-485 keyboard EKB 500

Timer: built-in real time clock with automatic time
synchronisation via global NTP server through Internet

Title: 12-characters title generator for each camera

Archive: USB 2.0 interface

Ethernet: RJ45 network connector

RS-232: 9-pin Sub-D

RS-485: 2x RJ45 connector for remote control and PTZ

Watchdog function: for processing, cooler fan,
HDD temperature and HDD activity

Password protection: 3 level

e9 certificate no.: e9*72/245*2004/104*6077*00

Power source: 12 / 24 V DC

(230 V AC power supply not included)

Power consumption: 60 W max.

Ambient temperature: -10°C ~ +50°C

Operating shock: 8G, 11 ms (20 per 5 seconds max.)

Operating vibration: 5 ~ 20 Hz, 0,037" (double amplitude),
5~500 Hz, 0,75 G (0 to peak)

Dimensions:

215 (W) x 100 (H) x 321 (D) mm (without mobile mounting kit)

320 (W) x 108 (H) x 321 (D) mm (with mobile mounting kit)

Weight: 5,0 kg

Features:

- ✓ built-in MPEG-4 compression/decompression with configurable quality
- ✓ variable recording speeds up to 100 IPS
- ✓ data archiving via USB 2.0 port
- ✓ programmable motion detection area (30x24) for each camera
- ✓ one hard disk for internal storage
- ✓ quad output for call monitor
- ✓ individual recording settings for each channel
- ✓ on-screen menu operation with multi-language support
- ✓ real time audio recording at any video recording speed
- ✓ Ethernet interface for remote network viewing and controlling
- ✓ fast network video transmission through either Internet Explorer (ActiveX application) or optional PowerCon 4.0 software
- ✓ shock- and vibration-proof mounting kit
- ✓ network operation independent from local operation mode
- ✓ e-mail alarm
- ✓ network alarm with optional PowerCon 4.0 software
- ✓ speed dome control via network
- ✓ optional RS-485 remote control (EKB 500)

M-JPEG Series



EDSR 100 H - 1-channel digital video recorder

Specifications

Video format: PAL

Video input:

1 video input 1 Vp-p BNC, automatic 75 Ohm termination

1 video input 1 Vp-p, 75 Ohm, BNC, for MPX main monitor

Video output:

2 video outputs, 1 Vp-p at 75 Ohm, BNC

1 loop-through video output, 1 Vp-p at 75 Ohm, BNC

1 video output, 1 Vp-p at 75 Ohm, BNC for MPX monitor output

Video compression: M-JPEG

Recording resolution: 720 x 576

HDD storage: 1 x 3,5" IDE HDD

Recording rate: 0,1 ~ 50 IPS

Playback rate: 0,1 ~ 50 IPS

Recording modes: continuous, timer and alarm recording

Playback search: via date / time, event or segment

Video pause: yes

Video loss detection: yes

Event log: yes

Alarm input: 1 alarm input

Alarm output: 1 alarm output

Audio: 2 mono inputs, 2 mono outputs, cinch

Control: front panel, IR remote control, RS-232, RS-485 keyboard EKB 500

Setup: on-screen display

Timer: max. 12 different timer periods per week

Image export: CompactFlash

RS-232: 9-pin Sub-D for remote control

RS-485: 2 x RJ45 for remote control

Watchdog function: yes

Password protection: for menu and record function

Power source: 12V DC / 5V DC,
via included power supply 230V AC

Power consumption: 60W max.

Ambient temperature: 0°C ~ +40°C
(non-condensing)

Dimensions: 215 (W) x 100 (H) x 321 (D)

Weight: 4,7 kg

Features:

- ✓ easy-to-use jog/shuttle control panel with common VCR functions
- ✓ instant retrieval of stored video
- ✓ on-screen setup menu and system timer
- ✓ built-in M-JPEG compression with configurable quality
- ✓ programmed with various time-lapse speeds
- ✓ one 3,5" IDE harddisk
- ✓ real-time live display for all cameras
- ✓ variable recording speeds up to 50 IPS
- ✓ alarm-activated recording
- ✓ audio recording capability



EDSR 100 M - 1-channel mobile digital video recorder

Specifications

Video format: PAL

Video input:

1 video input 1 Vp-p BNC, automatic 75 Ohm termination

1 video input 1 Vp-p, 75 Ohm, BNC, for MPX main monitor

Video output: 2 video outputs, 1 Vp-p at 75 Ohm, BNC

1 loop-through video output, 1 Vp-p at 75 Ohm, BNC

1 video output, 1 Vp-p at 75 Ohm, BNC for MPX monitor output

Video compression: M-JPEG

Recording resolution: 720 x 576

HDD storage: 1 x 2,5" IDE HDD

Recording rate: 0,1 ~ 50 IPS

Playback rate: 0,1 ~ 50 IPS

Recording modes: continuous, timer and alarm recording

Playback search: via date / time, event or segment

Video pause: yes

Video loss detection: yes

Event log: yes

Alarm input: 1 alarm input

Alarm output: 1 alarm output

Audio: 2 mono inputs, 2 mono outputs, cinch

Control: front panel, IR remote control, RS-232,

RS-485 keyboard EKB 500

Setup: on-screen display

Timer: max. 12 different timer periods per week

Image export: CompactFlash

RS-232: 9-pin Sub-D for remote control

RS-485: 2 x RJ45 for remote control

Watchdog function: yes

Password protection: for menu and record function

Power source: 12 V DC / 24 V DC

(230 V AC power supply not included)

Power consumption: 60 W max.

Ambient temperature: -10°C ~ +50°C (non-condensing)

Weight: 4,7 kg

Dimensions:

215 (W) x 100 (H) x 321 (D) mm without mobile mounting kit

320 (W) x 108 (H) x 321 (D) mm with mobile mounting kit

Features:

- ✓ easy-to-use jog/shuttle control panel with common VCR functions
- ✓ instant retrieval of stored video
- ✓ on-screen setup menu and system timer
- ✓ built-in M-JPEG compression with configurable quality
- ✓ programmed with various time-lapse speeds
- ✓ one 2,5" IDE harddisk
- ✓ real-time live display for all cameras
- ✓ variable recording speeds up to 50 IPS
- ✓ alarm-activated recording
- ✓ audio recording capability
- ✓ shock- and vibration-proof mounting kit

Recording capacities

EDR series (MPEG-4) 720 x 576

**Recording capacity (hours) for EDR series' digital video recorders - PAL mode recording
with 100 GB HDD capacity, system resolution: 720 x 576**

Recording rate (IPS)	Image quality / Image condition* / Image size in KB											
	LOWEST		LOW		BASIC		STANDARD		HIGH		HIGHEST	
	simple	complex	simple	complex	simple	complex	simple	complex	simple	complex	simple	complex
	8,04 KB	12,33 KB	8,42 KB	13,70 KB	10,15 KB	16,72 KB	11,86 KB	19,56 KB	14,72 KB	24,63 KB	18,60 KB	30,05 KB
200	17	11	17	10	14	3	12	7	9	6	7	5
100	35	22	33	20	27	16	23	14	19	11	15	9
96	36	23	34	21	29	17	24	15	20	12	16	10
64	54	35	52	32	43	26	37	22	29	18	23	14
50	70	45	66	41	55	33	47	28	38	23	30	18
32	108	70	103	63	86	52	73	44	59	35	47	29
16	216	141	206	127	171	104	146	89	118	70	93	58
8	432	282	412	253	342	208	293	178	236	141	187	116
4	864	563	825	507	684	415	586	355	472	282	373	231

EDR series (MPEG-4) 720 x 288

**Recording capacity (hours) for EDR series' digital video recorders - PAL mode recording
with 100 GB HDD capacity, system resolution: 720 x 288**

Recording rate (IPS)	Image quality / Image condition* / Image size in KB											
	LOWEST		LOW		BASIC		STANDARD		HIGH		HIGHEST	
	simple	complex	simple	complex	simple	complex	simple	complex	simple	complex	simple	complex
	3,53 KB	7,82 KB	3,87 KB	8,36 KB	4,21 KB	8,90 KB	4,92 KB	9,54 KB	5,62 KB	10,17 KB	6,41 KB	12,89 KB
200	39	18	36	17	33	16	28	15	25	14	22	11
100	79	36	72	33	66	31	56	29	49	27	43	21
96	82	37	75	35	69	33	59	30	52	28	45	22
64	123	56	112	52	103	49	88	46	77	43	68	34
50	157	71	144	66	132	62	113	58	99	55	87	43
32	246	111	224	104	206	98	176	91	154	85	135	67
16	492	222	449	208	412	195	353	182	309	171	271	135
8	984	444	897	415	825	390	706	364	618	341	542	269
4	1967	888	1794	831	1650	780	1411	728	1236	683	1083	539



EDR series (MPEG-4) 352 x 288

Recording capacity (hours) for EDR series' digital video recorders - PAL mode recording with 100 GB HDD capacity, system resolution: 352 x 288

Recording rate (IPS)	Image quality / Image condition* / Image size in KB											
	LOWEST		LOW		BASIC		STANDARD		HIGH		HIGHEST	
	simple	complex	simple	complex	simple	complex	simple	complex	simple	complex	simple	complex
	1,76 KB	4,56 KB	1,87 KB	4,87 KB	1,97 KB	5,46 KB	2,38 KB	6,51 KB	2,67 KB	7,08 KB	3,63 KB	9,02 KB
200	79	30	74	29	71	25	58	21	52	20	38	15
100	158	61	149	57	141	51	117	43	104	39	77	31
96	164	63	155	59	147	53	122	44	108	41	80	32
64	247	95	232	89	220	79	182	67	163	61	120	48
50	316	122	297	114	282	102	233	85	208	78	153	62
32	493	190	464	178	441	159	365	133	325	123	239	96
16	986	381	928	356	881	318	729	267	650	245	478	192
8	1973	761	1857	713	1763	636	1459	533	1300	490	957	385
4	3946	1523	3714	1426	3525	1272	2918	1067	2601	981	1913	770

EDSR series (M-JPEG)

Recording capacity (hours) for EDSR series' digital video recorders - PAL mode recording with 100 GB HDD capacity

Recording rate (IPS)	Image quality / Image size in KB					
	LOWEST	LOW	BASIC	STANDARD	HIGH	HIGHEST
	15 KB	19 KB	23 KB	27 KB	31 KB	35 KB
50	119	94	77	66	57	51
25	237	187	155	132	115	102
10	593	468	387	329	287	254
5	1185	936	773	658	574	508
2	2963	2339	1932	1646	1434	1270
1	5926	4678	3865	3292	2867	2540
0,5	11852	9357	7730	6584	5735	5079
0,4	14815	11696	9662	8231	7169	6349
0,2	29630	23392	19324	16461	14337	12698
0,1	59259	46784	38647	32922	28674	25397

* Image condition: simple = low-noise image content
complex = frequent modification / much motion / slight noise

Note: The indicated values are for reference only. With heavy noise, an MPEG-4 image may require 6 times the storage capacity

IP Products



► EAN 850 - 1/3" advanced day / night network camera, high resolution

Specifications

Sensor: 1/3" CCD, 440,000 Pixel

Sensitivity: 1 lux / F=1.2 colour (day mode)

0,1 lux / F=1.2 b/w (night mode)

Day/night control: with automatic swivelling IR cut filter

Compression method: MPEG-4 / M-JPEG

Resolution: 720 x 480, 640 x 480, 320 x 240 pixels

Network interface: 10/100 Base-T, RJ45

Bandwidth control: 64K ~ 2 Mbps

Video output: 1 Vp-p composite PAL, BNC

Audio: Audio in / out, ADPCM, bandwidth 100 Hz ~ 3,4 KHz

Alarm input: 1 x input for dry contacts, NO/NC adjustable, screwless terminal

Alarm output: 1 x dry relay contact, screwless terminal

Lens mount: C/CS mount, DD, manual

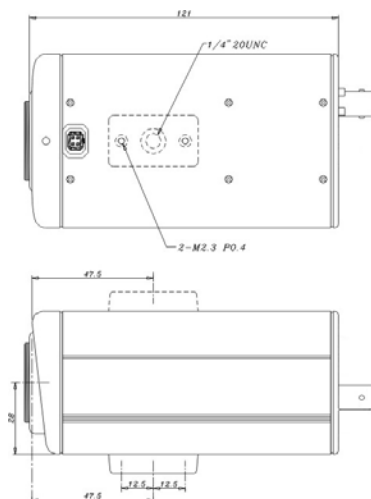
Internal memory: SD card slot for optional SD card (1 GB max.)

Power source: 12 V DC +/- 10%, 7W max., alt. PoE (PoE 802.3af 48 VDC)

Ambient temperature: 0°C ~ +40°C

Dimensions: 68 (W) x 57 (H) x 106 (D) mm

Weight: 600 g



► EAN 800 - 1/3" advanced colour network camera, high resolution

Specifications

Sensor: 1/3" CCD, 440,000 Pixel

Sensitivity: 1 lux / F=1.2 colour

Compression method: MPEG-4 / M-JPEG

Resolution: 720 x 480, 640 x 480, 320 x 240 pixels

Network interface: 10/100 Base-T, RJ45

Bandwidth control: 64K ~ 2 Mbps

Video output: 1 Vp-p composite PAL, BNC

Audio: Audio in / out, ADPCM, bandwidth 100 Hz ~ 3,4 KHz

Alarm input: 1 x input for dry contacts, NO/NC adjustable, screwless terminal

Alarm output: 1 x dry relay contact, screwless terminal

Lens mount: C/CS mount, DD, manual

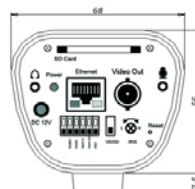
Internal memory: SD card slot for optional SD card (1 GB max.)

Power source: 12 V DC +/- 10%, 7W max., alt. PoE (PoE 802.3af 48 VDC)

Ambient temperature: 0°C ~ +40°C

Dimensions: 68 (W) x 57 (H) x 106 (D) mm

Weight: 600 g



Features

- ✓ colour and day/night version available
- ✓ high resolution up to 720 x 480
- ✓ bidirectional audio
- ✓ composite video output
- ✓ control of DD and VD lenses
- ✓ local alarm
- ✓ picture storage with SD card
- ✓ adjustable compression method (MPEG-4 or M-JPEG) in 5 resolutions
- ✓ network bandwidth control
- ✓ multicast / unicast mode



► EVS 400 - 4-channel video server

Specifications

Video input: 4 x 1 Vp-p BNC, automatic 75 Ohm termination
Picture compression: MPEG-4
Picture resolution: 720 x 480, 640 x 480, 352 x 240, 320 x 240
Streaming frame rate: 1 ~ 200 IPS adjustable
Audio: 4 RCA line inputs / 1 RCA line output, bidirectional
Audio compression method: G723
Bandwidth control: 64 ~ 4096 kB/s adjustable
Network interface: 100 BASE-T, RJ-45 socket
RS-485: RS-485 interface half-duplex for PTZ control
RS-232: 9-pin Sub-D (for service purpose)
USB interface: USB 2.0 socket (function reserved)
Alarm input: 4 inputs for dry contacts
Alarm output: 4 transistor outputs
Monitor output: 1 monitor output, 1 Vp-p at 75 Ohm, BNC
Casing: Aluminium, powder-coated black

Power input: 12 V DC +/- 10%, 30W max.

Environmental temperature: 0°C ~ +50°C

Humidity: < 90%, non-condensing

Dimensions: 157 (W) x 46 (H) x 169 (D) mm

Weight: 800 g



► EVS 100 - 1-channel video server

Specifications

Video input: 1 x 1 Vp-p BNC, automatic 75 Ohm termination
Picture compression: MPEG-4 and M-JPEG selectable
Picture resolution: 720 x 480, 640 x 480, 352 x 240, 320 x 240
Compression setting: 5 steps
Streaming frame rate: 1 ~ 30 IPS adjustable
Audio input: 3,5mm socket, sensitivity 100 mV max. / 10 KOhm impedance
Audio output: 3,5mm socket, sensitivity 500 mV max. at 10 KOhm impedance
Audio compression method: ADPCM (Pulse Code Modulation) U-Law
Audio frequency bandwidth: 300 Hz ~ 3,4 KHz
Bandwidth control: 64 ~ 4096 kB/s adjustable
Network interface: 100 BASE-T, RJ-45 socket
RS-485: RS-485 interface half-duplex for PTZ control, screwless terminal
Alarm input: 1 x input for dry contacts, NO/NC adjustable, screwless terminal
Alarm output: 1 x relay contact, screwless terminal
Casing: Aluminium, powder-coated black

Power input: 12 V DC +/- 10%, 7W max.

Environmental temperature: 0°C ~ +40°C

Humidity: < 90%, non-condensing

Dimensions: 77 (W) x 36 (H) x 117 (D) mm

Weight: 400 g



PowerCon 4.x



► PowerCon 4.x - network management software

Features

- ✓ unlimited number of managed systems (DVRs, network cameras, video servers, 3rd party sequences)
- ✓ live and playback view
- ✓ local storage and printout of video data or single pictures on client PC
- ✓ multi-window design with scalable video windows
- ✓ free definable multiviews with up to 4 DVR systems or network cameras, also mixed display of different DVRs (max. 64 cameras in 1 multiview with 4 x 16-channel DVR)
- ✓ mapview: visualisation of CCTV system in areas or buildings with free scalable maps, graphics (BMP or JPG format) or active symbols
- ✓ remote DVR configuration (EDR DVR series only)
- ✓ remote configuration of EAN network cameras and EVS video servers
- ✓ PTZ joystick control
- ✓ POS module for retail applications (optional)
- ✓ GPS module for object tracking (optional)
- ✓ network alarm reception and management
- ✓ multi-monitor support (depending on PC configuration)
- ✓ advanced access rights management with individual user rights for functions and system access
- ✓ network monitor for visualisation of network traffic
- ✓ system checker: integrated background port checker with alarm function for availability of DVRs, cameras and video servers in network
- ✓ support of external program starts
- ✓ basic feature support for browser-based 3rd party applications



Multiview function enables display of up to 64 cameras from up to 4 different DVRs

PTZ functionality for speed dome and further PTZ cameras during remote viewing





Mapview function: integration of freely scalable maps / graphics (BMP or JPG format) to visualise locations and areas

Minimum system requirements

Processor: PC Pentium IV (1.6 or higher) / AMD Athlon (1.8 or higher)

Operating system: Windows XP, service pack 2

VGA card: 32 MB min., 16,7 million colours, with DirectX 9.0C support

USB: 2.0 interface

Memory: 512 MB RAM

30 MB free HD space for installation

min. 10 GB free HD space for storage

Mediaplayer: Microsoft mediaplayer version 8.x or higher

Further: DirectX 9.0C

Supported DVRs: EDR 400 / 1600*

EDSR 100* / EDSR 400 H/M* / EDSR 600 / 900 / 1600 *

EDR 410 / 810 H/M / EDR 410 D / 910 A/D / 1610 A/D / 920 / 1640

* latest DVR firmware version

Supported network cameras: EAN 600 / EAN 800 / EAN 850

Further supported devices: video servers EVS 400 / EVS 100

network multi I/O controller EPS 100

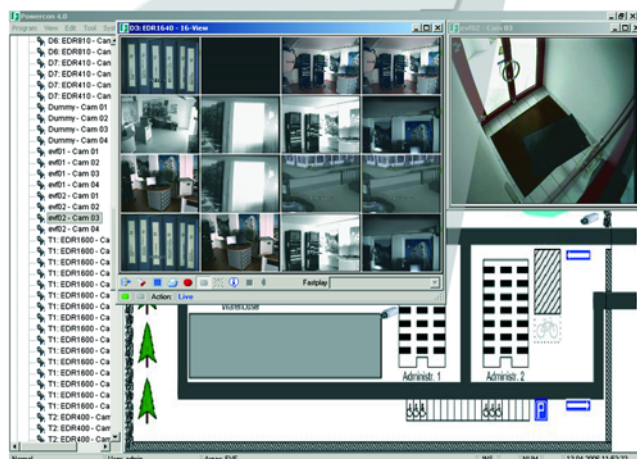
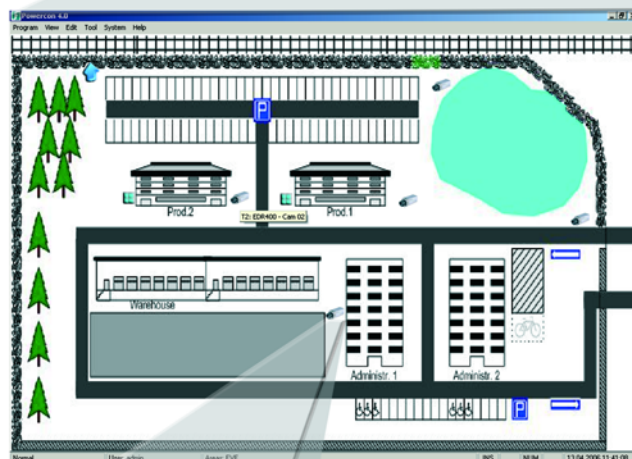
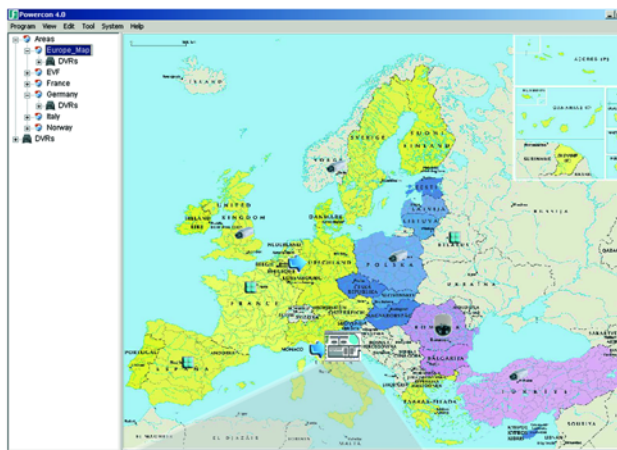
Versions:

PowerCon 4.x: single client version with CM-stick

multi-client versions (5/10/15/25 clients) with CM-stick

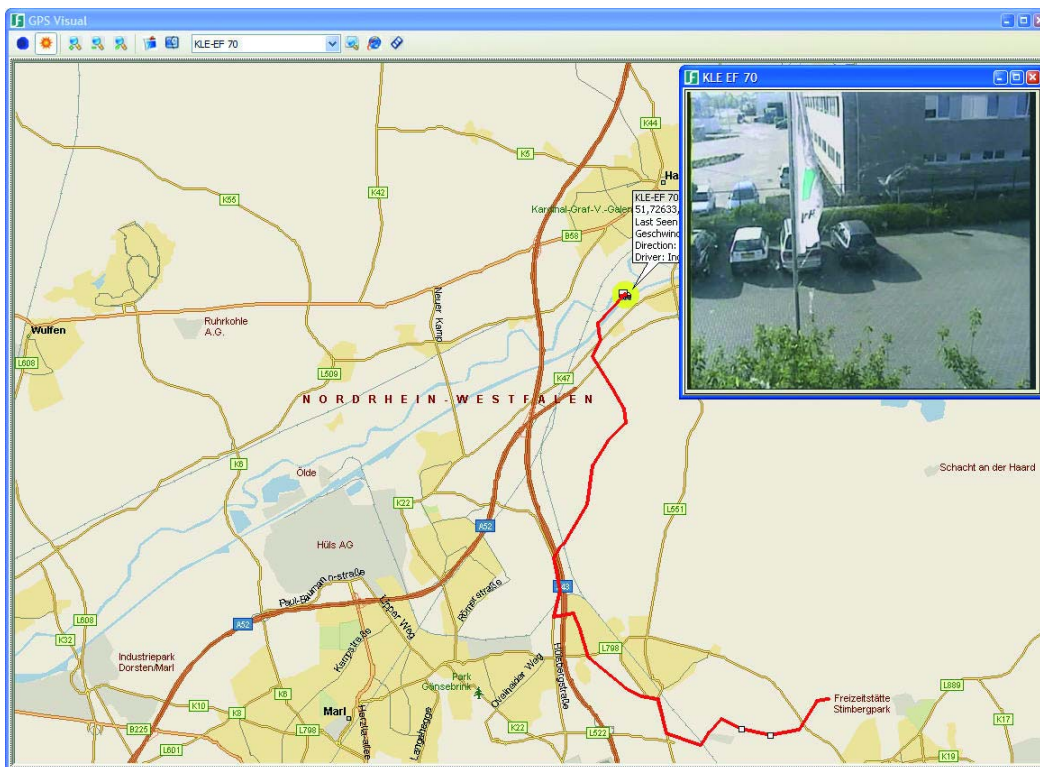
PowerCon 4.x update: update version for PowerCon Pro and

PowerCon Station (serial number of existing version required)



Multi-window design:
graphic surface remains visible
while the video images are displayed
on additional screens

PowerCon 4.x



GPS module:

Utilizing a wireless router (e.g. 3G / UMTS / GPRS) together with the mobile DVR, the vehicle's GPS data can periodically be sent through the Internet.

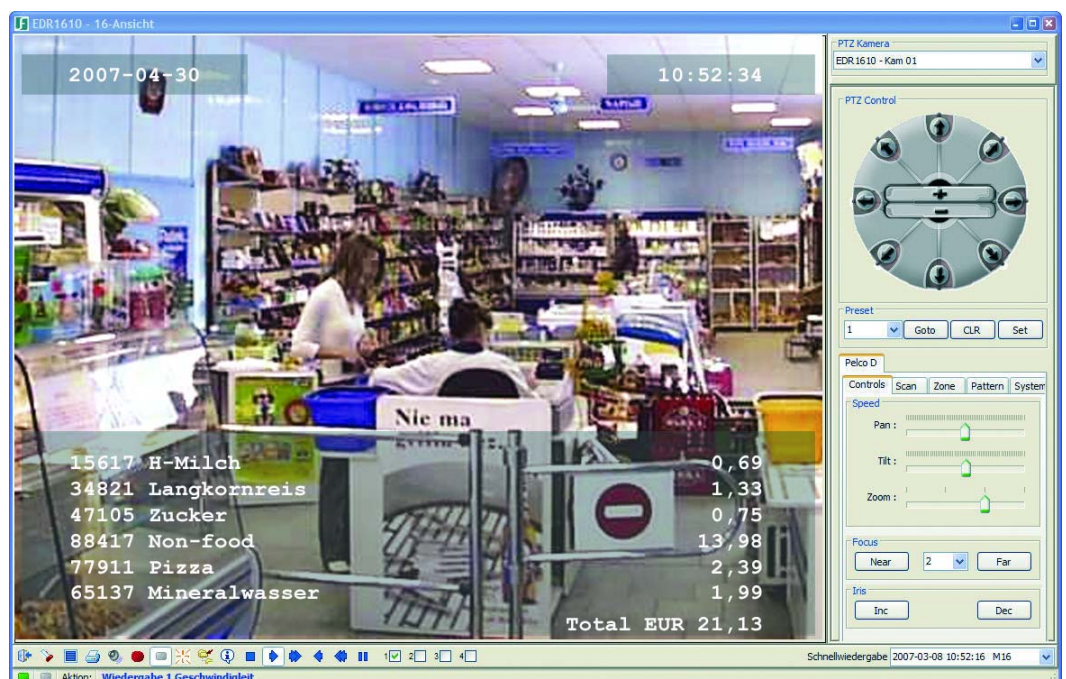
The received GPS data are indicated on the PowerCon-supported interactive map (e.g. Microsoft MapPoint) and allow for continuous automatic vehicle location.

POS module:

By means of the graphical text display (EDA 911, optional) featuring all relevant till protocols, POS data are captured together with related video data and recorded in the digital video recorder.

Recorded data can be evaluated on a common PC with PowerCon 4.x software.

The PowerCon Analyzer offers numerous search functions, e.g. date/time, cashier, value or keyword search, and instantly provides the associated playback video.





► EPS 100 - network multi I/O controller with 8 inputs / 8 outputs

Specifications

Output contacts:

Output type: 8 x Darlington transistors with common ground

Max. output voltage: up to DC 50V

Max. output current: up to 500 mA / 1 pin max.,
total power = 1W / 1 pin or 2,25W all pins

Inductive loads suppression: 8 x integral suppression diodes
for inductive loads, common pin

Input Contacts:

Input type: 8 x binary optocoupled

Log. 0 input voltage: 0 ... 3V

Log. 1 input voltage and current: from 5V / 5mA to 20V / 25mA

Max. input voltage and current: up to 40V / 50mA / 1 second

Isolation voltage: max. 50V

Sampling period: 100 ms

Network interface:

Interface: RJ45 10BASE-T (10 Mbit or 10/100 Mbit network compatible)

Compatibility: Ethernet: version 2.0/IEEE 802.3

Supported protocols: IP: ARP, TCP

TCP connection closing: data timeout 50s

Serial port (function reserved):

Operation modes: RS-232 or RS-485

Data bits: 7 or 8 or 9

Stop bits, parity: 1 or 2, none / odd / even / mark / space parity

Baud rates: 50 ... 115.2 kBd - entire range, step = 50 Bd

Data flow control: XON/XOFF, CTS/RTS, none

Interface: 1x DB9M (Rx/D, Tx/D, RTS, CTS, GND)

Used RS-232 signals: Rx/D, Tx/D, RTS, CTS (DTR output - defined voltage level only)

Diagnostic LEDs: power, link, activity

Power source: 8~24 V DC, 200 mA typical

Ambient temperature: 0°C ~ +50°C

Dimensions: 95 (W) x 38 (H) x 128 (D) mm

Weight: 395 g



► EDA 911 - graphic text display

Specifications

Video input: 1 Vp-p Composite PAL, 75 Ohm terminated, BNC

Video output: 1 Vp-p Composite PAL at 75 Ohm, BNC, with text overlay

RS-232: 2 x RS-232, 9-pin Sub-D male and female

Baud rate: 1200 ... 115.200 baud

Network interface: 10 Mbit Ethernet RJ45

Keyboard: PS/2 socket for clock and text settings

Relay output: 1 x NO/NC

Casing: steel, RAL 7037 powder-coated

Power source: 9~12 V DC, 800 mA max.

Dimensions: 140 (W) x 45 (H) x 83 (D) mm

Weight: 900 g

Features

- ✓ text overlay of serial data at video output
- ✓ characters display in 16 lines with 40 characters each, fixed character set
- ✓ configurable character colour / background
- ✓ free positioning of defined data fields; display timeout adjustable
- ✓ special characters possible (optional)
- ✓ generation of screen background signal in case of video loss
- ✓ on-screen camera text stored in EEPROM
- ✓ relay output can be triggered by data input
- ✓ POS data evaluation with EverFocus DVR and PowerCon management software (optional POS software module)
- ✓ data protocols for several ATM, access control and POS systems included on CD-ROM

DVR Accessories



► EPR 100 - harddisk reader for digital video recorders

Specifications

DVR models:

EDR 1640 / 920
EDR 810 H / 810 M / 410 H / 410 M
EDSR 1600 / 900 / 600
EDSR 400 H / 400 M / 100 H / 100 M

Multiplexer models (1-ch. DVR): 4BDX, 4CDX, 8CDX

LED: 2 LED for power and disk activity indication

Lock: HDD tray lock

Interface: USB 2.0, type B connector

Power connector: 6-pin 5V / 12 V DC

Operation: similar to DVR, mouse-controlled GUI

Search functions: via segment, alarm list, date/time and sidebar to move video pointer

Archive: save still image to BMP or JPEG file

print still image

capture video to AVI file or archive to proprietary format file

capture meta-data to text or binary file

Power source: 100 ~ 240 V AC, 50/60 Hz, 30 W max.

Ambient temperature: 0°C ~ +50°C

Dimensions: 155 (W) x 47 (H) x 277 (D) mm

Weight: 1,35 kg

► EPR 200 - external DVD writer

Specifications

DVR models: EDR 1640 / 920 / 1610 A/D / 910 A/D / 410 D / 810 / 410

Interface: USB 2.0, type B connector

Power connector: 6-pin 5V / 12 V DC

Control: via EDR copy menu

Data export: MPEG-4 video data, *.arv format

Accessories: Media: DVD+RW media, UDF formatted

Power source: 100 ~ 240 V AC, 50/60 Hz, 30 W max.

Ambient temperature: 0°C ~ +50°C

Dimensions: 155 (W) x 47 (H) x 277 (D) mm

Weight: 1,35 kg

► EDA 966 - IR remote control

Dimensions: 190 x 61 x 20 mm

Max. range: approx. 10 m

DVR models:

EDR 1640 / 920 / 1610 A/D / 910 A/D / 410 D
EDR 810 H / 810 M / 410 H / 410 M
EDSR 1600 / 900 / 600

Accessories (application with EDR 1610/910/810/410):

EDA 967 - 10m extension cable for DVR IR receiver

EDA 968 - 20m extension cable for DVR IR receiver

► EDSR 100 ZZ - IR remote control

Dimensions: 190 x 61 x 20 mm

Max. range: approx. 10 m

DVR models:

EDSR 100 H / M



► EDA 957 - harddisk tray

DVR models:

EDR 1640 / 1610 / 920 / 910
EDR 810 H / 410 H
EDSR 1600 / 900 / 600 / 100 H

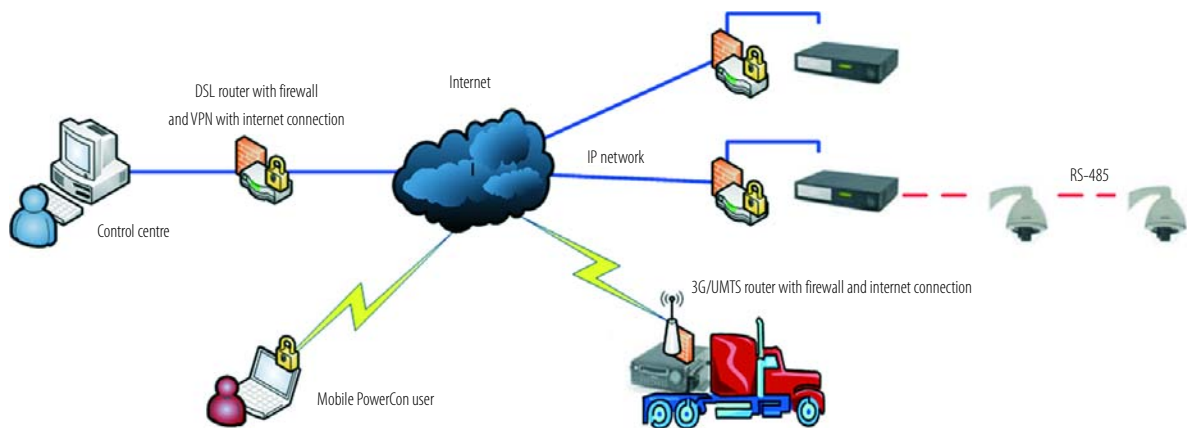
► EDA 957 M - harddisk tray

DVR models:

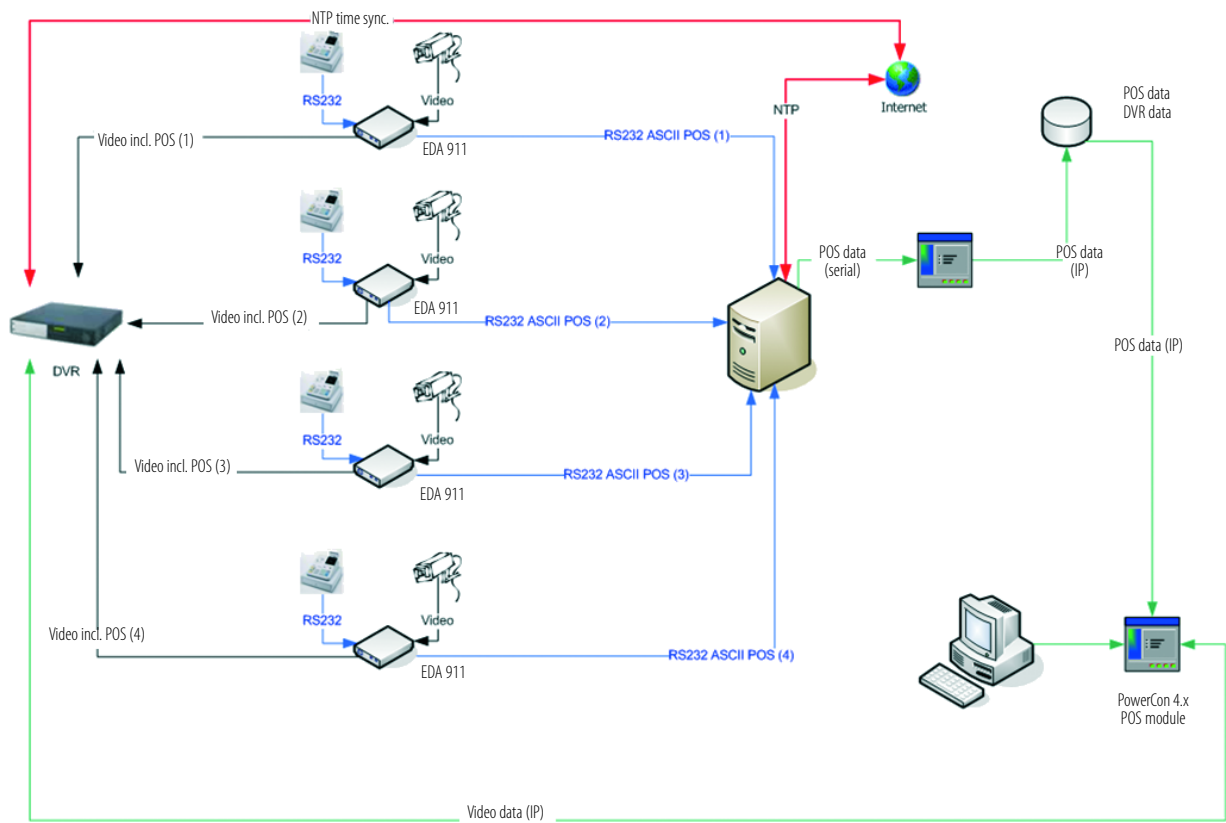
EDR 810 M / 410 M
EDSR 400 M / 100 M

Network System Examples

WAN IP solution including vehicle access



POS solution with 4 POS terminals, graphical text display EDA 911 and PowerCon POS module



TFT Monitors



FH 7519 E - 19" TFT monitor

Specifications

LCD Display: 19" active matrix TFT LCD panel

Viewable size: 376 (H) x 301 (V) mm / 5:4

Contrast ratio: 500:1 (typ.)

Brightness: 300 cd / m² (typ.)

Response time (tr/ta): 8 ms (typ.)

Display colour: 16,7 million

Pixel pitch: 0,297 (H) x 0,297 (V) mm

Max. resolution: 1280 x 1024

Horizontal frequency: 31 K ~ 80 KHz

Vertical frequency: 60 Hz ~ 75 Hz

Viewing angle H/V: 160° / 150°

Video inputs: 2 x FBAS Video 1,0 Vp-p, BNC,

Ch. 2 with loop-through, automatic 75 Ohm termination,

S-Video, mini DIN VGA, 15-pin D-Sub

Audio: 2 x line in cinch / line out 3,5mm stereo jack,

2 internal speakers 2,5 W (max.)

OSD menu: all modes: Colour, brightness, contrast, H-Pos., V-Pos., V-size, H-size, clock, phase, colour temp., user colour R/G/B, OSD H-Pos. / V-Pos., volume, language (EN/DE/FR/TR/IT/ES/CN), load default

Power input: 12 VDC / 3 A, via external power supply 100~240 VAC

Power consumption: 35 W (max.), 5 W in power saving mode

Power management: VESA DPMS, DDC1 / 2B compatible

Operating condition: Temp. 0°C ~ +40°C, humidity 10~85%

Storage condition: Temp. -20°C ~ +60°C, humidity 10~85%

Dimensions: 420 (W) x 360 (H) x 60 (D) mm (w/o stand base)

Weight: 6,0 kg

Approvals: FCC, CE, UL, RoHS

Mounting: Stand base included,

VESA compatible mount 75x75

Mounting accessories: BA DW 151 / 161 (wall / table mount)

BA DW 170 / 171 (wall mount)

BA DW CM (ceiling mount with BA DW 170 / 171)

BA DW CM2 (ceiling mount)



FH 7517 E - 17" TFT monitor

Specifications

LCD Display: 17" active matrix TFT LCD panel

Viewable size: 338 (H) x 270 (V) mm / 5:4

Contrast ratio: 400:1 (typ.)

Brightness: 300 cd / m² (typ.)

Response time (tr/ta): 8 ms (typ.)

Display colour: 16,7 million

Pixel pitch: 0,264 (H) x 0,264 (V) mm

Max. resolution: 1280 x 1024

Horizontal frequency: 31 K ~ 80 KHz

Vertical frequency: 56 Hz ~ 75 Hz

Viewing angle H/V: 160° / 150°

Video inputs: 2 x FBAS Video 1,0 Vp-p, BNC,

Ch. 2 with loop-through, automatic 75 Ohm termination,

S-Video, mini DIN VGA, 15-pin D-Sub

Audio: 2 x line in cinch / line out 3,5mm stereo jack,

2 internal speakers 2,5 W (max.)

OSD menu: all modes: Colour, brightness, contrast, H-Pos., V-Pos., V-size, H-size, clock, phase, colour temp., user colour R/G/B, OSD H-Pos. / V-Pos., volume, language (EN/DE/FR/TR/IT/ES/CN), load default

Power input: 12 VDC / 3 A, via external power supply 100~240 VAC

Power consumption: 35 W (max.), 5 W in power saving mode

Power management: VESA DPMS, DDC1 / 2B compatible

Operating condition: Temp. 0°C ~ +40°C, humidity 10~85%

Storage condition: Temp. -20°C ~ +60°C, humidity 10~85%

Dimensions: 374 (W) x 327 (H) x 54 (D) mm (w/o stand base)

Weight: 5,8 kg

Approvals: FCC, CE, UL, RoHS

Mounting: Stand base included,

VESA compatible mount 75x75

Mounting accessories: BA DW 151 / 161 (wall / table mount)

BA DW 170 / 171 (wall mount)

BA DW CM (ceiling mount with BA DW 170 / 171)

BA DW CM2 (ceiling mount)



FH 7519 T - 19" TFT monitor

Specifications

LCD Display: 19" active matrix TFT LCD panel
Viewable size: 376,32 (H) x 301,056 (V) mm / 5:4
Contrast ratio: 550:1 (typ.)
Brightness: 400 cd / m² (typ.)
Response time (tr/ta): 5,6/2,4 ms (typ.)
Display colour: 16,2 million
Pixel pitch: 0,294 (H) x 0,294 (V) mm
Max. resolution: 500 TV lines / 1280 x 1024
Horizontal frequency: 30 K ~ 80 KHz
Vertical frequency: 56 Hz ~ 75 Hz
Viewing angle H/V: 140° / 135°
Video inputs: FBAS Video 1,0 Vp-p, BNC in/out, automatic 75 Ohm termination
 S-Video, Mini-Din in / out
 VGA, 15-pin D-Sub

Audio: line in / out Cinch, 2 internal speakers 1W (max.)
OSD menu: VGA: Brightness, contrast, H-Pos., V-Pos., clock, phase, colour temp., user colour R/G/B, OSD H-Pos. / V-Pos., volume, PiP, language, recall
 Video: colour, tint (NTSC only), brightness, contrast, sharpness, H-Pos., volume, language, colour temp., scan, PiP, recall

Power input: 12 VDC / 4A, via external power supply 100~240 VAC
Power consumption: 50 W (max.)
Power management: VESA DPMS compatible

Operating condition: Temp. 0°C ~ +40°C, humidity 10~85%
Storage condition: Temp. -20°C ~ +60°C, humidity 10~85%
Dimensions: 420,6 (W) x 405,3 (H) x 170 (D) mm
Weight: 6,3 kg
Approvals: FCC, CE (EMC/LVD), UL, CUL
Mounting: standbase included, VESA compatible mount 75x75mm
Mounting accessories: BA DW 151 / 161 (wall / table mount)
 BA DW 170 / 171 (wall mount)
 BA DW CM (ceiling mount with BA DW 170 / 171)
 BA DW CM2 (ceiling mount)
 BA RK 19 - 19" rack mount bracket



FH 7517 T - 17" TFT monitor

Specifications

LCD Display: 17,1" active matrix TFT LCD panel
Viewable size: 337,92 (H) x 270,34 (V) mm / 5:4
Contrast ratio: 500:1 (typ.)
Brightness: 420 cd / m² (typ.)
Response time (tr/ta): 6/2 ms (typ.)
Display colour: 16,7 million
Pixel pitch: 0,264 (H) x 0,264 (V) mm
Max. resolution: 500 TV lines / 1280 x 1024
Horizontal frequency: 30 K ~ 80 KHz
Vertical frequency: 56 Hz ~ 75 Hz
Viewing angle H/V: 140° / 130°
Video inputs: FBAS Video 1,0 Vp-p, BNC in/out, automatic 75 Ohm termination
 S-Video, Mini-Din in / out
 VGA, 15-pin D-Sub

Audio: line in / out Cinch, 2 internal speakers 1W (max.)
OSD menu: VGA: Brightness, contrast, H-Pos., V-Pos., clock, phase, colour temp., user colour R/G/B, OSD H-Pos. / V-Pos., volume, PiP, language, recall
 Video: colour, tint (NTSC only), brightness, contrast, sharpness, H-Pos., volume, language, colour temp., scan, PiP, recall

Power input: 12 VDC / 3A, via external power supply 100~240 VAC
Power consumption: 50 W (max.)
Power management: VESA DPMS compatible

Operating condition: Temp. 0°C ~ +40°C, humidity 10~85%
Storage condition: Temp. -20°C ~ +60°C, humidity 10~85%
Dimensions: 375 (W) x 370 (H) x 170 (D) mm
Weight: 5,0 kg
Approvals: FCC, CE (EMC/LVD), UL, CUL
Mounting: standbase included, VESA compatible mount 75x75mm
Mounting accessories: BA DW 151 / 161 (wall / table mount)
 BA DW 170 / 171 (wall mount)
 BA DW CM (ceiling mount with BA DW 170 / 171)
 BA DW CM2 (ceiling mount)
 BA RK 17 - 19" rack mount bracket



FH 7515 T - 15" TFT monitor

Specifications

LCD Display: 15,1" active matrix TFT LCD panel
Viewable size: 304,1 (H) x 228,1 (V) mm / 4:3
Contrast ratio: 400:1 (typ.)
Brightness: 350 cd / m² (typ.)
Response time (tr/ta): 4/12 ms (typ.)
Display colour: 262.144
Pixel pitch: 0,297 (H) x 0,297 (V) mm
Max. resolution: 500 TV lines / 1024 x 768
Horizontal frequency: 30 K ~ 80 KHz
Vertical frequency: 56 Hz ~ 75 Hz
Viewing angle H/V: 120° / 100°
Video inputs: FBAS Video 1,0 Vp-p, BNC in/out, automatic 75 Ohm termination
 S-Video, Mini-Din in / out
 VGA, 15-pin D-Sub

Audio: line in / out Cinch, 2 internal speakers 1W (max.)
OSD menu: VGA: Brightness, contrast, H-Pos., V-Pos., clock, phase, colour temp., user colour R/G/B, OSD H-Pos. / V-Pos., volume, PiP, language, recall
 Video: colour, tint (NTSC only), brightness, contrast, sharpness, H-Pos., volume, language, colour temp., scan, PiP, recall

Power input: 12 VDC / 3A, via external power supply 100~240 VAC
Power consumption: 40 W (max.)
Power management: VESA DPMS compatible

Operating condition: Temp. 0°C ~ +40°C, humidity 10~85%
Storage condition: Temp. -20°C ~ +60°C, humidity 10~85%
Dimensions: 353,2 (W) x 338 (H) x 170 (D) mm
Weight: 4,0 kg
Approvals: FCC, CE (EMC/LVD), UL, CUL
Mounting: standbase included, VESA compatible mount 75x75mm
Mounting accessories: BA DW 151 / 161 (wall / table mount)
 BA DW 170 / 171 (wall mount)
 BA DW CM (ceiling mount with BA DW 170 / 171)
 BA DW CM2 (ceiling mount)
 BA RK 15 - 19" rack mount bracket

TFT Monitors



► EN 220 - 5,6" TFT LCD monitor with service kit

Specifications

Screen size: 87 x 116 mm, 5,6"
 Effective display area: 83,52 x 111,36 mm
 Dot matrix: 320 x 240
 Pixel distance: 0,116 x 0,348
 Brightness: 270 cd / m²
 Video input: 1 Vp-p FBAS
 Audio input: 50 mV (min.), stereo
 Audio output: built-in 4cm, 200 mW speaker, stereo earphone
 Control: brightness, contrast, colour, volume

Power source: 9 ~ 20 V DC,
 via included power supply 230 V AC

Power consumption: 8 W max. at 12 V DC

Ambient temperature: 0°C ~ +50°C
 Colour casing: black
 Dimensions: 162 (W) x 131 (H) x 54 (T) mm
 Weight: 2,95 kg incl. service kit

Service kit: bag, accumulator, charger,
 mains supply, cables



► EN 200 - 5,6" TFT LCD monitor

Specifications

Screen size: 87 x 116 mm, 5,6"
 Effective display area: 83,52 x 111,36 mm
 Dot matrix: 320 x 240
 Pixel distance: 0,116 x 0,348
 Brightness: 270 cd / m²
 Video input: 1 Vp-p FBAS
 Audio input: 50 mV (min.), stereo
 Audio output: built-in 4cm, 200 mW speaker, stereo earphone
 Control: brightness, contrast, colour, volume

Power source: 9 ~ 20 V DC,
 via included power supply 230 V AC

Power consumption: 8 W max. at 12 V DC

Ambient temperature: 0°C ~ +50°C
 Colour casing: black
 Dimensions: 162 (W) x 131 (H) x 54 (T) mm
 Weight: 482 g



► BA DW 151 - wall mount arm with gas spring

Specifications

Material: iron / plastic, powder-coated
 Colour: black
 Length: 569 mm
 Weight: 3,95 kg
 Max. loads: 8 kg

Application: with FH 7515 T, FH 7517 T,
 FH 7517 E and FH 7519 E

► BA DW 170 - wall mount bracket with 3-axis adjustment

Specifications

Material: iron / plastic, powder-coated
 Colour: black
 Distance to monitor: 142 mm
 Weight: 1,25 kg
 Max. loads: 12 kg
 Swivel: left & right and upwards & downwards 180 degrees,
 LCD monitor swivel 270 degrees

Application: with FH 7515 T, FH 7517 T,
 FH 7517 E and FH 7519 E

► BA DW CM2 - ceiling mount adaptor

Specifications

Material: steel
 Colour: black
 Length: 1045 - 1925 mm adjustable
 Adjustment: left / right 360°, up / down ~ 135° (depending on monitor)
 Monitor mounting: VESA standard 75mm / 100mm
 Max. loads: 15 kg
 Weight: 3,7 kg

► BA DW 161 - wall mount arm w/o gas spring

Specifications

Material: iron / plastic, powder-coated
 Colour: black
 Length: 560 mm
 Weight: 3,5 kg
 Max. loads: 8 kg

Application: with FH 7515 T, FH 7517 T,
 FH 7517 E and FH 7519 E

► BA DW 171 - wall mount bracket with 2-axis adjustment

Specifications

Material: iron / plastic, powder-coated
 Colour: black
 Distance to monitor: 115 mm
 Weight: 1,05 kg
 Max. loads: 12 kg
 Swivel: left & right or upwards & downwards 180 degrees,
 LCD monitor swivel 270 degrees

Application: with FH 7515 T, FH 7517 T,
 FH 7517 E and FH 7519 E

CCTV Monitors



► FH 7421 AT - 21" colour monitor

Specifications

Video format: PAL / NTSC
 Picture tube: 21", 0,7mm stripe pitch
 Horizontal resolution: > 500 lines
 Input connector: 2 x composite BNC, 1 x S-video
 Input signal: 1 Vp-p
 Input impedance: 75 Ohm
 Audio (input/output): yes (3/3)

Power source: 100 ~ 240 V AC, 50/60 Hz
 Power consumption: 80 W max.

Ambient temperature: -10°C ~ +50°C
 Dimensions: 492 (W) x 474 (H) x 482 (D) mm
 Weight: 27,0 kg



► FH 7417 HR - 17" high resolution colour monitor

Specifications

Video format: PAL / NTSC
 Picture tube: 17", 0,25mm colour CDT
 Horizontal resolution: > 800 lines (center)
 Scanning frequency: 15.734 KHz/60 Hz (NTSC), 15.625 KHz/50 Hz (PAL)
 Video input: Composite video 1,0 Vp-p, 75 Ohm
 Video connections: Video BNC in x 2, Y/C in x 1, Video BNC out x 2, Y/C out x 1
 Audio connections: RCA in x 3 / RCA out x 3
 Control front: Power on/off, O/U scan, OSD
 Aspect ratio: 4:3
 Colour temperature: 9300°K (NTSC) / 6500°K (PAL)
 Power source: 100 ~ 240 V AC, 50/60 Hz
 Power consumption: 100 W max.
 Ambient temperature: -10°C ~ +50°C
 Dimensions: 412 (W) x 397 (H) x 417 (D) mm
 Weight: 20,0 kg



► FH 7419 HR - 19" high resolution colour monitor

Specifications

Video format: PAL / NTSC
 Picture tube: 19", 0,27mm stripe pitch
 Horizontal resolution: > 800 lines
 Input connector: 2 x composite BNC, 1 x S-video
 Input signal: 1 Vp-p
 Input impedance: 75 Ohm
 Audio (input/output): yes (3/3)

Power source: 100 ~ 240 V AC, 50/60 Hz
 Power consumption: 95 W max.

Ambient temperature: -10°C ~ +50°C
 Dimensions: 448 (W) x 434 (H) x 448 (D) mm
 Weight: 25,0 kg



► FH 7415 HR - 15" high resolution colour monitor

Specifications

Video format: PAL / NTSC
 Picture tube: 15", 0,27mm stripe pitch
 Horizontal resolution: > 800 lines
 Input connector: 2 x composite BNC, 1 x S-video
 Input signal: 1 Vp-p
 Input impedance: 75 Ohm
 Audio (input/output): yes (3/3)

Power source: 100 ~ 240 V AC, 50/60 Hz
 Power consumption: 95 W max.

Ambient temperature: -10°C ~ +50°C
 Dimensions: 368 (W) x 361 (H) x 376 (D) mm
 Weight: 15,0 kg



FH 7320 - 20"
b/w CCTV monitor

Specifications

Video format: CCIR / EIA
Picture tube: 20"
Horizontal resolution: > 1000 lines
Input connector: 1 x BNC
Input signal: 1 Vp-p CCIR
Input impedance: 75 Ohm

Power source: 100 ~ 240 V AC, 50/60 Hz
Power consumption: 36 W max.

Ambient temperature: -10°C ~ +50°C
Dimensions: 472 (W) x 450 (H) x 360 (D) mm
Weight: 20,0 kg



FH 7315 - 15"
b/w CCTV monitor

Specifications

Video format: CCIR / EIA
Picture tube: 15"
Horizontal resolution: > 1000 lines
Input connector: 1 x BNC
Input signal: 1 Vp-p CCIR
Input impedance: 75 Ohm

Power source: 100 ~ 240 V AC, 50/60 Hz
Power consumption: 35 W max.

Ambient temperature: -10°C ~ +50°C
Dimensions: 350 (W) x 353 (H) x 360 (D) mm
Weight: 12,0 kg



FH 7312 - 12"
b/w CCTV monitor

Specifications

Video format: CCIR / EIA
Picture tube: 12"
Horizontal resolution: > 1000 lines
Input connector: 1 x BNC
Input signal: 1 Vp-p CCIR
Input impedance: 75 Ohm

Power source: 100 ~ 240 V AC, 50/60 Hz
Power consumption: 30 W max.

Ambient temperature: -10°C ~ +50°C
Dimensions: 304 (W) x 320 (H) x 310 (D) mm
Weight: 8,0 kg

Infrared Illuminators



► FH IRG 40 / FH IRG 80 - LED infrared illuminator

Specifications

Wave length: 845 nm
 Beam angle: 40° (FH IRG 40) / 80° (FH IRG 80)
 Max. range*: 70 m (FH IRG 40) / 35 m (FH IRG 80)
 Colour: black
 Protection class: IP-65

Power source: 230 V AC
 Power consumption: 43 W

Ambient temperature: -20°C ~ +50°C
 Dimensions: 200 (W) x 120 (H) x 112 (D) mm
 Weight: 1,5 kg



► BA WBJF - wall mount bracket for infrared illuminator

Specifications

Material: die-cast aluminium, powder-coated
 Colour: black
 Length: 285 mm
 Max. loads: 25 kg
 Application: with infrared illuminators FH IRG 40 / FH IRG 80



► FH IRK 40 / FH IRK 80 - LED infrared illuminator

Specifications

Wave length: 845 nm
 Beam angle: 40° (FH IRK 40) / 80° (FH IRK 80)
 Max. range*: 15 m (FH IRK 40) / 8 m (FH IRK 80)
 Colour: black
 Protection class: IP-65

Power source: 230 V AC
 Power consumption: 12 W

Ambient temperature: -20°C ~ +50°C
 Dimensions: 120 (W) x 80 (H) x 77 (D) mm
 Weight: 1,1 kg



► BA WBCD - wall mount bracket for infrared illuminator

Specifications

Material: die-cast aluminium, powder-coated
 Colour: black
 Length: 140 mm
 Max. loads: 1 kg
 Application: with infrared illuminators FH IRK 40 / FH IRK 80

* The IR illuminator range depends on the location, camera and lens type as well as the surroundings of the installation.
 Locating the device near highly absorbent surfaces can result in a significantly reduced range.

Accessories



EDA 997 A - RS-485 unidirectional data distributor / converter

Specifications

Signal input: manually switchable:
1 x RS-485 simplex, screw terminal or 1 x RS-232 9-pin Sub-D

Signal output: 8 x RS-485 simplex, screw terminal
Application: RS-485 star wiring for telemetry or DVR control,
conversion of RS-232 input to RS-485 output

Power source: 12 V DC / 4 W max.,
via included power supply 230 V AC

Dimensions: 19", 1U, 482 (W) x 44 (H) x 99 (D) mm
Weight: 1,1 kg



EL GB 001 - video ground loop isolator

Specifications

Input / output impedance: 75 Ohm
Bandwidth: 10 MHz < 3 dB
Isolation voltage: 600 VDC min.
Transient voltage suppressors: 12 V RMS

Ambient temperature: 0°C ~ +50°C
Dimensions: 84 x 28 x 21 mm with 2 x 150 mm cable
Weight: 100 g



RG59-2S - RG 59 cable with 2 x 0,75 mm low-voltage cable

Specifications

Outer diameter: 9,6 mm
Video cable: RG-59 black
Low-voltage cable: 2 x 0,75 mm flexible, unshielded



Power supplies

Item code	Power supply input	Power supply output	Power	Europe	UK	Remarks
AP12A122E0	230 V AC	12 V DC	600 mA	x	-	stabilized, switched
AP12D202E0	230 V AC	12 V DC	2000 mA	x	-	for EZ 180 / EZ 350 HQ / EHD series
AP12D202I0	240 V AC	12 V DC	2000 mA	-	x	for EZ 180 / EZ 350 HQ / EHD series
AP24A501E0	230 V AC	24 V AC	500 mA	x	-	
AP24A501I0	240 V AC	24 V AC	500 mA	-	x	

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