

Application Note

AN_0031 - Comparison of Dome Protocols

Code	Supported By	No. of Presets	Alarms	Polarized Conductors	Max No. of Devices per Control Line (daisy chain)	Conductor Requirement		Address Range	Jbox
						Specification	Max Distance		
Manchester	AD1024, AD168, MP48, AD2150	64 per device	Since Manchester is unidirectional, AD2096A Alarm Interface Unit must be used to send RS232 back to host.	Yes; Black, White, Shield	3	One twisted shielded pair, 18 AWG (Belden 8760 equivalent)	5000'	1 - 64	AD2091, AD1691 Code Distributors ¹
SEC RS422	AD1024, AD168, MP48	• 16 with AD2083-02B • 64 with AD168CCM • 96 with MP48	Bidirectional Code allows alarm information to be sent to host directly from Dome	Yes; Transmit(+), Transmit(-), Receive(+), Receive(-)	10	Two twisted shielded pairs, 22 AWG (Belden 8761 equivalent)	3000'	1 - 99	RJ856UD RJ856AP
SensorNet	ADTT16E, AD168, MP48	• 96 with ADTT16E • 64 with AD168CCM • 96 with MP48	Bidirectional Code allows alarm information to be sent to host directly from Dome	No; permits easier install/less mistakes	32	• One twisted unshielded pair, 22 AWG • One twisted shielded pair, 18 AWG (can be used in prewired installs)	3300' 2500'	1 - 255	RJ1SNUD RJ6SN

¹ Code distribution units may be supplemented by data surge suppressors. Jboxes listed in other rows already contain surge suppression

Supporting Documents:

8000-2627-01; Manchester Supplement
 AN024; Sensormatic SpeedDome RS422 Daisychain Configuration
 AN026; SensorNet Network Design Guidelines
 8000-2684-01; RS422/RS485 Communications Protocols
 8000-0970-01; Sensornet Network Guidelines

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