SensiNet Mesh Router With Integral Sensors

PRODUCT OVERVIEW

The SensiNet MESH-1021is a message-routing device that automatically configures itself into a wireless mesh network and serves to wirelessly extend the reach of the entire SensiNet system by receiving and re-routing messages. This extension can be for the purpose of additional path redundancy or to extend the range of the network beyond that which is capable of a single point to point connection. It also available with an embedded temperature / humidity sensor or connection for up to 8 CAT 5 connected temperature sensors

The MESH-1021 maintains both primary and secondary connections with other SensiNet devices to assure total reliability and redundancy. It needs no data wiring, The MESH 1021 provides an extraordinary level of fault tolerance to the SeniNet network through its ability to seek new communication paths in the event of primary and secondary path disruptions due to hardware failures or radio path interference.

SensiNet Network Benefits

Reliable – Mesh networking provides multiple acknowledged and error checked communication paths ensuring the message always gets through while spread spectrum , frequency hopping radio technology eliminates interference effects. The network is also self healing and able to recover from interruptions by seeking alternate paths.

Flexible - Move, add or eliminate sensors and the network reconfigures itself automatically.

Universal – Multiple protocols including Modbus, OPC , SNMP, ODBC, and Web Services ensure system compatibility or operate the system as a stand alone data logging system with local or web based logging.

Scalable - The same network can start with a single point and grow to thousands without replacing any components or performance degradation.

Base Model: MESH-1021
Integral Temp / Humidity Sensor : MESH-1022
Support for CAT 5 Connected Sensors :MESH-1028

SPECIFICATIONS

Radio Specifications	
Radio	IEEE 802.15.4 compliant, 2.4 GHz DFSS
Regulatory	FCC Part 15 and CE Approval
Antenna	Internal antenna
Output power	15 dBm
Range	• Up to 700 ft/212m range (outdoor, line of sight) • Up to 230 ft/70m range (typical indoor conditions)
Operating temperature	-10° C to 50° C
Operating humidity	Up to 100% non-condensing
Power Options 0.6 Watts	• 6-36 VDC through removable terminal block •12 VDC Barrel connector (AC converter optional) • 5 VDC Standard "B" USB Connector
Temperature Range Temperature Accuracy	-10C to +85C +/- 0.5 C
Humidity Range Accuracy	0-100 % RH +/- 3% RH at 25C
LED	Diagnostic LED indicating power/connectivity
Dimensions	• 5.125" x 3.00" x 1.5" • 131 mm x 77 mm x 39 mm
Packaging	ABS Box - IP30 rated
Mounting options	• Surface flange mounting