

Wireless Mesh Network

Features:

- Seamlessly Supports Ethernet Based Devices
- Licensed /Unlicensed Bands
- End-to-End Multi-Layer Security
- Radio Layer Encryption
- Payload Encapsulation
- 3 IP Layer data is encapsulated and accessible only to Digitize Mesh Alarm Transceivers
- Digital Certificates and MAC Filtering
- Segment traffic with secure access control on same physical infrastructure
- Supports 256k Encryption
- Outside of Wi-Fi Bands
- Self-Forming/Self-Healing
- Patented Auto Mesh Routing

Applications:

- Fire Alarms (Top Priority)
- Security Alarms
- Access Control Systems
- CCTV via Ethernet
- Mass Notification
- HVAC
- VoIP
- Building Management Systems
- Relay thermal images at fire scenes
- Temporary mobile emergency alarm and CCTV monitoring command centers at county fairs and disaster scenes
- Provides Ethernet Communication for any IT Device or System

Benefits:

- PRIVATE WIRELESS NETWORK
- NOT dependent on you existing Network
- **No Trenching Required**
- **No Pulling Cable or Hanging Wire from Poles**
- **Easy Installation**

Product Description:

Digitize Wireless Mesh Ethernet Networks(see figure on reverse side) provide supervised wireless Ethernet communication between the System 3505, Muxpad IIs, DGMs, Remote Annunciators other Digitize and non-Digitize IT products (such as CCTV Cameras and other IT devices), via a high-performance, encrypted, self-forming, self-healing, dual radio, wireless mesh network of Digitize Mesh Alarm Transceivers (MATs). MATs are comprised of a Wireless Mesh Dual Radio Transceiver, Antennas and a Mesh Alarm Power Supply (MAPS) *see pictures below.

MATs can be placed outdoors or onboard moving vehicles to provide reliable wireless Ethernet conductivity in most locations. All Digitize MATs have multiple Ethernet ports for connecting IT network devices or other networks to a wireless mesh.

Digitize MATs provide up to 35 Mbps throughput and operate at 2.4 GHz, 4.9 GHz (U.S. public safety licensed band), or 5 GHz. Nodes are equipped with dual radios, operating at 400 mW. Digitize Mesh Network networks provide end-to-end traffic encryption using 256 bit Advanced Encryption Standard.

The Digitize Mesh Network securely handles concurrent alarm, CCTV video, voice, and other data applications, making it ideal for military, government, municipal, public safety, campus and industrial networks. The mesh's self-forming and self-healing properties enable rapid deployment and dependable operation. Digitize Mesh Network routing protocol manages network load and traffic congestion to optimize mesh-wide performance and capacity.



MATs



Antenna Types



MAPS

Wireless Mesh Network

Mesh Alarm Transceiver (MATS)

Specifications:

Security and Encryption

- 40 bit, 104 bit WEP keys
- 128 bit, 256 bit AES keys (WPA2, end-to-end data)
- MAC address filtering, Digitally signed firmware files, Digital certificates on nodes

Traffic Prioritization

- Quality of Service (QoS 802.1p)

Wireless Interface

- IEEE 802.11a/b/g/h ad hoc
- Transmit power up to 400 mW
- Frequency ranges
2.412 – 2.483 GHz
4.94 – 4.99 GHz (US public safety band)
5.15 – 5.825 GHz
- Receive sensitivity (typical)
2.4 GHz, DSSS, 1 Mbps: -95 dBm, 11 Mbps: -88 dBm
2.4 GHz, OFDM, 6 Mbps: -90 dBm, 54 Mbps: -73 dBm
5 GHz, 6 Mbps: -90 dBm 54 Mbps: -73 dBm,
- Dynamic Frequency Selection (DFS)
- Transmit Power Control (TPC)

Regulatory Agency Certifications

- RoHS and WEEE compliant

Network Ports

- Three 10/100 Mbps Ethernet ports with weatherproof connectors, LED activity indicator
- IEEE 802.3, 802.3u compliant, CSMA/CD 10/100 auto-sense
- Ports 2, 3 PSE Power over Ethernet per 802.3af

Enclosure

- Cast aluminum NEMA-4X/IP66 enclosure
- Two N-type antenna connectors
- One weatherproof power connector
- Three weatherproof Ethernet connectors
- System LEDs (power, status, mesh)
- Weight: 12 lbs (5.4 Kg) with bracket and sunshield
- Dimensions: 12" X 10.5" X 5.75" (30.5 cm X 27 cm X 15 cm) including sunshield;
12" X 8.5" X 4.875" (30.5 cm X 22 cm X 12 cm) excluding sunshield

Power

- AC Input: 90-240 VAC, 50-60 Hz, 0.9 A
- DC Input: 15 VDC ±15%, 3 A
- Ports 2 and 3: IEEE 802.3af compliant PoE (PSE), 13.5 W max

Environmental Specifications

- Operating temperature: -40°C to +60°C
- Storage temperature: -40°C to +85°C
- Humidity (non-condensing): 10% to 90%
- Storage humidity (non-condensing): 5% to 95%
- Maximum altitude 15,000 feet (4600 meters)

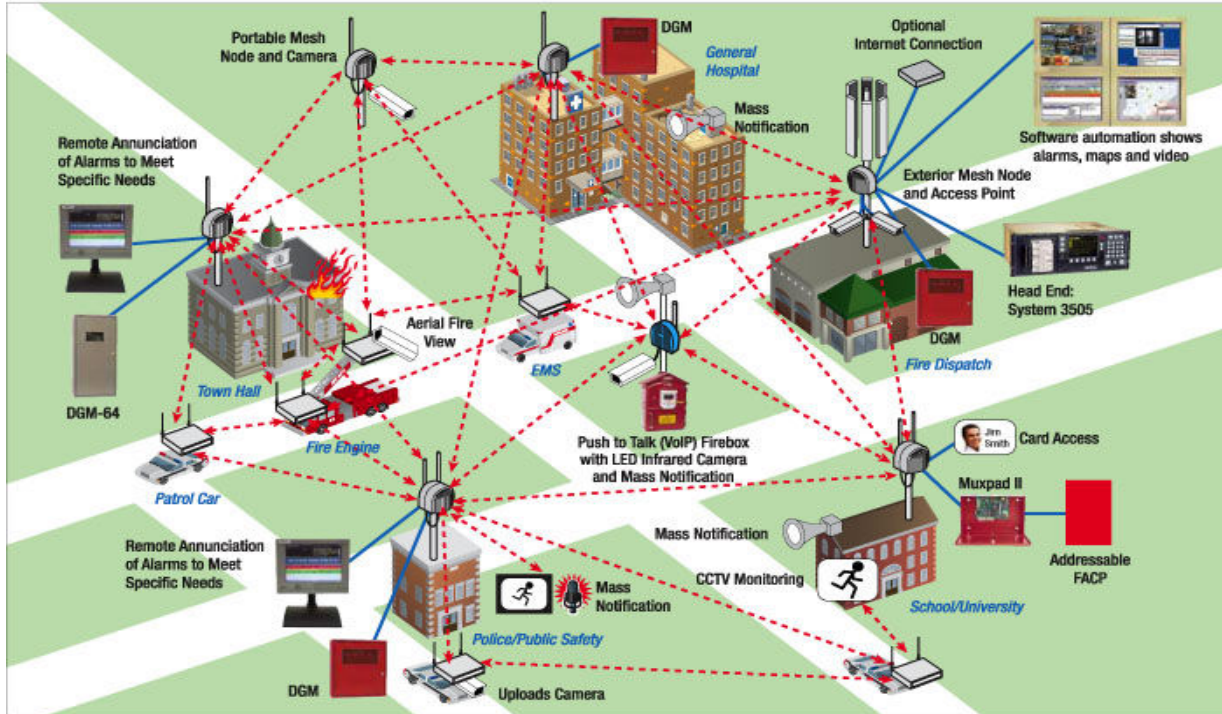
Included Accessories

- External AC power cord (non-North America power cord is separate orderable item)
- Removable sun shield,
- One weatherized Ethernet transition cable with watertight RJ-45 coupling

Mesh Alarm Power Supply (MAPS*)

Specifications:

Available soon



New! Digitize International Mesh Data/Communications Network™

Dual Radio, Bi-directional Data

We've Got Everybody Talking™