

DIGITIZE 7000 SERIES WIRELESS MESH RADIO

- **Viable alternative to fiber**
 - Provides up to 300 Mbps bandwidth for citywide systems
- **Convenient upgrade paths via multi-licensing configurations**
 - 802.11a/b/n single/dual radio capability
 - 802.11n MIMO capability
- **Easier deployment and network management**
 - Trenching and most wiring cost are eliminated
 - Integrated spectrum analysis, network capacity planning and antenna alignment tools
- **High Reliability**
 - Nodes form a multi-point to multi-point ad hoc wireless mesh network
 - No single point of failure
 - Self forming, self healing Mesh
 - Dual Radio operation maximizes performance
- **Improved Quality of Service**
 - Patented AutoMesh flow based routing protocols
 - Extensive VLAN capabilities for large scale deployments
- **Metro-scale Deployments**
 - Easily scales up to hundreds of mesh nodes
 - Advanced features, such as MeshBridge and Gigabit Ethernet Direct support multiple locations
- **Multicast and Security**
 - 802.11i support
 - Dual layer FIPS140-2 certifiable 256 bit AES encryption
 - MAC and VLAN based access control lists
- **Flexible Configurations**
 - Indoor and Outdoor units
 - 900 MHz, 2.4, 4.9 (licensed) 5. GHz frequency ranges
 - 5, 10, 20 & 40 MHz (MIMO only)

Typical Wireless Mesh System Components



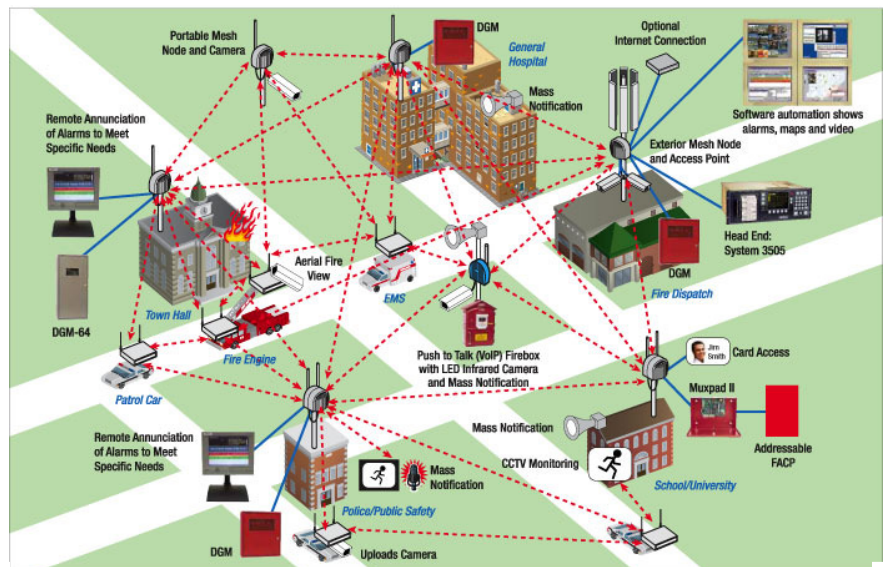
7020 Outdoor Wireless Mesh Node



4.9–6.1 GHz Triple Polarizations MIMO Base Station Antenna, 90°



KRATOS-4 Power supply charger and battery box



New! Digitize International Mesh Data/Communications Network™
Dual Radio, Bi-directional Data

DIGITIZE SERIES 7000 WIRELESS MESH RADIO

Specifications:

Models

- 7010 Indoor Mesh Node*
- 7020 Outdoor Mesh Node*

* Purchase of software license(s)

required for dual radio and/or 802.11n MIMO functionality

Mesh Protocol

- Firetide AutoMesh™ Protocol

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/n ad hoc; 3X3 MIMO with 2 streams*
- * Purchase of software license required for 802.11n MIMO functionality**

3X3 MIMO with 2 streams

- Transmit power up to 400 mW per stream
- Frequency ranges
2.412 – 2.483 GHz
4.94 – 4.99 GHz (US public safety band)
5.15 – 5.25 GHz (Indoor use only)
5.25 – 5.35 GHz
5.470 – 5.725 GHz
5.725 – 5.850 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, OFDM
6 Mbps: -90 dBm
54 Mbps: -73 dBm
- Ability to configure 5, 10, 20 and 40 Mhz (MIMO only) channel bandwidth
- Dynamic Frequency Selection (DFS)
- Transmit Power Control (TPC)

Mesh Management Software

- HotView Pro™ mesh management software (required)

Regulatory Agency Certifications

- RoHS and WEEE compliant

Warranty

- Hardware: 1 year limited warranty
- Software: 90 days limited warranty

Outdoor Model -7020 P/N 425210-0007

Network Ports

- Three GigE 10/100/1000 Mbps Ethernet ports with weatherproof connectors, LED activity indicator
- IEEE 802.3, 802.3u compliant
- CSMA/CD 10/100 autosense
- Ports 2, 3 PSE Power over Ethernet per 802.3af

Enclosure

- Cast aluminum NEMA-4X/IP66 enclosure
- Six type-N female antenna connectors
- Two weatherproof power connectors: AC and DC
- Three weatherproof Ethernet connectors
- System LEDs (power, status, mesh)
- Weight: 12 lbs (5.4 kg) with bracket and sunshield
- Dimensions: 11.6" X 8.1" X 4.1"

Power

- AC Input: 100–240 VAC, 50–60 Hz, 0.9 A
- DC Input: 12 VDC ±15%, 4 A powering 2 PoE devices; 1.7 A without PoE
- Ports 2 and 3: IEEE 802.3af compliant PoE (PSE) consumption

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

- Antennas: Six 2.4 GHz and six 5 GHz, 5 dBi, indoor-rated omni directional (included for network staging only)
- Bracket for pole and wall mounting
- External AC power cord (non-North America power cord is separate orderable item)
- Removable sunshield
- Three weatherized Ethernet connectors for watertight RJ-45 coupling

Optional Accessories

- Outdoor weatherized Ethernet transition cables for use with HotPoint® access points
- Omni, directional & panel antennas



Side View 7020 Outdoor Dual Radio

Indoor Model -7010 P/N 425210-0006

Network Ports

- Four GigE 10/100/1000 Mbps Ethernet ports with LEDs
- IEEE 802.3, 802.3u compliant
- CSMA/CD 10/100 autosense

Enclosure

- System LEDs (power, status, mesh)
- Ethernet port LEDs (link, status, activity)
- Connectors: six RPSMA female antennas, one power, four Ethernet (RJ-45)
- Reset button (recessed)
- Weight: 2 lb 14 oz (1.3 kg)
- Dimensions 9.4" X 5.9" X 1.6"

Power

- DC Input: 12 VDC, 2.5 A
- Port 1: IEEE 802.3at compliant PoE (PD)
- External power supply: 100–240 VAC, 50/60 Hz

Environmental Specifications

- Operating temperature: 0°C to +60°C
- Storage temperature: -20°C to +70°C
- Humidity (non-condensing): 10% to 90%
- Storage humidity (non-condensing): 5% to 95%
- Maximum altitude 15,000 feet (4600 meters)

Included Accessories

- AC power adapter with cord (non-North America power cord is separate orderable item)
- Antennas: Six 2.4 GHz and six 5 GHz, 5 dBi, omni directional

Optional Accessories

- Wall or cubicle-mount bracket



Side View 7010 Indoor Dual Radio

NOTES:

1. Purchase of software license(s) required for dual radio and/or 802.11n MIMO functionality
2. Please contact Digitize Inc. for antenna types
3. Please contact Digitize Inc. for propagation studies and other information
4. A Propagation study is required before installation