Overview
The Fortress ES2440 High Capacity Infrastructure Mesh Point utilizes MIMO technology to bring high performance secure wireless communications to outdoor locations across long distances through a self-forming, self-healing mesh network. Delivered in a ruggedized form factor that is easy to set-up and operate, the Fortress ES2440 functions as both a wireless access point and bridge, with four powerful radios for maximum range. In military operations where vehicles, deployed assets, sensor devices, and soldiers are operating in a large outdoor area, the Fortress ES2440 allows these distributed assets to connect to the network without the considerations and constraints of traditional wired networks.

FastPath Mesh™
Fortress FastPath Mesh is a self-forming, self-healing, path optimizing network architecture designed from the ground up to support truly mobile and often transported networks. FastPath Mesh elegantly addresses the needs of dynamic tactical networks enabling spontaneous network formation and scalability that extends the range of end-to-end connectivity and allows units to join and exit the network seamlessly and securely. The fully distributed architecture dynamically builds the network and adapts to change with no single point of failure or central controller. FastPath Mesh utilizes all network interfaces and radio links to reach a destination using the lowest cost path. End-to-end encryption and traffic awareness is overlaid on the mesh for improved overall network performance. Fortress’ mesh is IPv4 and IPv6 compatible.

Ideal for:
- Tactical military operations where vehicles, deployed assets, sensor devices and soldiers are operating in a large outdoor area
- Unmanned Ground Vehicles (UGVs)
ES2440 Specifications

Mechanical
- Dimensions
  - 8.5" x 9.5" x 2.75" (ES2440-35, ES2440-3555)
  - 8.5" x 9.5" x 3.405" (ES2440-34M, ES2440-3444M)
- Weight
  - 7.5 lbs (ES2440-35, ES2440-3555)
  - 8.6 lbs (ES2440-34M, ES2440-3444M)
- Mounting
  - Tool-less Mast Mounting
  - Direct Wall Mount

Interfaces
- Ethernet
  - 3x 10/100/1000BT
- Serial
  - 1x RJ45 Connector
- Power
  - 2 Pin Conn-X Connector
- Antenna
  - 4/8x N-Type Connectors
  - 1x SMA (GPS)

Networking
- IP Compatibility
  - IPv4 and IPv6
  - Integrated DHCP and DNS
- Wireless
  - 802.11 a/b/g/n AP, Bridge, Mesh Point

Models:
- RF ES2440-3555
  - Radio 1 250 mW 802.11 a/b/g/n
  - Radio 2 500 mW 802.11n 4.4 GHz
  - Radio 3 500 mW 802.11n 4.4 GHz
  - Radio 4 500 mW 802.11n 4.4 GHz
  - (All: 2x2 MIMO)
- RF ES2440-34M
  - Radio 1 250 mW 802.11 a/b/g/n
  - Radio 2 800 mW 802.11n 4.4 GHz
  - (All: 2x2 MIMO)

Security
- FIPS
  - FIPS 140-2 Level 2
- Encryption
  - AES-CTR-128/192/256
  - AES-GCM-128/256
  - AES-CCM-128
  - IPsec (Suite B & Legacy) (optional)
  - NSA Suite B (optional)

Performance
- Sustained FIPS Crypto Throughput
  - 800 Mbps (200 Mbps per radio)

Management
- Access
  - Secure Browser-based GUI
  - Serial CLI (physical access)
  - SSH (network)
  - SNMP Monitoring
- Indicators
  - Power
  - Status
  - Ethernet link/activity
  - Radio activity (2/4)
- Control
  - Reset Button

Environmental
- Operating Temperature
  - -40°C to +65°C (-40°F to +149°F)
- Storage Temperature
  - -40°C to +70°C (-40°F to +158°F)
- Cooling
  - Convection Cooled (no fans)
- Humidity
  - 5%-95% Non-Condensing

Power
- Voltage
  - 11 to 30 VDC
  - UPoE (60W)
- Power Draw
  - ES2440-3555 31W
  - ES2440-3444M 40W
  - ES2440-35 25W
  - ES2440-34M 28W

Certification
- Safety & Emissions
  - FCC, CB Test, IC, RoHS
  - DFS – FCC
  - NIST – FIPS 140-2 Level 2
  - Weather Resistance Protection Rating – IP67 Submersible Enclosure
  - DoD Information Network Approved Products List (DODIIN APL)
  - MTBF (per Telcordia SR-332)
    - ES2440-35/34M – 100,000 hours
    - ES2440-3555/3444M – 75,000 hours

Manufacture & Warranty
- Made in the USA
- 1 year limited warranty

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