Overview
The Fortress ES520 Deployable Mesh Point provides rapidly deployable secure wireless communications to environments with no available infrastructure through a self-forming, self-healing mesh network. Delivered in a compact and rugged form factor with an integrated eight port Ethernet switch and industry leading radio range, the ES520 provides secure voice, video and data communications for outdoor network operations where network mobility is crucial.

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
- First responders
- Rapidly deployable kits
- Vehicle-based networks
- Situational awareness

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**Mechanical**
- **Dimensions**
  - 8.8” x 8.2” x 2.7”
- **Weight**
  - 4.9lbs
- **Mounting**
  - Tool-less Mast Mounting
  - Direct Wall Mount

**Interfaces**
- **Ethernet**
  - 8x RJ45 10/100BT
- **WAN**
  - 1x RJ45 10/100BT
- **USB**
  - 1x USB Host Connector
- **Serial**
  - 1x RJ45 Connector
- **Power**
  - DC Power Input Connector
- **Antenna**
  - 2x N-Type Connectors

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

**Performance**
- **Sustained FIPS Crypto Throughput**
  - 50 Mbps (Ethernet)
  - 50 Mbps (Wireless)

**Models**
- **RF - ES520-35**
  - Radio 1: 500 mW 802.11 a/b/g
  - Radio 2: 750 mW 802.11 a
- **RF - ES520-34**
  - Radio 1: 250 mW 802.11 a/b/g/n
  - Radio 2: 800 mW 802.11n 4.4 GHz

**Security**
- **FIPS**
  - FIPS 140-2 Level 2
- **Encryption**
  - AES-CTR-128/192/256
  - AES-GCM-128
  - AES-CCM-128
  - WPA2 (802.11i)
  - IPsec (Suite B & Legacy) (Optional)
  - NSA Suite B Upgradeable

**Management**
- **Access**
  - Secure Browser-based GUI
  - Serial CLI (physical access)
  - SSH (network)
  - SNMP monitoring
- **Indicators**
  - Power
  - Clr
  - Status 1
  - Status 2
  - Radio1 Up
  - Radio1 Down
  - Radio2 Up
  - Radio2 Down
  - Ethernet link/activity
- **Control**
  - Reset Button

**Environmental**
- **Operating Temperature**
  - -10°C to +55°C (14°F to +131°F)
- **Storage Temperature**
  - -35°F to +161°F (-37°C to +72°C)

**Cooling**
- Convection Cooled (no fans)

**Humidity**
- 5%-95% Non-condensing

**Power**
- **Voltage**
  - 10 to 30 VDC
  - POE (802.3af)
  - PSE Sourced Power to 50W
- **Power Draw**
  - ES520-35: 13W (not including PSE)
  - ES520-34: 14W

**Certification**
- **Safety & Emissions**
  - FCC, CB Test, IC, RoHS
- **Environmental – RoHS-6**
- **DFS – FCC**
- **NIST – FIPS 140-2 Level 2**
- **JITC – UCAPL Certified**
- **Wi-Fi Alliance – Wi-Fi a/b/g**
- **Weather Resistance Protection Rating**
  - IP56, NEMA 4
  - Watertight Enclosure
  - Lightning Arrestors
- **100,000 Hours MTBF**

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

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**GENERAL DYNAMICS**
Mission Systems

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