

# Tactical Mesh Point

## Secure Net-Centric Wireless Communications

The Fortress ES210 Tactical Mesh Point brings **secure net-centric, wireless communications** to warfighters through a self-forming, self-healing **mesh network**. Powered by a rechargeable and replaceable battery, AC, or DC power, the ES210 offers **FIPS 140-2 compliant security** and is upgradeable to **NSA Suite B**. Delivered in a **small and rugged** form factor with **long battery life** and **industry leading radio range**, the Fortress ES210 is designed specifically to be worn by individuals or used for edge devices such as cameras, unmanned vehicles and sensors. The Fortress ES210 Tactical Mesh Point delivers **dependable performance** in a wide range of conditions including arctic, desert, tropical and maritime environments, and allows every asset to be an active node on the network.

Any wireless network used in tactical, small unit environments must **support mobility of the nodes**. Mesh networks allow nodes to move within the area of operation, forming links with new neighbors and dropping links with old neighbors. With best in class range and **Fortress FastPath Mesh™**, Fortress Tactical Mesh Points ensure **high performance networking under highly mobile conditions**, allowing individuals and assets to move within the network and to seamlessly leave and join the network.

In military operations, when personnel, sensors, supplies, soldiers and vehicles are introduced into an austere operating environment, **Fortress Tactical Mesh Points** allow these distributed assets to connect to the network without the installation and management constraints associated with traditional wired networks.

**Fortress Tactical Mesh Points** bring secure, net-centric, wireless communications to the tactical edge, bringing voice, video and data communications to warfighters and vehicles in the field.

### FORTRESS ES210 TACTICAL MESH POINT



## Product Datasheet



### Features and Benefits:

#### Simple and Secure Connectivity

The Fortress ES210 connects dismounted soldiers and agents to each other and to nearby vehicles and fixed infrastructure, bringing voice, video, and data communications to those who need it, when and where they need it.

#### Maximum Range and Network Resilience

With a powerful radio for long range access, and self-forming, self-healing Fortress FastPath Mesh™ technology, the Fortress ES210 ensures that network access is available even in the roughest terrain.

# Product Datasheet

## Features and Benefits:

### Small and Rugged Design

The rugged design and small form factor of the Fortress ES210 delivers dependable performance in a wide range of conditions including arctic, desert, tropical and maritime environments.

### Easy to Use, Easy to Wear

The Fortress ES210 easily attaches to tactical vests. Its simple controls are designed to be usable when wearing protective gloves. LEDs indicate power and radio status and it can be set to blackout mode when desired.

### Long Battery Life

The Fortress ES210 has a rechargeable, replaceable lithium ion polymer battery that allows up to 8 hours of operation at 100% duty cycle and supports tool-less removal. The 210 also supports external DC power (9- 30V) and AC power.

### Certified Security

With FIPS 140-2 certified, Layer 2, AES-256 encryption, the 210 provides secure communications that meet federal policy. Upgradeable to NSA Suite B, Fortress offers proven security that has been thoroughly tested and deployed in the most demanding environments.

## LTI DataComm

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KEY FEATURES AND PERFORMANCE	
Portable Rugged Form Factor	<ul style="list-style-type: none"> <li>• Small (7"H x 3.3"W x 1.7"D)</li> <li>• Lightweight (2.1 lbs) including battery</li> </ul>
Mobile	<ul style="list-style-type: none"> <li>• Self-forming, self-healing 802.11 Fortress FastPath Mesh™</li> </ul>
Secure	<ul style="list-style-type: none"> <li>• FIPS, AES-256, NSA Suite B, key zeroization</li> </ul>
Versatile	<ul style="list-style-type: none"> <li>• DC &amp; battery power, multiple mounting options</li> </ul>
SECURITY	
Encryption	<ul style="list-style-type: none"> <li>• AES-128, 192, 256</li> <li>• WPA2 (802.11i)</li> <li>• NSA Suite B upgradeable</li> </ul>
Encryption Key Zeroization	<ul style="list-style-type: none"> <li>• Via user initiated pushbuttons</li> </ul>
MANAGEMENT	
Configuration/status	<ul style="list-style-type: none"> <li>• Secure browser-based GUI, CLI or SNMP</li> </ul>
Power LED	<ul style="list-style-type: none"> <li>• On, low battery</li> </ul>
Status LED	<ul style="list-style-type: none"> <li>• Booting/internal tests</li> </ul>
Radio LED	<ul style="list-style-type: none"> <li>• Strength and association</li> </ul>
Ethernet Port LEDs	<ul style="list-style-type: none"> <li>• Link, activity, status</li> </ul>
Pushbutton Control	<ul style="list-style-type: none"> <li>• Pushbuttons to select operating modes and features (usable wearing gloves)</li> </ul>
HARDWARE	
Enclosure	<ul style="list-style-type: none"> <li>• Rugged IP67 aluminum enclosure</li> </ul>
Chassis Dimensions	<ul style="list-style-type: none"> <li>• 7"H x 3.3"W x 1.7"D (17.8 cm x 8.4 cm x 4.3 cm)</li> </ul>
Weight	<ul style="list-style-type: none"> <li>• 2.1 lbs. (0.95 kg) including battery</li> </ul>
Mounting	<ul style="list-style-type: none"> <li>• Fits into standard PALS radio pouch</li> <li>• Optional universal mounting kit</li> </ul>
INTERFACES	
Ethernet	<ul style="list-style-type: none"> <li>• 2 RJ-45 10/100 LAN ports w/ auto-MDIX</li> </ul>
Serial	<ul style="list-style-type: none"> <li>• 1 serial port (console port)</li> </ul>
Power	<ul style="list-style-type: none"> <li>• Weatherized power connector (9-30VDC) with tethered cap</li> </ul>
Antenna	<ul style="list-style-type: none"> <li>• RP-TNC antenna connector (female)</li> <li>• SMA-GPS passive/active antenna connector (female)</li> </ul>
RADIOS	
Radios	<ul style="list-style-type: none"> <li>• 250mW 802.11a/b/g/n radio</li> </ul>
GPS	<ul style="list-style-type: none"> <li>• Integrated commercial GPS receiver</li> </ul>
ENVIRONMENTAL	
Cooling	<ul style="list-style-type: none"> <li>• Convection (no fans)</li> </ul>
Operating Temperature	<ul style="list-style-type: none"> <li>• -10°C to +60°C</li> </ul>
Humidity	<ul style="list-style-type: none"> <li>• 5 to 95%</li> </ul>
Weather Resistance	<ul style="list-style-type: none"> <li>• IP67 submersible</li> </ul>
Shock, Vibration, Moisture, Temp.	<ul style="list-style-type: none"> <li>• MIL-STD 810G</li> </ul>
Power	<ul style="list-style-type: none"> <li>• Variable 9-30 VDC input</li> <li>• Removable/rechargeable lithium ion battery</li> </ul>
CERTIFICATION AND TESTING	
Safety & Emissions	<ul style="list-style-type: none"> <li>• FCC</li> </ul>
NIST	<ul style="list-style-type: none"> <li>• FIPS 140-2 level 2 submitted</li> </ul>
HERO/HERF/HERP	<ul style="list-style-type: none"> <li>• MIL-STD 464A</li> </ul>
EMI	<ul style="list-style-type: none"> <li>• MIL-STD 461F</li> </ul>
Harsh Environments	<ul style="list-style-type: none"> <li>• MIL-STD 810G</li> </ul>
Weather Resistance	<ul style="list-style-type: none"> <li>• IP67 submersible</li> </ul>
MTBF	<ul style="list-style-type: none"> <li>• 100,000 hrs</li> </ul>
Accessories	<ul style="list-style-type: none"> <li>• Battery pack</li> <li>• Universal mounting kit</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>• Includes 1 year of maintenance and support</li> </ul>