PERSISTENT SYSTEMS

IRON
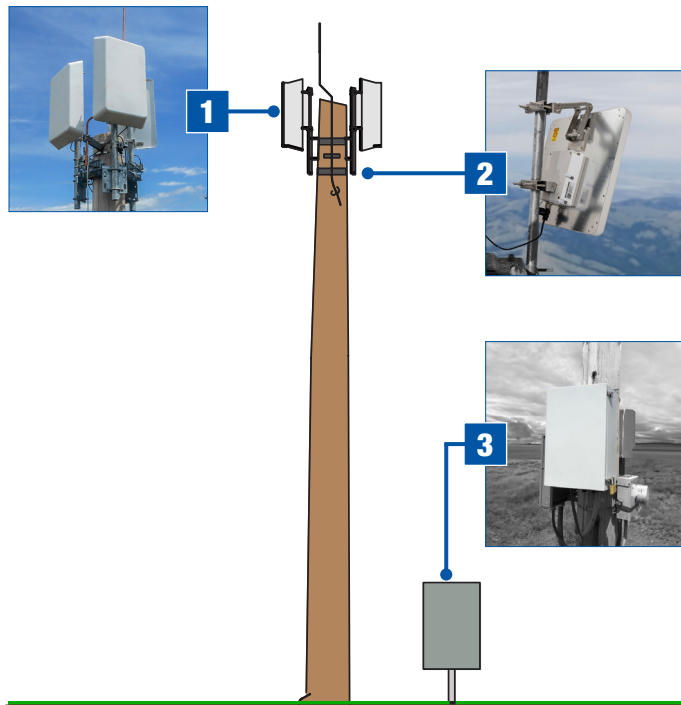## INFRASTRUCTURE-BASED REGIONAL OPERATION NETWORK

Infrastructure-based Regional Operation Network (IRON) consists of 3 components: (1) Integrated Sector Antennas, (2) Integrated Directional Antennas and (3) Multi-Unit Power Supply.

IRON enables Wave Relay users to stay connected to each other and to their enterprise network over massive geographic areas by blanketing areas of routine operation with permanent Wave Relay coverage.

Integrated Sector Antennas are available in C-, L- or S-band. They form a high-capacity macro coverage area footprint and deliver enterprise capabilities to the network edge. Integrated Directional Antennas provide point-to-point links between towers, providing a wireless backhaul capability. The Multi-unit Power Supply powers and networks up to four Integrated Antennas at each tower, providing a turn-key and simple-to-deploy solution.

From military bases and wildland firefighting to border patrol and port/maritime security, IRON provides continuous connectivity and unmatched performance in a durable, easy-to-install package.

persistentsystems.com

Benefits

Create Connectivity where None Exists

- Create a network where there is no infrastructure, such as long land or sea borders.
- Unconstrained topology & massive autonomous scalability to cover any area, regardless of terrain and size

Lowest Cost of Ownership

- Cover the maximum area with fewer towers.
  - Highest transmission power in its class means towers can be further apart.
- You own the network - no recurring costs.

Robust & Resilient Connectivity Fabric

- If a node fails, network will self-heal in less than one second.
- Low-latency, high throughput, peer-to-peer mesh connectivity
- Efficient pruning to local areas

Connect mobile workforce

- Deliver enterprise connectivity to dismount users, vehicles, and aircraft on the move.
- Nodes automatically route data through the best path.

Typical Applications

- Personnel Tracking & Accountability
- Situational Awareness
- Voice Communication
- Video Surveillance
- Sensor Networking

Spectrum Support

- Military L-, S-, and C-Bands
- Federal Public Safety Bands
- 2.4 & 5 GHz ISM Bands

Proven Security

- FIPS 140-2 Validated
- CTR-AES Encryption
- SHA-256 HMAC
- Wave Relay Interference Resilience & Defense (IRD)
- Over-the-Air Rekey & Key Zero

Integrates with Enterprise Networks

- Existing computers, cameras, and sensors can plug into network.
- Multicast, UDP, TCP/IP, IGMP protocol support
- Easily integrates with existing UHF walkie talkie systems

Low cost, easily deployable, turn-key solution

- Simple Installation without specialized training
  - One cable for power and data
  - Multi-unit power supply powers and networks up to four Integrated Sector/Directional Antennas.
  - Mounting bracket for quick & secure installation
- Hassle-free configuration and management
  - Settings can be adjusted remotely or directly from the base of the tower.
- Coverage maps for planning

Rugged Design for Any Environment

- Built for permanent installation on towers, buildings, and poles
- IP66 rated to protect against inclement weather
- Surge suppression in Integrated Antennas and power supply