

## **SpiderMesh**<sup>™</sup>

# High-Speed Wireless Mesh Network Covering Upto 4000 Sq. Km

SpiderMesh<sup>™</sup> technology is a cutting-edge wireless communication system that utilizes interconnected nodes to form a mesh network that can expand over long distances. This innovative technology enables the transmission of large data quantities at high speeds, ensuring fast and secure communication across different devices.

SpiderMesh<sup>™</sup> works by creating a network of wireless nodes that communicate with each other, forming a mesh network. Each node acts as a relay for data, ensuring that messages can be transmitted from one node to another, even if they are not directly connected. This means that the network can cover a wide area without the need for cables or physical connections.

One of the key advantages of SpiderMesh<sup>™</sup> technology is its ability to transmit data in parallel. This means that multiple messages can be sent simultaneously, enabling faster communication and increasing overall network efficiency. Additionally, the mesh network architecture provides redundancy, ensuring that if one node fails or loses its connection, the data can still be transmitted through alternative routes.





Security is also a top priority for SpiderMesh<sup>™</sup> technology. The mesh network is designed to be self-healing and self-organizing, meaning that it can detect and respond to potential security threats in real-time. The network can also be configured to use encryption and other security protocols to protect sensitive data and ensure that only authorized devices have access to the network.

SpiderMesh<sup>™</sup> technology offers a robust, reliable, and secure wireless communication solution for a wide range of applications, including industrial automation, smart cities, and IoT devices.

### **Features**

#### Waveform

- MIMO technology
- Diversity
- Quasi beamforming
- Auto adaptive modulation
- Interference avoidance scheme

#### **Carrier Wave**

- Robust signal
- Greater ranges penetration
- Extream NLOS performance
- 1.25MHz to 20MHz B/W
- 1000 low data carriers
- Forward error correction

#### Security/Encryption

- Standard DES
- AES 128Bit
- AES 256Bit
- LPI, LPD

#### Network

- Token passing
- Masterless TDMA
- Self-forming & self-healing
- Datarate upto 87Mbps
- 120 nodes in a single network
- Interlink

#### **Audio Communication**

- 16 Voice Groups
- Dual PPT Optional

#### Video

- Dual SD/HD cncoder
- H.264 compression
- Stream voice, video &
- data simultaneously
- UDP, TCP, RTSP, Multicast/
- Unicast, RTP, RTP-Z
- 128GB storage
- Push back