Highway9 Private & Public Outdoor Radio Unit

Product Information

The rugged and powerful Highway9 Networks outdoor radio unit is the access tier of the Mobile Cloud instance. This radio is validated by all major US-based MNOs for neutral host. The Mobile Cloud instances leverage the CBRS Access Points to provide distributed and resilient private and public cellular coverage for private enterprise networks with the ability to reach devices over 1 mile away. The radio allows connection of external antennas with N-type connectors (either one 4-port antenna or two 2-port antennas). The unit can be pole or wall mounted. The devices leverage the Highway9 Networks cloud service for activation and zero-touch configuration to ease the end-to-end deployment.

The Highway9 Networks radio units work in concert with Highway9 Networks Mobile Edge to keep control and data traffic local to the secure enterprise network, with high availability topologies supported in the default configuration.

Includes an optional built-in antenna with 65°±7° azimuth and 17 dBi±1 dB boresight gain. These built-in panel antennas can be replaced with an external CBRS antenna of choice. This can be a single 4-port antenna or two 2-port antennas (dual-sector) to operate each cell discretely.

Key Capabilities

- CBRS Band 48 (3.55-3.7Ghz)
- Supports both public & private networks
- Validated by major MNOs
- Built-in Panel Antenna

Enterprise Capabilities

- Cloud-based Operations requires less resources on-premise and rapid just-in-time deployments.

- Carrier Aggregation to maximize available CBRS bandwidth with Spectrum Allocation Service (SAS) support.

- Configurations optimized for IOT or IT use cases - tuneable for coverage vs. capacity, flexible throughput controls.

- Enhance enterprise security by SIM device and user onboarding.

- Extend non-cellular capable devices with the Highway9 Networks CBRS Gateway portfolio for a backwards-compatible next-gen campus architecture.

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Key Capabilities

- 4 external antenna ports: supports 4-port antennas or two 2-port antennas
- 4x2W (33 dBm/port)
- GPS & PTP Synchronization
- 40Mhz of Bandwidth (CA)
- Configurable channel bandwidth: 5/10/15/20 MHz
- Modulation: UL/DL QPSK, (16, 64, 256 QAM))
- Framework enables deep radio & CPE/UE operations & visibility

Simplified Operations

- Neutral Host-aaS-integrates simply with Highway 9 for Neutral host as a service
- PMN-aaS – centrally managed private network as a service
- Cloud-driven Provisioning (ZTP)
- Cloud Metrics, Logs and Tracing
- Enterprise Network Integration
- Low Latency Local Breakout
- Data-in-flight Encryption
- Control & Data High Availability

Certifications

- OnGo ® Alliance Certified
- FCC approved
- IC approved (Canada)

Additional Specifications

Synchronization:
GPS (external), 1588v2

Interfaces:
Interfaces 1 optical (SFP) and 1 RJ-45 Ethernet interface (1 GE)

Protection Rating:
IP66

MIMO:
DL: 2x2 on each carrier

Power Supply:
-40.5v to -57v DC, nominal -48v

Dimensions (HxWxD):
19.68 x 11.22 x 4.92 inches

Weight:
16.5 lbs/7.5 kgs

Atmospheric Pressure:
70 kPa to 106 kPa

Operating Temperature:
-40°F to 131°F / -40°C to 55°C

Storage Temperature:
-40°F to 158°F / -40°C to 70°C

Humidity:
5%-100% non-condensing