

## Highway9 Private & Public Indoor Radio Unit

### Product Information

The compact, yet powerful Highway9 Networks indoor 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 VMC 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 within 8,000-25,000 sq ft. The access points can be wall or ceiling mounted and are integrated into the existing corporate network via Power-over-Ethernet (PoE++) using existing structured cabling. The devices leverage the Highway 9 Networks cloud service for activation and zero-touch configuration to ease the enterprise deployment.

The indoor access points work in concert with the Mobile Edge to keep control and data traffic local to the secure enterprise network with high availability topologies supported in the default configuration. The indoor access point supports both public and private networks interoperating with the Highway 9 private core and carrier extension service (MOCN).

Includes a built-in antenna with a 9dBi antenna gain enabling a 37 dBm max EIRP per carrier for simple omni-directional operation.

### Key Capabilities

- CBRS Band 48 (3.55-3.7GHz)
- Supports both public & private (NHN-aaS and PMN-aaS)
- Integrates into existing enterprise network fabrics



### 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

- 4x315mW (25 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

- PMN-aaS – centrally managed private network as a service
- NHN-aaS – integrates simply with Highway 9 for neutral host as a service with integrated KPIs & monitoring
- Cloud-driven Provisioning (ZTP)
- Cloud Metrics, Logs and Tracing
- Enterprise Network Integration
- Data-in-flight Encryption
- Control & Data High Availability

### Certifications

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

### Additional Specifications

#### Synchronization:

PTP (1588v2) or GPS (external)

#### Interfaces:

1 optical (SFP+) or

1 RJ-45 Ethernet interface (1 GbE)

#### Protection Rating:

IP40

#### MIMO:

DL: 2x2 on each carrier

#### Power Supply:

POE++ (60W, 802.3bt) or 12 DC / 5 A

#### Dimensions (HxWxD):

9.84 x 9.84 x 2.36 inch

#### Weight:

6.6 lb / 3 kg plus weight of mounting bracket

#### Atmospheric Pressure:

70 kPa to 106 kPa

#### Operating Temperature:

23°F to 104°F / -5°C to 40°C

#### Storage Temperature:

-4°F to 158°F / -20°C to 70°C

#### Humidity:

5%-85% non-condensing