

## TerraNet V120 & V40 Models

mmWave PtMP and PtP Radio Unit - Data Sheet



### Product Description

TerraNet V120 and V40 are PtMP and PtP radio units that provide up to 2.3Gbps net aggregate throughput while delivering access connectivity for up to 32 Subscriber Units.

TerraNet V120 and V40 support full 60GHz band, including channels 5 and 6, enabling higher throughput on longer links.

Each radio comes with an integrated antenna.

### Product Highlights

- Full V-Band support 57-71GHz
- Up to 2300 Mbps net aggregated throughput
- Flexible operation mode: Base Station, Hub or Client
- Supports up to 32 SUs
- Robust and reliable operation in outdoor conditions
- Beamforming antenna with automatic alignment decreasing installation time
- Ease of operation and maintenance

## Product Specifications:

| <b>Configuration</b>     |  |
|--------------------------|--|
| Architecture             | Outdoor Unit with an integrated antenna  |
| Integrated antenna       | V120: Beamforming antenna 120° x 50° 20dBi gain, vertical polarization<br>V40: Beamforming antenna 40° x 40° 22dBi gain, vertical polarization |
| PoE to ODU Interface     | Outdoor CAT-5e; Maximum cable length: 100m for 10/100BaseT and 75m for 1000BaseT   |
| Data Interfaces          | 1 x 2500BaseT, 1 x 1000BaseT (POE)   |
| <b>Radio</b>             |  |
| Max Capacity             | 2300 Mbps net aggregate throughput   |
| Subscriber Units support | Up to 32 subscriber units  |
| Range                    | V120: Up to 1.2 km / 0.8 miles *<br>V40: Up to 1.2 km / 0.8 miles *  |
| Channel Bandwidth        | Full (2.16GHz), Half (1.08GHz)   |
| Modulation               | BPSK, QPSK, 16QAM (MCS 1-12); Single Carrier   |
| Tx Power                 | Max EIRP 40 dBm  |
| Duplex Technology        | TDD  |
| Encryption               | AES+GCMP 128bit  |
| <b>Networking</b>        |  |
| Layer 2                  | Transparent bridge   |
| Max MTU size             | Configurable up to 7900 Byte   |
| DHCP snooping            | Supported  |
| Traffic shaping          | Supported  |
| VLAN Support             | 802.1Q tagging for Traffic and Management  |
| IPv4/IPv6                | supported  |
| Management               | Static/DHCP, HTTP or HTTPS, SNMP v2 & v3, SNMP traps   |
| <b>Supported Bands</b>   |  |
| Band                     | Radio Compliance   |
| FCC, ISED                | 57-71 GHz: Full channels: 1-6; Half channels: 1-11** following FCC Part 15.255, RSS-210  |
| ETSI                     | EN 303 722   |
| <b>Mechanical</b>        |  |
| ODU Dimensions           | 28.0x10.2x5.1 cm / 11x4x2 inch   |
| ODU Weight               | 695 g / 24.5 oz  |
| Mount                    | Pole or wall mountable via mounting backplate  |
| <b>Power</b>             |  |
| Power Feeding            | Passive PoE 38-55V compliant with 803.2at type 2 or 48V on DC input. -48VDC is not currently supported   |
| Power Consumption        | 17W without PoE out being used, and 30W with PoE out being used (using RW-9921-1059 POE)   |
| Output power             | On 1G port: passive PoE out w/max 0.5A   |
| <b>Environmental</b>     |  |
| Operating Temperatures   | -30°C to 60°C / -31°F to 140°F   |
| Dust and Humidity        | IP54   |
| <b>Certificates</b>      |  |
| EMC                      | FCC Part 15 Subpart B Class B; ICES-003 Issue 7 Class B; EN 301 489-1; EN 301 489-17   |
| Safety                   | EN IEC 62368-1:2020+A11  |
| Health                   | EN 50385:2017  |

| Integrated Antenna    |   |
|-----------------------|---|
| Gain                  | V120: 20 dBi<br>V40: 22 dBi   |
| Azimuth and Elevation | V120: 120°<br>V40: 40°  |
| Elevation             | V120: 50°<br>V40: 40°   |
| Beamforming           | Supported with automatic alignment                                    |
| Polarization          | Vertical  |
| Beam Size             | V120: 23° Azimuth x 12° Elevation<br>V40: 12° Azimuth x 12° Elevation |

**Ordering Info**

**Part Number:** RW-6V02-9160, RW-6N02-9160, RW-6V02-I160, RW-6N02-I160

**Description:** RADWIN TerraNET Radio Unit, with an integrated antenna, supporting 57-71GHz V-band\*\*.

\* May be limited by regulation in the specific band being used

\*\* Depends on the TerraNet models: Full Band or Limited Band

Datasheet information can be changed by manufacturer without prior notice