

## RADWIN FiberinMotion™ VMU 5750 Series

### Vehicular Mobile Unit - Data Sheet



RW-5750-0V50

#### Product Description

RW-5750-0V50 is a ruggedized Vehicular Mobile Radio Unit (VMU), specially designed for deployment in vehicles or fully outdoor environment, connecting directly to the vehicle power source.

The RW-5750-0V50 communicates with RADWIN mobility base stations. It provides high capacity access connectivity in motion of up to 50Mbps net aggregate throughput.

RW-5750-0V50 supports 4.9 to 5.9 GHz and complies with FCC/IC, Universal, IC, WPC & MII regulations.

RW-5750-0V50 provides also Wi-Fi access point functionality that allows connectivity of multiple Wi-Fi devices in and around the vehicle to the broadband backhaul.

#### Product Highlights

- High Capacity Mobile Unit - up to 100 Mbps
- Wide coverage - up to 10 km/6.2 miles
- High speed - up to 250Km/h
- Access-Point functionality for Wi-Fi devices
- Built-in GPS for vehicle tracking and location-based solutions
- Connects directly to the vehicle power source
- Outstanding short and constant latency
- Single radio supports multiple-bands
- Robust and reliable operation in harsh environment and extreme temperatures
- Ease of operation and maintenance

## Product Specifications:

<b>Configuration</b>					
Architecture	Outdoor Unit connectorized for external antenna				
<b>Backhaul Radio</b>					
Max Capacity	100 Mbps net aggregate throughput				
Range	Up to 10 km / 6.2 miles				
Channel Bandwidth	Configurable: 5, 10, 20, 40 MHz (for the default band)				
Modulation	2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM)				
Adaptive Modulation & Coding	Supported				
DFS	Not Supported (for the default band)				
Diversity	Supported				
Max Tx Power	25 dBm				
Duplex Technology	TDD				
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6				
Encryption	AES 128; FIPS 197				
Uplink / Downlink Allocation	Configurable: Symmetric or Asymmetric				
Layer 2	HUB Mode				
QoS	Packet classification to 4 priority queues according to 802.1P or Diffserv				
VLAN Support	802.1Q, QinQ, 4094 VLANs				
ODU Management	IPv4/IPv6 dual-stack; SNMP v1 and v3; HTTP using web browser				
<b>Wi-Fi Access Point Radio</b>					
Frequency Band	2.4 GHz; IEEE 802.11b/g/n				
Modulation	2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM)				
Channel Bandwidth	Configurable: 20 or 40 MHz				
Max Tx Power	26 dBm				
Encryption	WEP, WPA-PSK, WPA-TKIP, WPA2 AES, RADIUS				
Virtual AP	Up to 8 BSSIDs				
Concurrent Clients	Up to 256				
<b>GPS</b>					
Type	Autonomous GPS with 1 external antenna, supporting NMEA, TAIP				
<b>Interfaces</b>					
LAN	Auto-sensing 10/100BaseT; M12 Connector				
POE-out	Auto-sensing 10/100BaseT + PoE-out 802.3af; M12 Connector				
Alarms	2 alarm-input; 2 relay-output; M12 Connector				
<b>Supported Bands</b>					
<b>Band</b>	<b>Channel BW 5MHz [GHz]</b>	<b>Channel BW 10MHz [GHz]</b>	<b>Channel BW 20MHz [GHz]</b>	<b>Channel BW 40MHz [GHz]</b>	<b>Radio Compliance</b>
4.9 GHz FCC/IC	4.9425-4.9875	4.940-4.990	4.940-4.990	-	FCC 47CFR Part 90 Subpart Y; IC RSS-111
4.9 GHz Universal	4.8975-4.9925	4.895-4.995	4.890-5.000	4.880-5.000	Universal
5.1 GHz Universal	5.1475-5.3375	5.145-5.340	5.140-5.345	5.130-5.355	Universal
5.2 GHz FCC/IC	5.2525-5.3475	5.255-5.345	5.255-5.345	5.255-5.345	FCC 47CFR Part 15.407; IC RSS-210
5.4 GHz FCC/IC	5.4775-5.7175	5.480-5.715	5.480-5.715	5.480-5.715	FCC 47CFR Part 15.407; IC RSS-210
5.4 GHz IC	5.4775-5.7175	5.480-5.715	5.480-5.715	5.480-5.715	IC RSS-210
5.4 GHz Universal	5.4725-5.7225	5.470-5.725	5.465-5.730	5.455-5.740	Universal
5.8 GHz FCC/IC (default)	5.7275-5.8475	5.725-5.850	5.725-5.850	5.725-5.850	FCC 47CFR Part 15.247; IC RSS-210
5.8 GHz WPC	5.8275-5.8725	5.825-5.875	5.825-5.875	5.815-5.885	WPC (India) G.S.R 38(E) dated 19 January, 2007 Notification
5.9 GHz Universal	5.7275-5.9525	5.725-5.955	5.720-5.960	5.710-5.970	Universal
5.8 GHz MII	5.7375-5.8375	5.735-5.840	5.730-5.845	5.720-5.855	CMIIT RTA
5.0 GHz Universal	4.9975-5.1525	4.995-5.155	4.990-5.160	4.980-5.170	Universal
<b>Mechanical</b>					
ODU Dimensions	26(w) x 4(h) x 19.8(d) cm				
ODU Weight	1.9 kg / 4.19 lbs				
<b>Power</b>					
Power Feeding	10-36V; Can be connected directly to the vehicle power source; Protection against surges, spikes and over current				
Power Ignition	Safe battery operation; On/off ignition detection				
Power Consumption	<40W				
<b>Environmental</b>					
Operating Temperatures	-35°C to 60°C / -31°F to 140°F				
Humidity	100% condensing, IP67 (totally protected against dust and against immersion up to 1m)				
<b>Safety</b>					
FCC/IC (cTUVus)	UL 60950-1, UL 60950-22, CAN/CSA C22.2 60950-1, CAN/CSA C22.2 60950-22				
ETSI	EN/IEC 60950-1, EN/IEC 60950-22				
<b>EMC</b>					
FCC	47 CFR Class B, Part15, Subpart B				
ETSI	EN 300 386, EN 301 489-1, EN 301 489-17, EN 55024				
CAN/CSA-CEI/IEC	CISPR 22-04 Class B				

**Ordering Info**

**Part Number:** RW-5750-0V50

**Description:** RADWIN VMU 5750 ODU, connectorized for external antenna, supporting multi frequency bands at 5.x GHz, factory default 5.8 GHz FCC/IC.