



# RDL-3000 XP RAS-Extend

## Full Motion Auto-Acquire Wireless TCP/IP Data Terminal

The RDL-3000 XP RAS-Extend series provides secure reliable wireless transport directly to land vehicles, marine vessels, and floating platforms in motion. Easily operated by non-technical personnel with no special training, the RAS-Extend automatically obtains and holds a reliable high-speed connection to the fixed Aviat Networks wireless network.

### FEATURES AND BENEFITS

- The highly reliable touchless operation and self-aiming antenna with continuous signal and GPS tracking, requires no specialized (telecom) personnel for normal operation
- High throughput for concurrent transport of M2M telemetry and telecontrol, data, video and voice services
- Durable all-weather enclosure for reliable operation in a wide range of temperatures and environmental conditions
- Over-the-air monitoring, configuration and software keyed features enable upgrades without physical access
- Software-defined architecture enhances reliability and service lifetime

### PRODUCT COMPLEMENTS

The RAS-Extend is fully compatible with all Aviat Networks RDL-3000 XP family base stations and wireless terminals. Aviat Networks provides a complete selection of peripherals and professional services for all your deployment needs.

### UNIFIED GLOBAL SOLUTIONS

Aviat Networks' patented UWT™ technology provides a truly unified wireless networking solution—across the spectrum, across your company and across the globe—enabling secure, reliable, high-speed connectivity to people and smart devices everywhere.



### SYSTEM AT A GLANCE

Outdoor software-defined 186.6 Mbps wireless terminal for PMP and PTP applications

Extends high speed TCP/IP transport to moving land vehicles, marine vessels and floating platforms

Reliable fast transport of M2M, data, HD video and voice traffic

Auto-acquire with full-time tracking and automatic antenna alignment with built-in GPS

Wide selection of MIMO antennas

-15 to 55 °C operating range using dynamic and thermal dissipation (no moving parts)

High-grade cyber security features

Very low latency supports time-sensitive applications

Over-the-air monitoring, configuration, upgrades and software keyed speeds and features

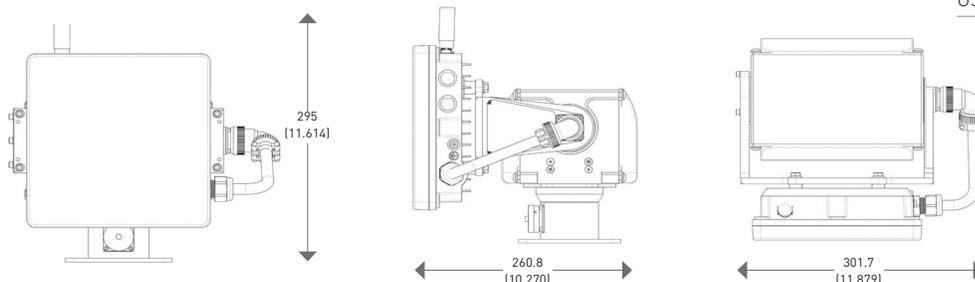
## RDL-3000 XP RAS-EXTEND SPECIFICATIONS

<b>Capability</b>	LOS/OLoS/NLOS PMP Terminal, PTP Terminal <sup>1</sup>
<b>Wireless transmission</b>	OFDM (orthogonal frequency-division, multiplexing), TDD/TDMA, 2 x 2 MIMO A/B with STBC & MRRC
<b>RF Band (MHz)</b>	470-698 <sup>1</sup> , 2000-2300 <sup>1</sup> , 2300-2700 <sup>1</sup> , 3300-3800 <sup>1</sup> , 4940-5875 <sup>1</sup>
<b>Channel Size (MHz)</b>	0.875/1.25/1.75/2.5/3.5/5/6/7/10/12/14/20 software selectable <sup>1</sup>
<b>Modulation</b>	BPSK 1/2 to 64 QAM 5/6, 256 QAM <sup>1</sup>
<b>System Capacity</b>	3 Mbps to 186.6 Mbps <sup>1</sup> UBR
<b>Max Tx Power</b>	M/L: +30 dBm <sup>1</sup> (Max combined tx power, MIMO mode/frequency band specific)
<b>Antenna Info</b>	LV: Integrated MIMO; M/L: External MIMO
<b>Wireless QoS</b>	Dynamic Spectrum Access & Management <sup>1</sup>
<b>MAC</b>	Dynamic ARQ
<b>Security</b>	AES 128/256 (OTA, FIPS 197 compliant); HTTPS (SSL), SSH (CLI), SNMP v3; MAC-based, Mutual Authentication; ECDSA Certificates Authentication <sup>1</sup>
<b>Connection</b>	10/100 Ethernet (RJ-45); M/L: 2x RF N-Type(f)
<b>Layer 2</b>	Up to 100 Mbps <sup>1</sup>
<b>Latency</b>	<10 ms
<b>Processing (PPS)</b>	>280,000
<b>Attributes</b>	Transparent bridge, DHCP pass-through, 802.1Q VLAN
<b>Network QoS</b>	CIR, PIR support, multiple services per terminal, 802.3x, 802.1p
<b>Management</b>	Aviat Networks ClearView NMS, SNMP v2, HTTP (Web), Telnet (CLI), RADIUS (User Authentication)
<b>Provisioning</b>	Automatic templates using ClearView NMS <sup>1</sup>
<b>Redundancy</b>	1+1 Hot Standby <sup>1</sup> (PRP or RSTP compatible)
<b>Temperature</b>	-15 to 55 °C (-5 to 131 °F)
<b>Enclosure</b>	IP67 (IEC 60529)
<b>Humidity</b>	100% humidity, condensing
<b>Surge Protection</b>	Built-in: PoE port
<b>Location &amp; Timing</b>	LV: Built-in GPS; M/LV: External GPS
<b>Mount</b>	Marine: Pole or prepared flat surface Land: Pole or truck bracket
<b>Mil-Spec Shock &amp; Vibration</b>	MIL-STD-810F METH.516.5, MIL-PRF-49256A

All specifications are subject to change without notice.

1. Availability restricted by regional regulations, model type, software version and purchased product options

## DRAWINGS



Dimensions are in millimeters (inches)

## Compliance

Safety:	IEC/EN/UL 60950-1 IEC/EN/UL 62368-1
EMC:	EN 301 489-1 EN 301 489-4 EN 301 489-17
5.8 GHz <sup>1</sup> :	RSS-247, FCC Part 15.407, EN 302 502
5.4 GHz <sup>1</sup> :	RSS-247, FCC Part 15.407, EN 301 893
5.2 GHz <sup>1</sup> :	RSS-247, FCC Part 15.407
4.9 GHz <sup>1</sup> :	RSS-111, FCC Part 90Y
3.65-3.70 GHz <sup>1</sup> :	RSS-197, FCC Part 90Z
3.5 GHz <sup>1</sup> :	RSS-192
3.4-3.6 GHz <sup>1</sup> :	EN 302 326-2
2.6 GHz <sup>1</sup> :	FCC Part 27
2.4 GHz <sup>1</sup> : I	RSS-210, FCC Part 15C2 EN 300 328
2.3 GHz <sup>1</sup> :	RSS-195
2.1 GHz <sup>1</sup> (2.025-2.110 GHz <sup>1</sup> , 2.200-2.290 GHz <sup>1</sup> )	ITU-R F.1098
600 MHz <sup>1</sup> :	RSS-196, FCC Part 15H, EN 301 598



## Physical Attributes

### Dimensions

**Land:** 301.7 x 295 x 260.8 mm  
(11.879 x 11.614 x 10.270 in)

**Marine:** 295 x 255 x 250 mm  
(11.75 x 10.5 x 10 in) [antenna positioner only]

### Weight

**Land:** 8.4 kg (18.6 lbs)

**Marine:** 16.3 kg (36.0 lbs)  
[antenna positioner only]

### Patent No.

US 9,468,028 B2