

The APS-U provides multi-frequency GNSS capability together with GNSS Heading, L-Band positioning and wireless communications within a rugged MIL-STD-810 housing for the broadest range of applications.

For maximum flexibility, the design is scalable from a single GNSS receiver to full options with Heading, wireless links and L-Band positioning. The APS-U has an additional processor for on-board configuration and custom applications separate from the GNSS engine. The rear panel has an extensive suite of interfaces for data output, timing, event marks, and a second antenna port for GNSS Heading.

Integrated wireless options include Bluetooth® for easy configuration, plus a GSM or CDMA cellular modem and UHF radio modem for transmission or reception of RTK corrections.



## FEATURES

- 136 channels
- GPS/GLONASS/GALILEO/Compass
- GNSS Heading
- L-Band Positioning
- On-board configuration
- Integrated GSM or CDMA cellular modem
- Integrated full band UHF radio
- Bluetooth®, Ethernet, USB and Serial
- 1PPS, Event Markers, CAN
- 2 GB internal memory
- Remote access via Ethernet



## APS-U

Channels	136
GPS	L1/L2/L2C/L5
GLONASS	L1/L2
GALILEO	L1/E5a/E5b
COMPASS	Compass Ready
SBAS	WAAS, EGNOS
GNSS Heading	0.03 deg @ 10m separation 0.1 deg @ 3m separation 0.3 deg @ 1m separation
Standalone	1.3 m H, 1.9 m V
SBAS	0.6 m H, 0.8 m V
DGPS	0.5 m H, 0.9 m V
PPP (L-Band)	10 cm
RTK	0.6 cm + 0.5 ppm H 1 cm + 1 ppm V
Static	5 mm + 0.5 ppm V 5 mm + 0.5 ppm V
Output Rate	20 Hz
Measurement Rate	100 Hz
Latency	<20 msec
Average Time to Fixed RTK	<7 sec
Cold Start	<45 sec
Warm Start	<20 sec
Re-acquisition	<1.2 sec
Input/Output	1PPS 2 x Event Marks Ref In/Out RTCM2.x, RTCM3.x, CMR, CMR+ NMEA 0183 V2.30
Integrated UHF Radio	406-470 MHz
Integrated Cellular Modem	GSM/GPRS Quad-Band or CDMA
Integrated Bluetooth	Class 2
Memory	Min. 2 GB
Communication Ports	3 x RS232 1 x USB 1 x Ethernet 1 x CAN
Humidity	MIL-STD-810G, Method 507.5, Procedure I
Dust	MIL-STD-810G, Method 510.5, Procedure I
Shock	MIL-STD-810G, Method 516.6, Procedure I/II
Vibration	MIL-STD-810G, Method 514.6, Procedure I
Certification	IP67, RoHS, CE, FCC Class B Part 15
External Power Input	9 to 30 VDC
Weight	1.5 kg
Dimensions	164 mm x 157 mm x 54 mm
Operating Temperature	-30 to +65 deg C
Storage Temperature	-40 to +75 deg C

## SPECIFICATIONS

Specifications are typical and subject to change without prior notice.