

Datasheet

PlaneTRack Type RDM



Dual independant 19" ADS-B Receiver and Accessories

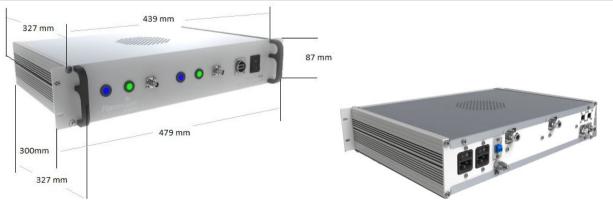
ADS-Receiver	ADS-B antenna(s) and clamp(s)	GPS antenna(s) and clamp(s)	Antenna line surge protectors
3008008813		GPS IT	

PlaneTRack Type RDM is a fully redundant ADS-B receiving systems with an dual independant channel ADS-B receiver, dual redundant AC power supply, two ADS-B antennas/clamps, two GPS antennas/clamps and four antenna line surge protectors.

PlaneTRack Type RDM is the ideal solution for receiver sites that require full redundancy or dual antennas that are required due to partially obstructed views.

Available Options:

010	Maritime/offshore rugged version	06x	Airborne option (DO-160)
020	Extended temperature range -20°+80°C	070	Radar display software for MS Windows
030	Industry package with SNMP client and alarm contact	08x	Extended warranty 24/48 months
035	High gain active antenna +21dB	090	Exchange service/Pool access
04x	Internal DC/DC power supply 12/24/48V		Antenna cables, connectors and adapters
05x	Data options for Asterix and Mode-S Enhanced Surveillance		



Specification:

ADS-B receivers

- 2 High performance ADS-B Receivers (SAW frontend, ADC, FPGA and Linux Single Board Computer driven)
- System processor 32-bit Cortex A8, 1GHz, 4 GB
- Operating system: Debian 8 Kernel 4.1 (LTS)
- Power up boot delay: < 45 secs
- Sensitivity at each receiver antenna port: better than -93 dBm
- 2 mechanical RF frontend filters with DC short protection, passband attenuation: < 0.5 dB
- RF filter bandwidth: < 9MHz @ -3 dB

Antennas and accessories

- 2 ADS-B antennas passive: 5 dBi gain; N-female connectors, VSWR 1.5 max, length 0.55m, base from chromed brass
- 2 antenna clamps, max. 32 mm mast diameter, aluminium
- 2 ADS-B antenna connectors: N female
- ADS-B antenna input impendance: 50 Ohms
- 2 GPS antennas: active 5VDC, length ca. 0.25 m
- 2 GPS antenna connectors: N female
- 4 Lightning protection gas surge protectors,
 N-female connectors (to be mounted outside enclosure)

Firmware/Software

(table call) data

- Complete ADS-B decoder compliant to ICAO Annex 10, DO260/A/B, DOC 9871, ED129A et.al.
- Decoder latency to output: < 10 ms
- Packet throughput: > 2.500 packets/sec
- Additional decoding of Mode-S and TCAS frames
- Variety of decoder output formats via network interface
 - O Undecoded raw data
 - O Fully decoded data in ASCII CSV or JSON formats
 - O Built-in Google Maps/Earth or OpenStreetMaps server for test purposes
- Decoder output available as push (stream) or pull

Network interface

- 2 Ethernet ports, network connection: Cat. 5e, 10/100 Base TX, RJ-45
- Data protocols: UDP/IP, TCP/IP, HTTP
- 2 Ethernet surge protectors, 7.5/70V, 10kA/20μs, 100A/1ms, IEC 61643-21

Power supply and earthing

- 2 IEC 60320 C-14 power connectors with integrated power switch
- 2 industrial grade power supply units with 20 years MTBF, input voltage 110-230 VAC, surge withstand 300VAC, input frequency 50/60 Hz
- 1 automatic power switchover circuitry
- 1 M8 bolt for protective earth connection

Mechanical data

- 1 Industry grade 19" 2U enclosure from aluminum, VDE and CE compliant
- 4 Control lamps for Traffic and Power on front panel
- 1 Standby switch on front panel
- 1 Raw data video out BNC female on front panel
- 1 USB type A maintenace port on front panel
- Dimensions of enclosure: W: 439/479mm, H: 87 mm, D: 300/355 mm
- Weight 19" enclosure: ca. 5.2 kgs, all components delivered: ca. 6.8 kgs

Environment

- Ambient temperature range 0 40°C
- Relative humidity: < 80%
- Cooling: natural convection
- Enclosure ingress classification: IP52

Miscellaneous

- Individual operating and maintenance manual
- CE marking including EMV and EN60950-1 compliance
- License for commercial use
- MTTF > 60,000 hrs

Service and Warranty

- Premium customer support
- 6 months from delivery

All data subject to change without prior notice.

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