PlaneTRack Type B
with FLARM and PC options

19" ADS-B Receiver and accessories
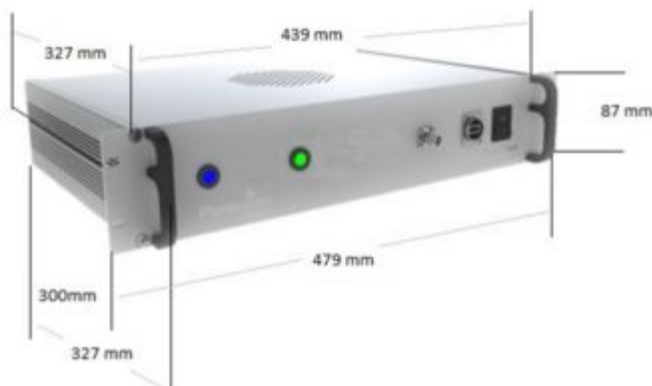
ADS-Receiver	ADS-B antenna(s) and clamp(s)	GPS antenna(s) and clamp(s)	Antenna line surge protectors

PlaneTRack Type B is a complete ADS-B receiving systems with a single AC power supply, one ADS-B antenna/clamp, one GPS antenna/clamp and two antenna line surge protectors.

PlaneTRack Type B is the ideal solution for receiver sites that require 19" plug-n-play rack inserts.

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	FL▲RM	**FLARM ground station add-on with Asterix CAT-021, JSON, CSV data output via network**
05x	Data options for Asterix and Mode-S Enhanced Surveillance	*PC*	**Integrated PC with HDMI output for displays. Stand-alone. No further external PC required**

Specification:

ADS-B receiver

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

Antennas and accessories

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

Firmware/Software

- 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
  - ○ Undecoded raw data
  - ○ Fully decoded data in ASCII CSV or JSON formats
  - ○ Built-in Google Maps/Earth or OpenStreetMaps server for test purposes
- Decoder output available as push (stream) or pull (table call) data

Network interface

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

Power supply and earthing

- IEC 60320 C-14 power connector with integrated power switch
- Industrial grade power supply unit with 20 years MTBF, input voltage 110-230 VAC, surge withstand 300VAC,input frequency 50/60 Hz
- M8 bolt for protective earth connection

Mechanical data

- 1 Industry grade 19" 2U enclosure from aluminum, VDE and CE compliant
- 2 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 maintenance port on front panel
- Dimensions of enclosure: W: 439/479mm, H: 87 mm, D: 300/355 mm
- Weight 19" enclosure: ca. 4.5 kgs, all components delivered: ca .5.5 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 EMC 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.   Rev. 02/2017