

Datasheet

PlaneTRack Type BDM (2024)



19" 2U ADS-B Receiver Kit and Options

ADS-B Receiver 19" 2U Single power supply	ADS-B antenna and clamp by AMPHENOL	GPS antenna and clamp by AMPHENOL	Antenna line surge protector by CITEL
		GPS	

PlaneTRack Type BDM is a complete professional ADS-B receiving system kit with a dual redundant DC power supplies, one rugged environment ADS-B antenna and GPS antenna/clamp and one antenna line surge protector.

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

Available Options

E,F,G	12V, 24V or 36V DC power supply (Mandatory selection)	J	Data output options for Asterix CAT021 V1.8/2.4
KK	115/230V AC/DC desktop power supplies (Operating temperature -30°-+70°)	R	Radar display software ASD-VIEW by CAMBRIDGE PIXEL
С	SNMP Software client	W,X,Y	Extended warranty 24/36/48 months



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: Linux Debian
- Power up boot delay: < 45 secs
- Sensitivity at each receiver antenna port: better than -93 dBm, dynamic range >73 dB
- RF frontend cavity filter 1090 MHZ +-0.1 MHZ, with DC short protection, passband attenuation: < 0.5 dB
- Filter bandwidth: +-4 MHz @ -3 dB, +-35MHz @-30 dB

Antennas and accessories

- ADS-B antenna passive: 2.2 dBi gain; length 0.55m, base from aluminium coated; integrated antenna clamp
- ADS-B antenna connector: N female
- ADS-B antenna input impedance: 50 Ohms
- GPS antenna active 5V DC, length ca. 0.25 m
- GPS antenna connector: N female
- 1 Lightning protection gas surge protector,
 N-female connector (to be mounted outside enclosure for ADS-B antenna line)

Firmware/Software

- Complete ADS-B decoder according to ICAO Annex
 Vol IV, DO260/A/B, DOC 9871, ED129 (App. M) etc
- 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 (REST API)
 - Asterix CAT021 V0.23, 0.26; (1.8. 2.4 by option)
 - Built-in Google Maps/Earth or OpenStreetMaps server
- Decoder output available as push (TCP stream, UDP) or pull (REST http table call) data

Order code: 520-XX-Y

X: E or F or G Y: other options

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/ 20 μ s, 100A/1ms, IEC 61643-21

Power supply and earthing

- Power supply 12VDC (9-18V) or 24VDC (18-36V) or 48VDC (36-72VDC)
- Optional external desktop PSU 115/230V AC 50/60Hz (temp. limited to -30°..+70°C)
- Amphenol DC power plug
- Amphenol DC power jack included
- M6 bolt for protective earth connection

Mechanical data

- 1 Industry grade 19" 2U enclosure from aluminium, VDE and CE compliant
- 2 Control lamps for Traffic and Power on front panel
- 1 Power switch on front panel
- 1 USB type A maintenance port on front panel
- Dimensions of enclosure: W: 439/479mm, H: 87 mm, D: 265/310 mm
- Weight 19" enclosure: ca. 5.5 kgs, all components delivered: ca. 6.5 kgs

Environment

- Indoor components operating temperature range
- -10°+60°C (-30°/-40°..+70°C by option)
- Outdoor components operating temperature range -30°..+70°C
- Relative humidity: < 90%
- Cooling: natural convection
- Enclosure ingress classification: IP52

Miscellaneous

- Individual operating and maintenance manual
- CE marking including EMC and EN62368 compliance, RoHS, WEEE
- Licence for commercial use
- MTTF > 60,000 hrs

Service and Warranty

- Premium customer support
- 6 months from delivery, or options 24/36/48 months

All data subject to change without prior notice.

Rev. V2-05/2024