

### INNOVATIVE LOW COST SURVEILLANCE SOLUTIONS

**PlaneTRack**, **DroneTRack**, and **VesselTRack** are part of a family of professional 1U/2U, 10/19-inch rack-mounted ground station kits designed for cost-effective industrial and defense (naval) surveillance applications.

These systems integrate advanced signal reception and processing technology, offering exceptional long-range RF sensitivity, rapid decoding, and versatile data output formats via a unified network interface.

Featuring an open software architecture, the kits can be easily customized to meet specific client requirements.

**PlaneTRack Type B10** is a cost-efficient, professional 2U 10-inch ADS-B ground station tailored for monitoring ADS-B-equipped aircraft.

### APPLICATION EXAMPLES

- Surveillance of industrial complexes, such as power stations, offshore wind farms, critical infrastructure
- Enhancement of AIS surveillance systems on vessels and land based
- Support for mobile and stationary defense systems

### PLUG-AND-PLAY KIT

**PlaneTRack Type B10** is supplied as a complete ready-to-install system kit. It comes with a rugged ADS-B antenna and GPS antenna/clamp by AMPHENOL PROCOM for harsh environment, and an antenna line surge protector by CITEL. Also we offer a display software from CAMBRIDGE PIXEL as an option.



### KEY FEATURES

- **Industry grade 1090 MHz ADS-B receiver, processor and decoder**
- **Standard 10 inch 2U enclosure**
- **9-72VDC or 115-230VAC Power Supply**
- **Full network connectivity (Ethernet)**
- **Variety of data output formats**
- **Open software architecture for tailored solutions**
- **Accessories from well-known manufacturers**

### UNIFIED DATA FORMATS

**PlaneTRack**, **DroneTRack** and **VesselTRack** systems provide standardized data output formats, enabling seamless integration into shared downstream processing and visualization systems. For example aircraft data can be transmitted to vessel systems in NMEA/IEC format, while vessel data to aircraft systems in ASTERIX format.

### RELATED PRODUCTS

**PlaneTRack B** - 19" 2U ADS-B Ground Station

**PlaneTRack BDM** - redundant power supply

**PlaneTRack R1U** - set of redundant units

**DroneTRack** - Ground station for UAV&small aircraft signal reception

**VesselTRack** - AIS Rx Ground Station

## ADS-B RECEIVER/DECODER

|                |                                                                                        |
|----------------|----------------------------------------------------------------------------------------|
| RF input       | N(f) conn., 50 Ohms, max. 0 dBm                                                        |
| RF filter      | Cavity type 0.1 MHz @ -0.5 dB,<br>4 MHz @ -3 dB, 35 MHz @ -30 dB                       |
| Frontend stage | Sensitivity >-93 dBm, dyn. range 75 dB,<br>SAW filters                                 |
| Data Processor | Linux/Debian LTS OS, 32-bit CORTEX A8, 1<br>GHZ clock, 512 MB RAM, 1 GB Flash          |
| Data Decoder   | ICAO Annex 10 Vol IV, DO260/A/B, DOC<br>9871, ED-129, ED-102/A; ADS-B, Mode-S,<br>ACAS |

## MECHANICAL AND ENVIRONMENTAL

|                |                                                                    |
|----------------|--------------------------------------------------------------------|
| Enclosure      | H:88 mm, W:436/483 mm, D: 210/254 mm                               |
| Weight         | 5.5 kgs incl. accessories                                          |
| Temperature    | indoor components: -10°..+60°C;<br>outdoor components: -30°..+70°C |
| Classification | indoor components: IP30;<br>outdoor components: IP66               |
| Cooling        | natural convection                                                 |

## INTERFACES

|                |                                                                                           |
|----------------|-------------------------------------------------------------------------------------------|
| Network        | Ethernet RJ45 with Surge Protector IEC<br>61643-21,                                       |
| GPS            | N(f) 5V DC                                                                                |
| Data protocols | Push: UDP; Pull: TCP, HTTP; Time: NTP                                                     |
| Data formats   | Raw, JSON, Asterix CAT021, 023, 247, CSV,<br>NMEA/IEC, REST API                           |
| Power          | 115/230VAC IEC socket - or - 12VDC or<br>option 24VDC, 48VDC, ca. 1.1 W, Amphenol<br>plug |
| Maintenance    | USB Type A PC maintenance port                                                            |
| Earth          | Bolt M5                                                                                   |

## SERVICE AND COMPLIANCE

|          |                                    |
|----------|------------------------------------|
| Warranty | 6 months or option 24/36/48 months |
| MTBF     | > 60.000 h                         |
| Markings | CE, FCC, ACMA, RoHS, WEEE          |

## SUPPLIED OUTDOOR ACCESSORIES

|                            |                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------|
| ADS-B antenna              | N(f) conn., 50 Ohms, 2.2 dBi, length 0.55m,<br>rugged for maritime environment,<br><b>Amphenol Procom</b> |
| GPS antenna                | N(f) conn., 5V DC, length 0.25 m, rugged<br>for maritime environment, <b>Amphenol<br/>Procom</b>          |
| ADS-B line surge protector | 2xN(f) conn., IEC 61342-21, 7.5V / 70V, 10<br>kA (8/20 µs), 100 A (10/1000 µs), <b>CITEL</b>              |

## OPTIONS

|            |                                                               |
|------------|---------------------------------------------------------------|
| F, G       | 24VDC, 48VDC ext. operating voltage                           |
| H          | Extended temp. range -30°..+70°C for indoor<br>components     |
| K          | External PSU 115/230VAC for DC supply                         |
| Q          | Active ADS-B antenna >17 dB gain                              |
| R          | ASD-VIEW radar software client by <b>Cambridge<br/>Pixels</b> |
| S          | SNMP client V2c, V3                                           |
| W, X,<br>Y | Extended warranty 24, 36, 48 months                           |

