

INNOVATIVE LOW COST SURVEILLANCE SOLUTIONS

PlaneTrack, **DroneTrack**, and **VesselTrack** are part of a family of professional 1/2U, 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.

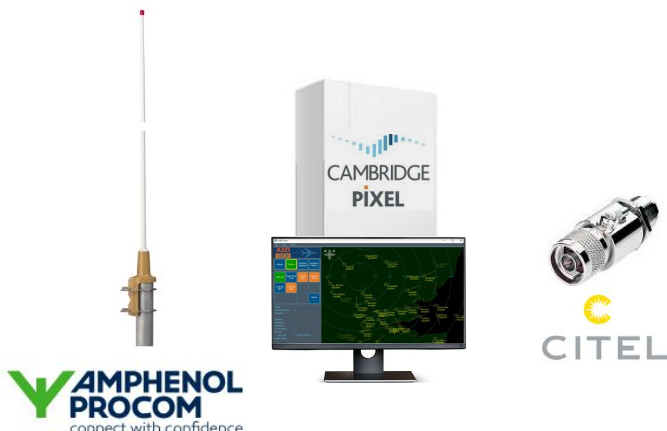
VesselTrack is a cost-efficient, 2U 19-inch professional AIS (Automatic Identification System) receiver ground station tailored for monitoring position and various data from vessels and other maritime related sources.

APPLICATION EXAMPLES

- Surveillance of industrial ashore and offshore complexes, such as power stations, wind farms, critical infrastructure
- Enhancement of ADS-B surveillance systems
- Support for mobile and stationary defense systems

PLUG-AND-PLAY KIT

VesselTrack is supplied as a complete ready-to-install system kit. It comes with a high-sensitivity AIS receiver and ADS-B and GPS antennas for maritime environment. **VesselTrack** can feed into the same display software by CAMBRIDGE PIXEL (option).



KEY FEATURES

- **Dual channel AIS receiver**
- **Receives and decodes: AIS Class A and Class B transponders, AIS SARTs and Aids to Navigation**
- **Standard 19 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**

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 a vessel system in NMEA/IEC format, while vessel data to an aircraft system in ASTERIX format.

RELATED PRODUCTS

PlaneTrack - ADS-B Rx Ground Stations

DroneTrack - UAV and small aircraft Rx Ground Station

162 MHz RECEIVER/DECODER

RF tuner	161.975 (87B) + 162.025 (88B) MHz
RF input	N(f) conn., 50 Ohms, max. 0 dBm
RF frontend	LC filter, sensitivity better than -112 dBm
Data Processor	Linux/Debian LTS OS, 32-bit CORTEX A8, 1 GHZ clock, 512 MB RAM, 1 GB Flash
Data Decoder	NMEA 0183, private IEC messages on request

MECHANICAL AND ENVIRONMENTAL

Enclosure	H:88 mm, W:436/483 mm, D: 265/300 mm
Weight	4.5 kgs incl. accessories
Temperature	indoor components: -15°..+60°C; outdoor components: -30°..+70°C
Classification	indoor components: IP30 outdoor components: IP66
Cooling	natural convection

INTERFACES

Network	Ethernet RJ45 with Surge Protector IEC 61643-21
GPS	N(f) 5V DC
Data protocols	Push: UDP; Pull: TCP, HTTP; Time: NTP
Data formats	Raw NMEA/IEC, JSON, Asterix CAT021, 023, 247, CSV, REST API
Power	12VDC or option 24VDC, 48VDC, ca. 1.1 W, Amphenol 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

AIS antenna	N(f) conn., 50 Ohms, 2.2 dBi, length 1.30m, Amphenol Procom
Surge protector	2xN(f) conn., IEC 61342-21, 7.5V / 70V, 10 kA (8/20 µs), 100 A (10/1000 µs), CITEL

OPTIONS

D	Dual redundant PSU
F, G	24VDC, 48VDC ext. operating voltage
K	External PSU 115/230VAC for DC supply
R	ASD-VIEW radar software client by Cambridge Pixels
S	SNMP client V2c, V3
W, X, Y	Extended warranty 24, 36, 48 months

