

Airborne AIS Test Set



General description

Airborne AIS Test Set provide reliable testing of Airborne/ Aircraft Automatic Identification System operation. The AIS Test Set is intended for verification of marine and avionics AIS installations.

Airborne AIS of commercial and civil aircraft gives the ability to track and identify AIS-equipped vessels and report aircraft position as well as provides maritime patrol and SAR aircraft with the ability to track and identify AIS-equipped vessels over a dedicated VHF datalink.

Thus annual testing of Airborne AIS is highly recommended.

AIS Tester allows to test all type of AIS transponders of any manufacturer.

The AIS Tester is specified equipment for radio surveyors, classification societies and administrative authorities.

All measurements are carried out by means of cable and attenuator included in standard delivery set.

Operation / Features

AIS Test Set is user-friendly and easy to use test device.

AIS Test Set allows to perform:

- Measure AIS frequencies (on channels 1, 2);
- Measure or estimate the AIS transmitted power (on channels 1, 2);
- Receive and decode the AIS messages;
- Send the data to AIS stations;
- Pass the DSC polling information (channel 70);
- Check AIS answer to so called "virtual vessel";
- Simulate NMEA data transmissions.
- Simulate AIS data transmissions, such as ship's name, position, length, course, speed, power and beam. Transmit and receive the DSC messages of different types for VHF stations;

AIS Test Set allows to:

- Find Malfunctioning Systems
- Perform pre-operational test
- Field and Bench Testing
- Simulate AIS Data
- Installation Verification

Connection to PC or laptop

After all tests are done usually it is required to process the measured data, prepare and print the test reports.

Thus the AIS tester can be easily connected to any PC or laptop. The connection is carried out by means of standard USB A-USB A cable and special software available on this website. The minimal requirements are Microsoft OS, such as Windows XP, Windows Vista or Windows 7 or 8 and at least 1 USB port. No special hardware configuration is required.

Also the special FTDI driver should be installed for proper connection. It can be downloaded at our web-site as well.

Technical description

- AIS operational frequencies are: channel 1 - 161,975 MHz; channel 2 - 162,025 MHz;
- DSC operational frequency channel 70 - 156,525 MHz;
- Setting accuracy of output frequency – no less than ± 1 ppm;
- Output power of AIS channel 1 and 2 and channel 70 DSC not less than (-7) dBm or 100 mW;
- AIS modulation - FM-GMSK;
- AIS channel band rate - 9600 Baud;
- DSC channel band rate - 1200 Baud;

- Tester provides carrier frequency measurement in range of 156-162MHz within the accuracy ± 99 Hz;
- Input/Output resistance - (50 ± 1.5) Ohm.
- Approximate continuous operation time using the battery – about 5 hours.

The tester power supply is performed by 4 AA batteries 1.5V, as well as by external DC source with voltage 4,5...7V and load current no less than 500 mA.

TESTER displays internal battery voltage with accuracy $\pm 5\%$.

The tester is designed to operate at the temperature range from 5oC to + 45oC and relative air humidity should be no more than 95%, which is determined by used LCD.

Complete set of the Aircraft AIS Test Set

- AIS Tester (main unit)
- Attenuator
- PC Cable (USB A – USB A) 1.5m
- PC Cable (DB9 - NMEA) with open wires
- RF Cable TNC-TNC
- RF Cable BNC-BNC
- RF Connector BNC-UHF
- Technical Description and User Manual (English)
- Package
- Software and software user's guide manual (available for download)
- Cable (DB9 - NMEA) with ready output for connection to pilot plug (Pilot plug cable) - optional
- Antenna to make measurements through broadcast - optional



Dimensions (mm)

