

PORTABLE**RUGGED****AIS TEST SET**

INTRODUCING THE ST162-T1:

A portable, Dual Receiver AIS Test Set designed for testing AIS receiver operation for aircraft, ships, and shore stations.

- **Simulates** Up to 100 AIS Messages
- **Integrated, Internal** AIS Antenna
- **RS232** Communication (optional Bluetooth)
- **Fast setup, Lightweight, Simple to use**

Intended for verification of marine and avionics AIS installations, the ST162-T1 AIS Test Set is designed to test equipment quickly with minimal setup time or expertise required. The Test Set ships from the manufacturer pre-loaded with 10 AIS messages including 6 unique MMSI numbers making the ST162-T1 the first AIS test set to work straight out of the box with no additional configuration required: simply turn the unit on and begin testing. The ST162-T1 also comes with an internal VHF antenna, so no cables are required for basic operation.

Advanced users will likely want to take advantage of the included PC software to program up to 100 AIS messages. Along with standard ship messages the ST162-T1 is also capable of simulating; AIS Aid to Navigation (AtoN), Safety Related Message (SRM), Search and Rescue Transmitter (SART) and Binary message types.

In order to meet the needs of both lab and field technicians, the ST162-T1 is integrated in small lightweight highly visible Pelican 1200 series enclosure and is powered solely off of two easily accessible Alkaline C cell batteries. The control panel is outfitted with full IP67 hardware to provide protection against exposure to UV, dust, impact and water immersion. In addition all removable parts including connector caps and battery covers are tethered for use on active runways. Regardless, if your need is for bench testing or full installation field testing the ST162-T1 will get the job done.

The ST162-T1 is capable of performing:

- **Pre-Operational Checks**
- **Field and Bench Testing**
- **Installation Quality Comparisons**
- **Identification of Malfunctioning Systems**
- **Simulated AIS Data**
- **Other Custom Data**

PORTABLE**RUGGED****AIS TEST SET****System Specifications**

- **Designation:** Portable AIS Test Set for AIS Receivers
- **User Interface:** RS232 at 115200 Baud (Bluetooth available on ST162-T1-01)
- **Power Requirements:** C cell batteries (X2)
- **Battery Life:** 10 hours average
- **Temperature Range:**
 - **Storage:** -30 to +70 degrees C
 - **Operation:** -15 to +55 degrees C
- **Compass Safe Distance:** 1 meter

Navigation Specifications

- **12 Channel GPS Receiver**

Dimensions and Weights

- **Width:** 9.68 in.
- **Length:** 10.62 in.
- **Height:** 4.87 in.
- **Weight:** < 7.5 lbs.

Frequencies and Channel Bandwidth

- **TX AIS1:** 161.975 MHz at 25 KHz
- **TX AIS2:** 162.025 MHz at 25 KHz
- **Custom Frequency Range:** 161.925-162.050 MHz
*(25 KHz steps)

*Contact Shine Micro for more information

AIS Signal Generator

- **AIS Data Rate:** 9600 bits/s (RF Output)
- **Signal Generator Output:** Less than 150 μ V/m @ 3m
- **EUT Port Output Level:** -120 to -90 dBm
(Programmable)
- **EUT Port Input Power Level:** 25 W maximum
- **Frequency Accuracy:** +/- 2.5 ppm

Message Formats

- Capable of simulating AIS messages 1, 2, 3, 5, 6, 8, 12, 14, 18, 19, 21, 24A and 24B non-encrypted* AIS messages
- *Contact Shine Micro for additional messages and encryption options

Mechanical

- **Enclosure:** 1200 Pelican Case (Polypropylene Copolymer)
- **Material Finish:** Bright Yellow
- **IP67 Compliant**

Front Panel Features

- **Power Switch:** ON/OFF MIL-S-83731 compliant Toggle Switch w/sealing boot
- **AIS Direct Output:** N-type female w/cap and ball chain
- **GPS Antenna:** TNC female w/cap and ball chain
- **Serial Data:** IP67 DB9 female w/ tethered dust boot
- **LED Indicators:** Power, Transmit, GPS Lock, Low Battery, *Bluetooth Status

*ST162-T1-01 only

WARRANTY INFORMATION

Shine Micro warrants its products to be free from defects for one full year from the date of purchase. Shine Micro will, at its sole discretion, repair or replace any components that fail in normal use. Labor and material costs for such repairs or replacement will be free of charge. This warranty does not cover failures due to abuse, misuse, accidents, or unauthorized alterations or repair.

