

iRepeater Handheld Test Module

Portable IEEE-1394b Bus Status and Port Diagnostic Tool

Applications

- Testing of IEEE-1394b point-to-point cable testing
- Air Vehicle wire harness and LRU diagnostics tester
- Repeat-out removed module(s) 1394b signals during maintenance and sustainment operations allowing uninterrupted vehicle testing

Benefits

- Quickly determine wire harness issues through monitoring of port connectivity and bit error information
- Monitoring of IEEE-1394b bus traffic activity and bus resets help diagnose network level issues
- Ruggedized design for using in harsh sustainment type applications
- Greater than 8 hours of battery operation to provide complete shift module replacement (charger included)

Features

Simple (red/green light) indication of good or bad wire harness/module connectivity

- Monitors Bus Resets and Port Connectivity to determine gross connectivity issues
- Monitors Bit Error Rate to quickly determine more marginal signal quality issues

Three (3) IEEE-1394 Beta transformer coupled ports

Data rates supported: S200 β and S400 β

Over 8 hours of battery life per charge

IEEE-1394-2008 and SAE AS5643 and AS5643/1 compliant

Ruggedized for use in harsh environments

- CE and ATEX Zone 2 Certified
- Tested to MIL-STD-810F, MIL-461E and MIL-STD-1686

Overview

The iRepeater is a battery-powered, IEEE-1394 3-port tester that supports AS5643 (Mil1394) signaling levels. It provides both general 1394 bus and specific PHY port status information that is used to diagnose connectivity issues related to cables or modules.

The iRepeater provides IEEE-1394 Beta/AS5643 wire harness/module diagnostic and module replacement capability. When conducting wire harness/module diagnostics the iRepeater monitors the IEEE-1394 network for bus resets and each of its three ports for connections, loops, and received errors. Unexpected bus resets and/or unconnected ports indicate the connected wire harness or module has severe connectivity issues. Received errors (Rx Error) indicate the iRepeater detected corrupt bits on the associated 1394 port. Both the Connected and Rx Error indicators help isolate connectivity issues down to a single port (4-wires). If an iRepeater is placed on each end of the wire harness, connectivity issues can be isolated down to just two wires.

During assembly or maintenance operations, aircraft modules are often not present for one reason or another. The iRepeater's compact size allow it to be substituted for missing modules (LRUs) for non-flight assembly or diagnostic applications.



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Complete Product Support Program

As our customers can attest, the New Wave DV prides itself on its excellent customer support. New Wave DV provides industry standard warranty on its products, but it is the human factor that makes our support so valuable to our customers. Our team takes the time and effort to ensure that the customer experience with our products is a positive one.

Our Commitment

New Wave DV is committed to providing the latest innovations in technology, architectures, and techniques to keep our customers one step ahead of the rest. Our products are intended to offer our customers an entirely unique out-of-the-box experience.

Optional Accessories

Custom adapter cable lengths and connectors for air vehicle wire harness connectivity



Request more information.

Ordering Information

FW-IRB400-SK: iRepeater handheld module, portable IEEE-1394b bus status and port diagnostic tool, S200/S400 support

Technical Specifications

CONNECTORS

13-Pin 38999 providing three Mil1394, transformer-coupled ports
2-Pin 38999 Battery Charger

DATA RATE SUPPORT

IEEE-1394 S200B and S400B

WEIGHT

3.2lbs

DIMENSIONS

11.75" x 4" x 2.5" inches

TEMPERATURE

Operating: 0°C to 49°C
Storage: -51°C to 71°C

ALTITUDE

Operating: -1,300ft to 10,000ft
Storage: Up to 40,000ft

RELATIVE HUMIDITY

Operating: 95%
Storage: 100%

SALT FOG

Storage: 5.3%

COMPLIANCE

IEEE-1394-2008 Beta AS5643 and AS5643/1

Low Voltage: 2014/35/EU

EMC: 2014/30/EU

ATEX: 2014/34/EU

Electro Magnetic Interference:

- MIL-STD-461F: CE102, CS101, CS114, CS115, CS116, RE102, RS103
- MIL-STD-1686: Up to 8KV

Environmentals (MIL-STD-810F):

- Temperature Methods 501.4 & 502.4
- Altitude Method 500.4
- Relative Humidity Method 507.4
- Salt Fog Method 509.4

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