

KNOW BEFORE YOU GO™



Hydra Systems Integration Laboratory Test Set

Part Number: EU00036-01-FG

Specifications subject to change without notice.

Providing confidence and reliability through total spectrum test and training solutions.

The Hydra SIL is a systems integration laboratory (SIL) test set used to stimulate laser warning receiver systems such as the AN/AAR-47(V)2, AN/AVR-2, ALTAS, COLDS and SELEX 1223.

Handheld or supported on a simple tripod, a standard Hydra SIL test set contains two 905-nanometer (nm) lasers and one 1,550-nm laser. One of the 905-nm lasers has a wider, 10-degree field of view, while the others share a three-degree field of view. The system also can accommodate up to three additional lasers; for example, a 1,064-nm source.

The rugged, battery-operated Hydra SIL test set can simulate a number of laser threats — including beam riders, target designators and range finders — using unclassified, programmable characteristics such as wavelength, radiant intensity, pulse length and pulse frequency. It operates from typical standoff ranges of 5-15 meters (m) or 15-50 feet (ft.) from laser warning receiver system sensors, depending on laser warning receiver sensitivity.

An optional software management package called the Hydra Control Utility, or HCU, is available for the creation and downloading of threat data, as well as for remote control of the test set using a Recommended Standard (RS) 232 serial port.

Specifications

- Performance:**
- Two 905-nm lasers with 3 degrees (°) and 10° field of view
 - One 1,550-nm laser with 3° field of view
 - Laser Class 3B
 - Average peak intensity 300 milliwatts per centimeter squared (mW/cm²) for the 905-nm laser, and 1,200 mW/cm² for the 1,550-nm laser
 - Range to warner typically 5-15 m or 15-50 ft.
 - Maximum test duration 10 seconds
 - Standby time less than or equal to 2 seconds
- Test profiles:** A choice of nine threat programs with the following variables:
- Pulse amplitude zero to 100 percent of maximum irradiance
 - Pulse repetition rate single shot to 20 kilohertz
 - Pulse width 10-100 nanoseconds (ns)
 - Pulse rise time (to maximum power) greater than 15 ns
- Aiming device:**
- Central laser aiming pointer in the visible red band
- Power supply:**
- Rechargeable battery
 - External 12 volts direct current (VDC) via utility port
- Indicators:**
- Battery status, ready and operational
- Controls:**
- On/off switch and trigger on the hand grip
 - Profile selector switch
 - Aiming laser switch
- Utility port:**
- RS 232 serial communication port
 - Remote external trigger (by contact closure)
 - External battery charge
 - External 12 VDC power input
- Dimensions:**
- 410 millimeters (mm) x 115 mm x 135 mm (1.3 ft. x 0.3 ft. x 0.4 ft.) excluding handle
 - Mass less than or equal to 4.5 kilograms (9.9 pounds) including battery pack
- Color:**
- NATO green plus yellow removable strip
- Environment:**
- Operating temperature -20 to 55 degrees Celsius (°C) excluding batteries
 - Storage temperature -40 to 71°C
 - Weather resilient against conditions including rain and sand
 - CE marked
 - Designed to the requirements of MIL PRF 28800F and DEF STAN 66-31
- Transport case:** Containing ancillaries including the Hydra SIL unit, one spare rechargeable battery pack, socket driver, battery charger and mains lead, and operation/maintenance manual

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