MEON™ DIRECTIONAL INFRARED COUNTERMEASURE
FLIGHT LINE TEST SET
Part Number:
EU00101-03-FG (MEON v3)
EU00101-04-FG (MEON v4)
Specifications subject to change without notice.

PROVIDING CONFIDENCE AND RELIABILITY THROUGH TOTAL SPECTRUM TEST AND TRAINING SOLUTIONS.

MEON is an end-to-end flight line confidence test set for directional infrared (IR) countermeasure, or DIRCM, and ultraviolet (UV) missile systems such as the AN/AAR-44, -47, -54, -57, -58 and -60. It also incorporates an IR beacon and IR detector to provide complete end-to-end testing, alignment checks and calibrated radiometric measurement of DIRCM systems including AN/AAQ-24(v) NEMESIS (using the MEON v4) and Large Aircraft Infrared Countermeasures, or LAIRCM (using the MEON v3).

The test set is capable of confidence testing fixed, multi-swept and multi-tonal jamming signals, and includes an eye-safe laser range finder (LRF) of 5-300 meters (m) or 15-1,000 feet (ft.) to accurately measure the testing distance for calibrated radiometric measurements.

The rugged, battery-operated MEON can be handheld or supported on a tripod. An optional management software package is available for the creation and downloading of test templates, as well as remote control of the unit via a Recommended Standard (RS) 232 serial communication port.

SPECIFICATIONS

PERFORMANCE
• UV stimulator
  – Wavelength: solar blind
  – Field of view ±5 degrees (°) (half power)
  – Maximum on-axis irradiance 2 nanowatts per centimeter squared at 1 m
• IR stimulator
  – Wavelength: mid-IR band
  – Field of view ±10° (half power)
  – Maximum on-axis irradiance 25 milliwatts per centimeter squared (mW/cm²) at 1 m
• IR beacon
  – Wavelength: mid-IR band
  – Field of view ±25° (half power)
  – Maximum on-axis irradiance 20 mw/cm² at 1 m
• IR receiver
  – Bandwidth: mid-IR band
  – Field of view ±2.5°
  – Detector sensitivity 1 mw/cm²
  – Dynamic range 50 decibels
  – Modulated bandwidth 70 hertz to 3 kilohertz
• LRF
  – Gallium arsenide, or GaAs, laser diode LRF; eye-safe Class 1
  – Wavelength: near-IR
  – Range 5-300 m (15-1,000 ft.)
  – Accuracy 100 millimeters (mm)

IR LAMP/LASER COMPATIBILITY
• External removable attenuators
• Programmable detector gain

RADIOMETRIC CAPABILITY
• Go/no-go capability
• Radiant intensity measurement accuracy ±2.5 percent in a laboratory environment
• Optional alternative band filters, e.g., Bands I, II, III and IV
• Integral, eye-safe LRF
• Annual self-calibration with optional calibration rig (MEON v4)

SUPPRESSED JAM BEAM REFLECTIONS
• Rubber front cover provides additional protection

POWER SUPPLY
• Rechargeable battery or external 12 volts direct current (VDC) supply

TEST PROFILES
• 32 test mode, missile signature and/or jamming code templates per PCMCIA (PC) card
SPECIFICATIONS (CONTINUED)

**INDICATOR**
- Power on

**DISPLAY SYMBOLOGY**
- Includes battery status, scroll buttons, profile activity indicator, bar graphs of jamming signal with code template, file number, serial activity indicator and go/no-go jammer irradiance

**CONTROLS**
- On/off switch and trigger on the hand grip
- Test file selector scroll buttons
- Select internal or external power supply

**CONNECTORS**
- 12 VDC external power
- RS-232/422 serial communication port
- IR detector output
- Tripod mounting

**AIMING SIGHT**
- One times, or x1, magnification with aiming mark and field of regard indication

**DIMENSIONS**
- 350 mm x 180 mm x 150 mm (1.1 ft. x 0.6 ft. x 0.5 ft.) excluding handle
- Mass 7 kilograms (kg) or 15 pounds (lb.) including battery pack; 8 kg (17 lb.) tripod-mounted with LRF

**COLOR**
- NATO green

**ENVIRONMENT**
- Operating temperature -20 to 55 degrees Celsius (°C) excluding batteries
- Storage temperature -40 to 71°C
- Designed in accordance with MIL 28800 PRF and DEF STAN 66-31

**OPTIONAL ANCILLARY EQUIPMENT**
- Available ancillaries include a small tripod, alignment accessories kit, calibration rig and management software