

# KNOW BEFORE YOU GO™



## MEON (A) Missile Warning System Test Set

Part Number: EU00067-01-FG

Specifications subject to change without notice.

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

MEON (A) is an end-to-end flight line confidence test set for the Advanced Threat Infrared Countermeasures and Common Missile Warning Systems, commonly known as ATIRCM and CMWS. It also can be used to stimulate ultraviolet (UV) missile warning systems on a stand-alone basis, including the AAR -47, -54, -57 and -60.

Using its infrared (IR) beacon and IR detector, the MEON (A) provides complete end-to-end testing, alignment checks and calibrated radiometric measurement of ATIRCM and CMWS systems. It also incorporates an integral laser range finder (LRF) to accurately measure the testing distance for radiometric measurements of the jam beam in Bands I and IV.

The rugged, battery-operated MEON (A) can be handheld or supported on the tripod included within the system's transit case. A Recommended Standard, or RS, 422 serial communication channel can be used for remote control of the unit. In addition, an optional management software package is available for the creation of test programs and libraries.

## Specifications

### Performance:

- UV stimulator
  - Wavelength: solar blind
  - Field of view  $\pm 10$  degrees ( $^{\circ}$ ) (half power)
  - Maximum on-axis irradiance 2 nanowatts per centimeter squared at 1 meter (m)
  - Frequency response greater than 5 hertz (hz) at greater than 50 percent full intensity modulation depth
  - Shutter rise/fall time less than 2 milliseconds (ms) over intensity range 10-90 percent of maximum intensity
- IR stimulator
  - Wavelength: mid-IR band
  - Field of view  $\pm 15^{\circ}$  (half power)
  - Maximum on-axis irradiance 5 microwatts per centimeter squared at 1 m (4-5 microns)
  - Frequency response less than 5 hz at less than 50 percent full intensity modulation depth
  - Shutter rise/fall time less than 4 ms over intensity range 10-90 percent of maximum intensity
- IR receiver
  - Bandwidth Bands I and IV
  - Band I field of view  $\pm 5^{\circ}$
  - Band IV field of view  $\pm 2.5^{\circ}$
  - Band I detector sensitivity 0.05-4 milliwatts per centimeter squared (mW/cm<sup>2</sup>)
  - Band IV detector sensitivity 4-480 mW/cm<sup>2</sup>
  - Modulated bandwidth 50 hz to 3.2 kilohertz
- LRF
  - Gallium arsenide, or GaAs, laser diode LRF; eye-safe Class 1
  - Wavelength: near-IR
  - Range 5-100 m, or 16.4-328 feet (ft.)
  - Accuracy 100 millimeters (mm)
  - Resolution 100 mm

### Radiometric capability:

- Go/no-go capability
- Standoff range 10-50 m (32.8-164 ft.) depending on system under test
- Integral, eye-safe LRF
- Irradiance measurement in Bands I or IV
- Radiant intensity measurement accuracy  $\pm 2.5$  percent (laboratory) and  $\pm 15$  percent (flight line)

### Suppressed jam beam reflections:

- Angled front surface

### 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*

<b>Indicator:</b>	<ul style="list-style-type: none"><li>■ Power on</li></ul>
<b>Display symbology:</b>	<ul style="list-style-type: none"><li>■ Includes battery status, program number, scroll buttons active, fault conditions, profile activity indicator, bar graphs of jamming signal with code template, and go/no-go jammer irradiance</li></ul>
<b>Controls:</b>	<ul style="list-style-type: none"><li>■ On/off switch</li><li>■ Trigger/abort button</li><li>■ Program selector scroll buttons</li><li>■ Select battery or external power supply switch</li></ul>
<b>Connectors:</b>	<ul style="list-style-type: none"><li>■ 12 VDC external power</li><li>■ RS 422 communications port</li><li>■ IR detector output Bayonet Neill-Concelman, or BNC</li><li>■ Tripod mounting</li></ul>
<b>Aiming sight:</b>	<ul style="list-style-type: none"><li>■ Through LRF sight</li></ul>
<b>Dimensions:</b>	<ul style="list-style-type: none"><li>■ 150 mm x 370 mm x 370 mm, or 6 inches (in.) x 15 in. x 15 in., including handle and LRF</li><li>■ Less than or equal to 9.07 kilograms (20 pounds)</li></ul>
<b>Color:</b>	<ul style="list-style-type: none"><li>■ Two-pack polyurethane interthane 990 RAL 1023 traffic yellow</li></ul>
<b>Environment:</b>	<ul style="list-style-type: none"><li>■ Operating temperature -10 to 55 degrees Celsius (°C) excluding batteries</li><li>■ Storage temperature -30 to 71°C</li><li>■ Weather resilient against rain and sand</li><li>■ Designed to the requirements of MIL PRF 28800F and DEF STAN 66-31</li></ul>
<b>Transit case dimensions:</b>	<ul style="list-style-type: none"><li>■ 885 mm x 575 mm x 280 mm (11 in. x 23 in. x 35 in.)</li><li>■ Less than or equal to 29.48 kilograms (65 pounds)</li></ul>
<b>Transit case contents:</b>	<ul style="list-style-type: none"><li>■ One spare rechargeable battery pack</li><li>■ Spare source lamps (one UV and one IR)</li><li>■ Battery charger</li><li>■ Hex drivers</li><li>■ Spare desiccant cartridge</li><li>■ PCMCIA (PC) card, programmed upon request</li><li>■ Tripod</li><li>■ Handle assembly</li><li>■ Operation and maintenance handbook</li><li>■ Safety statement</li></ul>
<b>Optional ancillary equipment:</b>	<ul style="list-style-type: none"><li>■ Library editor software and manual</li><li>■ Card programmer</li><li>■ Interface control document</li><li>■ Remote control cable</li><li>■ External power cable</li></ul>

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