Avionics

MLS-801 Microwave Landing System Ramp Test Set

The MLS-801 ramp test set provides go/no-go verification testing of the Microwave Landing System angle receiver installed in an aircraft. The test set generates a single channel signal that includes all necessary AM and DPSK modulation for testing of the azimuth, elevation, back azimuth and clearance functions as well as all basic data words in their standard test conditions.

Controls on the IFR MLS-801 provide for angle offset, deviation and slewing in order to allow the operator to exercise the Glideslope and Localizer deviation, to observe control surface motion and to test offset approach angles.

Other Features

- Dynamic Slew capability at 0.05, 0.1, 0.5 and 1.0 degrees/second.
- Left and Right Clearance pulse simulation.
- Azimuth, High Rate Azimuth and Back Azimuth offset approach simulation of up to 40 degrees.
- Elevation approach angle simulation from 1 to 10 degrees.
- Fixed transmission frequency, set to the FAA specified channel (500).
- Auxiliary RF, Video and Sync Pulse outputs for use in limited bench testing.

SPECIFICATION

**RF Frequency**

MLS Channel 500, 5031 MHz ±10 kHz

**RF LEVEL**

**HIGH Range**

-69.5 dBW/m² @ 30 ft.; Range approximately 300 ft.

**LOW Range**

-89.5 dBW/m² @ 30 ft.; Range approximately 30 ft.

**MODULATION**

AM and DPSK signals that conform to FAA 14 CFR Part 17 requirements. Phase accuracy is 180 ±10 degrees.

Aeroflex is a leader in the design, manufacture and marketing of Avionics test systems.

For the very latest specifications visit  [www.aeroflex.com](http://www.aeroflex.com)
**BEAM LEVEL**

Fixed at 6 dB above the preamble; Accuracy ±2 dB

**BEAM WIDTH**

AZ, BAZ and EL: 1.0°
HIAZ: 3.0°

Accuracy
±10% (measured at the -3 dB point)

**ANGLE OFFSET**

Azimuth: ±40° in 10° steps
Elevation: +1 to +10° in 1° steps

Accuracy
±0.1°

**CLEARANCE PULSE**

Levels
CLR L: +6 dB LEFT PULSE and -4 dB RIGHT PULSE
CLR R: -4 dB LEFT PULSE and +6 dB RIGHT PULSE

Width
1/2 Beam plus Clearance Pulse at -3 dB point (75µs)

Position
Pulse fixed at ±12.5° (Pulses fixed at -12.5° left and +12.5° right)

**DEFLECTION**

Center
0% Full Scale Deflection (FSD)
Accuracy: ±0.1°

Full
100% FSD (left and right 3.2 degrees Azimuth)

Standard
52% FSD

Control Motion
7% FSD

**SLEW**

Slew Rate
0.0, 0.05, 0.1, 0.5 and 1.0° per second

Accuracy
± 0.05° per second

**GENERAL**

Operating Temperature
-40° C to +55° C

Storage Temperature
-40° C to +71° C

Battery
Four hour battery operation with 15 minute time-out following the absence of switch operation

**AC**

Selectable VAC operation used to recharge the battery and operate the test set; 103.5 to 129 VAC or 207 to 253 VAC, 47.5 to 420 Hz, 50 W

**Dimensions**

343 mm wide, 368 mm deep, 209 mm high

13.5 in. wide, 14.5 in. deep, 8.25 in. high

**Weight**

13.5 kg (30 lbs.) approximately

**VERSIONS AND ACCESSORIES**

When ordering please quote the full ordering number information.

**Ordering Numbers**

**Versions**

801 MLS-801 Microwave Landing System Ramp Test
801-C MLS-801 Microwave Landing System Ramp Test with Certificate of Calibration

All IFR Avionics products delivered with Factory Certificate of Calibration
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