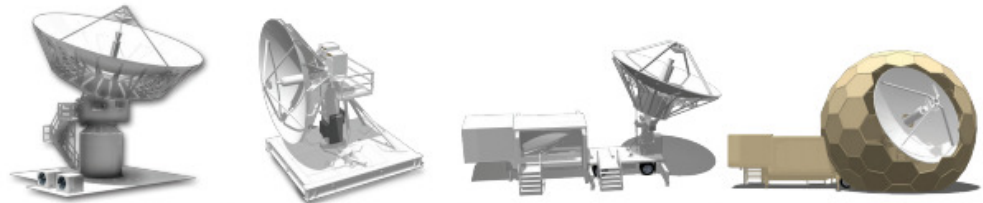


This application is for qualification testing of a military satellite system to verify compliance with requirements of MIL-STD-188-125-1 per the test method in appendix A.

Shielding Effectiveness testing per MIL-STD-188-125-1 Appendix A requires open air transmission of 1.33 watts ERP CW for a duration of 1.2 milliseconds at 800 logarithmically spaced frequencies from 10 KHz to 1 GHz. Test to be performed 5 times.

The item under test is the MET (Modernization of Enterprise Terminals) Hardened Transportable Terminal. It is a Military Satellite Terminal that was designed to support secure communication using the Wideband Global Satellite (WGS) Constellation. The prime contractor is L3Harris Technologies, and the Government Customer is PL-WESS of the US Army, Ft. Belvoir, Va.

MODERNIZATION OF ENTERPRISE TERMINALS (MET)



Characteristic/ Terminal	Large Fixed/Large Fixed HEMP Terminal	Small Fixed Terminal	Standard Transportable Terminal	Hardened Transportable Terminal
Frequencies				
X-band	Rx: 7.25–7.75 GHz Tx: 7.9–8.4 GHz	Rx: 7.25–7.75 GHz Tx: 7.9–8.4 GHz	Rx: 7.25–7.75 GHz Tx: 7.9–8.4 GHz	Rx: 7.25–7.75 GHz Tx: 7.9–8.4 GHz
Ka-band	Rx: 20.2–21.2 GHz Tx: 30.0–31.0 GHz	Rx: 20.2–21.2 GHz Tx: 30.0–31.0 GHz	Rx: 20.2–21.2 GHz Tx: 30.0–31.0 GHz	Rx: 20.2–21.2 GHz Tx: 30.0–31.0 GHz
G/T				
X-band	> 35 dB/K	> 25 dB/K	> 30 dB/K	> 30 dB/K
Ka-band	> 38 dB/K	> 30 dB/K	> 34 dB/K	> 34 dB/K
EIRP				
X-band	> 117.5 dBm	> 101 dBm	> 112.5 dBm	> 112.5 dBm
Ka-band	> 115.5 dBm	> 101 dBm	> 111.5 dBm	> 111.5 dBm
RF Compliance	Per MIL-STD-188-164A (CN2)	Per MIL-STD-188-164A (CN2)	Per MIL-STD-188-164A (CN2)	Per MIL-STD-188-164A (CN2)
WGS Certified	Approved	Approved	Approved	Approved
Operating Environment				
Temperature	–40°C to +49°C	–40°C to +49°C	–40°C to +49°C	–40°C to +49°C
Humidity	10% to 90% w/condensation below 37.8°C	10% to 90% w/condensation below 37.8°C	10% to 90% w/condensation below 37.8°C	10% to 90% w/condensation below 37.8°C
Wind	45 mph w/gusts to 65 mph (operational); 150 mph stowed	45 mph w/gusts to 65 mph (operational); 125 mph stowed	45 mph w/gusts to 65 mph (operational); 125 mph stowed	Ops Van and Radome 150 mph
Ice/Snow	2 inches clear ice, snow load up to 40 lbs/ft2	2 inches clear ice, snow load up to 40 lbs/ft2	2 inches clear ice, snow load up to 40 lbs/ft2	2 inches clear ice, snow load up to 40 lbs/ft2
EM/EMC	Per MIL-STD-461F	Per MIL-STD-461F	Per MIL-STD-461F	Per MIL-STD-461F
MTBF	1,250 hours	1,250 hours	1,250 hours	1,250 hours
HEMP Protection	Per MIL-STD-188-125-1 (1) MIL-STD-188-125-2 (1) (HEMP Terminal only)			Per MIL-STD-188-125-1 (1) and MIL-STD-188-125-2 (1)