



# Modernization of Enterprise Terminals

## High performance and reliability for global reach communications

L3Harris designed and developed the next-generation military satellite communications terminals for the U.S. Army's Modernization of Enterprise Terminals (MET) program. The MET program replaces up to 80 AN/GSC-52, AN/GSC-39, AN/FSC-78, and other aging strategic satellite communications terminals around the world with new, simultaneous X- and Ka-band terminals capable of interfacing with the new Wideband Global SATCOM (WGS) satellite constellation and legacy satellite systems. The new terminals support internet protocol and dedicated circuit connectivity within the Global Information Grid.

MET is the U.S. Army's 10-year program to upgrade and modernize the existing fixed enterprise strategic ground terminals that form the backbone of the DoD's secure satellite communications network. Major program objectives include:

- > Extend service life beyond 2025 and reduce life-cycle costs
- > Integrate terminals with the Global Information Grid

- > Add capability for Wideband Global SATCOM and XTAR satellites
- Develop, build, qualify, certify, install, support and train one family of terminals
- > Provide a "building block" approach that can be tailored for many missions
- > Provide full logistics and life-cycle support to include the Interactive Electronic Technical Manual (IETM), operator and maintenance training, provisioning, sparing, engineering services and a full range of depot support capabilities.



## Strategic SATCOM

### **KEY BENEFITS**

- Provides a worldwide backbone for high-priority military communications and missile defense systems
- Replaces aging satellite communications terminals to provide critical reach-back capabilities for warfighters
- > Lowers acquisition and logistics costs by achieving a high level of equipment and integration commonality through the advanced strategic terminal architecture

#### **FEATURES**

MET is comprised of five terminal configurations. The 12.2-meter Large Fixed Terminal offers simultaneous X-/Ka-band communications with WGS satellites and Defenses Satellite Communications System (DSCS) backward compatibility. The hardened 12.2-meter Large Fixed Terminal also incorporates protection against high-altitude electromagnetic pulse (HEMP) threats. The 7.2-meter X/Ka dual-band Standard Transportable Terminal utilizes many of the Large Fixed Terminal features in a transportable system. The fourth variant is a HEMP X/Ka dual-band 7.2 meter Hardened Transportable Terminal. The (4.8-meter) X/Ka dual-band Small Fixed Terminal meets lower throughput requirements and can be mounted on small pads.



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
EMI/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)

#### MET

© 2020 L3Harris Technologies, Inc. | 06/2020 | BCS | 20-DSD-222 | Rev-201

Non-Export-Controlled Information.

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.

Use of U.S. DoD visual information does not imply or constitute DoD endorsement.



1025 W. NASA Boulevard Melbourne, FL 32919