

4.0 METER MOBILE GROUND SATCOM TERMINAL (MGST)

Ku-band gateway terminal for rapid deployment

The L3Harris 4.0 Meter MGST delivers gateway-class multi-band performance in a lightweight, rapidly deployable package. Two operators can assemble the complete system in under 45 minutes, in preparation for high-throughput satellite communications for tactical and strategic operations worldwide.

PRODUCT DESCRIPTION

The L3Harris 4.0 Meter MGST is a high-performance multi-band terminal engineered for rapid deployment in demanding environments. The carbon fiber reflector and proprietary pedestal design deliver exceptional RF performance while maintaining the lightweight construction required for tactical mobility.

The terminal features automated satellite acquisition and tracking, eliminating complex manual pointing procedures. The elevation-over-azimuth mount provides full hemispheric coverage with sectorized pedestal options for 360° satellite access. Setup requires no special tools – two trained operators can have the system operational on-satellite in under 90 minutes.

Built to MIL-STD-810H environmental specifications, the MGST operates in extreme temperatures from

-30 °C to 55 °C and withstands operational winds up to 45 mph gusting to 60 mph. The complete system transports in a single ISU-90 container via C-130.

The 4RU rack-mounted controller supports remote operation via Ethernet with SNMP management. 100 to 1,000 meter fiber optic inter-facility links enable flexible antenna placement away from operations centers.



Gateway Performance.
Tactical Mobility.
Rapid Deployment.

KEY FEATURES

- > **Rapid Deployment:**
Two-operator setup in less than 45 minutes
- > **High Performance:**
Gateway-class throughput exceeding 100 Mbps
- > **Lightweight Design:**
Carbon fiber construction for maximum mobility
- > **Quick Transport:**
Complete system packs in single ISU-90 container
- > **Auto-Acquire:**
Automated satellite acquisition and tracking
- > **Proven Reliability:**
MIL-STD-188-164 certified configurations available
- > **Remote Operation:**
Full control via fiber optic link

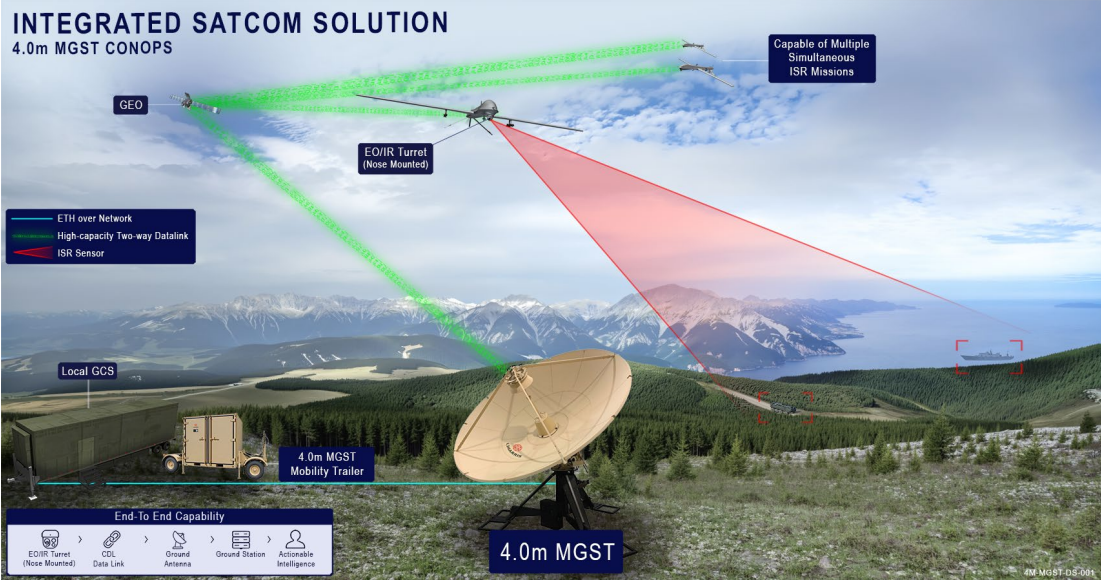
SPECIFICATIONS

SYSTEM PERFORMANCE	
Antenna Diameter	4.0 meters
Mount Type	Elevation over azimuth
Tracking	Auto-acquire, step, OPT track, program, memory, manual
Pointing Range	0° to 90° elevation, ±120° azimuth
Build Time	< 45 minutes (2 operators)
Weight	< 5,800 lbs (2631 kg)
Prime Power	100 to 240 VAC, 50/60 Hz

ENVIRONMENTAL	
Operating Temperature	-30°C to 55°C
Operational Wind	45 mph gusting to 60 mph (72-97 kph)
Survival Wind	100 mph stowed (161 kph at 90° elevation)
Compliance	MIL-STD-810H

TRANSPORT	
Storage	Single ISU-90 container
Air Transport	C-130
Ground Transport	Optional mobility trailer available

PARAMETER	C-BAND	KU-BAND	X/KA SIMULTANEOUS	
			X-BAND	KA-BAND
Rx Frequency Band	3.4-4.2 GHz	10.70-12.75 GHz	7.25-7.75 GHz	19.2-21.2 GHz
Tx Frequency Band	5.850-6.725 GHz	13.75-14.5 GHz	7.9-8.4 GHz	29.0-31.0 GHz
Polarization	Circular: LHCP/RHCP Orthogonal/ reversible Linear: motorized V/H	Linear: motorized V/H	Rx: LHCP/Tx: RHCP Rx: RHCP/Tx: LHCP	Rx: LHCP/Tx: RHCP Rx: RHCP/Tx: LHCP
Tx Axial Ratio	0.41 dB	0.2 dB	1.4 dB	0.9 dB
Tx Cross-Polarization	Intelsat IESS 207	Intelsat IESS 208	MIL-STD-188-164	
Compliance	FCC, Intelsat	FCC SES, Intelsat	WGS Certified For X/KA Multicarrier Operation	
G/T min. @ 25° El with Rx Out of Band Filtering	23.7 dB/K	30.5 dB/K	27 dB/K	32 dB/K
EIRP(P _{SAT}) (Single Carrier at Midband) (Equivalent Isotropic Radiated Power)	67.4 dBW (100W SSPA CP) 68 dBW (100W SSPA LP) 71.4 dBW (400W SSPA CP) 72.9 dBW (400W SSPA LP)	72.6 dBW (100W SSPA) 78.7 dBW (200W SSPA) 80.3 dBW (250W SSPA)	74.5 dBW (400W SSPA)	75.4 dBW (50W SSPA)



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