Satcom-on-the-Move[™]

Model 17-17LP Ku-Band Terminals



Description

The Satcom-on-the-Move (SOTM) terminals, developed and manufactured by General Dynamics SATCOM Technologies, offer robust voice and data wideband satellite communications from vehicles in motion over rugged terrain. The full-motion SOTM™ terminals can be deployed on a wide variety of both on-road and off-road military and commercial vehicles via our flexible Above-the-Deck™ flush mount design. The fully interoperable, joint service terminals are field proven in demanding off-road combat operational conditions and are currently deployed in theaters of operation worldwide. Current customers include the US DOD and international MODs. The General Dynamics SOTM terminal is the first such system to be licensed by the FCC for use in the United States.



Features

- Antenna, positioner, servo controller, beacon receiver, low noise amplifier, block up and down converters and high efficiency solid state power amplifier, all under radome and above the deck
- FCC and ITU compliant
- 'On-satellite' tracking accuracy achieved via a combination of integral satellite beacon receiver, gyro stabilization, and inertial measurement unit (CFE or available as an option)
- Integral air-to-air heat exchanger for high temperature environments
- 24x7x365 tech support for all systems

Low Risk Technology

Field-Proven; Deployed in Theater

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Above-the-Deck™ Flush Mount

Modem Agnostic

Fully Interoperable (Joint Service)

Satcom-on-the-MoveTM Model 17-17LP Ku-Band Terminals

Specifications	
Frequency - Receive	10.95 - 12.75 GHz
Frequency - Transmit	13.75 - 14.50 GHz
Model Number	M17-17LP Ku
Aperture Size	17 by 13 in (43 by 33 cm)
Pedestal	2 Axis Az/El
SSPB P1db	25 Watts
G/T Typical at Midband (30° EL , 23° C)	9.6 dB/K
EIRP Typical at Midband	43.4 dBW
Beamwidth, Midband 3dB, Rx/Tx	3.9° / 3.3° Az 4.3° / 3.6° El
Sidelobes, Tx	FCC VMES Compliant
Polarization	Linear V/H or H/V remotely selectable
Transmit Cross Polarization within Tracking Accuracy	30 dB Typ
Axial Ratio within Tracking Accuracy, Rx/Tx	N/A
Azimuth Travel	360 ° Continuous
Elevation Travel (Full Performance)	0° (horizon) to +80°
Elevation Travel (total)	0° (horizon) to +87°
Polarization Travel	360° Continuous
Pointing Performance	FCC VMES Compliant (< 0.20° - 99% of the time during Churchville B conditions, El angle < 80°)
Satellite Acquisition Time	< 5 sec hot, <5 min from cold start
Height	16.8" (42.6 cm)
Diameter (radome)	23.7" (60.2 cm)
Diameter (footprint at base)	27.5" (69.8 cm)
Weight	110 lbs (50 kg)
Maximum Vehicle Speed	> 60 mph (100 km/hr)
Operating Temperature	-40° to + 49°C
Storage Temperature	-51 ° to + 71 ° C
Supply Voltage	28 VDC per MIL-STD-1275E1
Power	280W cont, 800W peak

¹Steady State, Transient, Rev Pol, EMC and ESD

GENERAL DYNAMICS SATCOM Technologies

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