



**Norsat**  
International Inc.

Intelligent Satellite Solutions



## GLOBETrekker™ Multi-Band

An industry leading ultra-portable Multi-Band satellite system, the GLOBETrekker™ Multi-Band has undergone rigorous usability and interoperability testing on next-generation military and commercial Multi-Band satellites. This system is fully automated and integrated, flexible for both non-technical and advanced users, and has all the built-in intelligence of the original GLOBETrekker™.

Common to Norsat's ultra-portable family of systems, the GLOBETrekker™ Multi-Band is conveniently packaged for easy transport by aircraft, military, SNG vans and personal vehicles.



### Ultra-Portable

- Man-Portable
- Airline Checkable
- Quick Assembly without Tools

### Intelligent

- Auto Acquire
- Intuitive Interface
- Remote Operation

### Tough

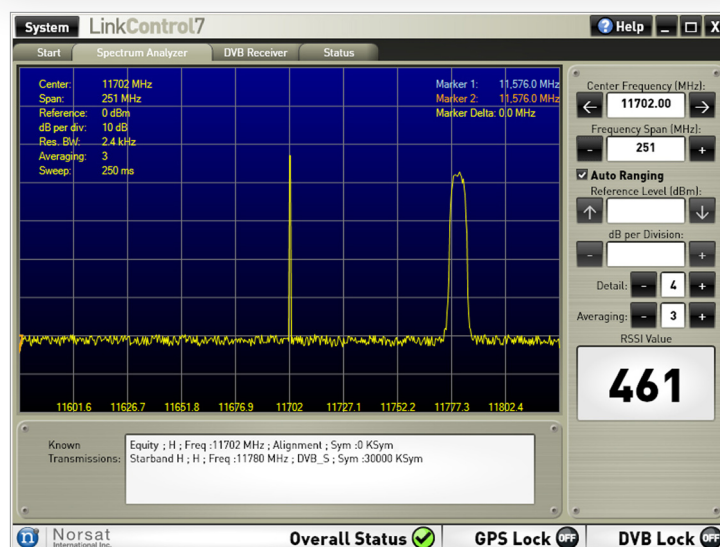
- Rugged Design
- Shock Protected
- Environmental Controls

## Next Generation Ka, Ku and X-Band

Defense interoperability with SKYNET 5 and XTAR assures delivery of high volume transmissions for the industry's most reliable ultra-portable satellite terminal.

## Superior User Experience

The Norsat GLOBETrekker™ Multi-Band is a highly integrated system which includes customizable Ka/Ku/X-Band feed kits, a carbon fiber antenna, motorized azimuth/elevation superstructure, built-in spectrum analyzer, DVB receiver, inclinometer, compass, GPS, shock protected chassis and LinkControl™, Norsat's intuitive software platform which enables users to monitor & control their peripherals and establish their application over a satellite connection within minutes.



# GLOBETrekker™ Multi-Band

System		X-Band	Ku-Band	Ka-Band
EIRP @ 1 dB C.P.		58 dBW	56.1 dBW	53.5 dBW
G/T		15 dB/K	19.5 dB/K	21 dB/K
Antenna				
Antenna	1.0 m carbon fiber segmented (6 pieces)	1.0 m carbon fiber segmented (6 pieces)	1.0 m carbon fiber segmented (6 pieces)	
Tx Gain	36.5 dBi	41.5 dBi	48.0 dBi	
Rx Gain	36.0 dBi	40.0 dBi	44.0 dBi	
Antenna Platform	Motorized Elevation / Azimuth Mounted on Baseband Unit	Motorized Elevation / Azimuth Mounted on Baseband Unit	Motorized Elevation / Azimuth Mounted on Baseband Unit	
Polarization	Circular	Linear Cross-Pol	Circular	
Cross-Pol isolation	RHCP / LHCP or LHCP / RHCP	> 35 dB with 1 dB center	RHCP / LHCP or LHCP / RHCP	
Axial Ratio	< 1.0 dB in Tx Band	< 1.0 dB in Tx Band	< 1.0 dB in Tx Band	
Elevation Adj.	10 to 85 degrees	10 to 85 degrees	10 to 85 degrees	
Azimuth Adj.	±170 degrees	±170 degrees	±170 degrees	
Transmit				
Transmit Frequency	7.9 - 8.4 GHz	13.75 GHz - 14.5 GHz	30 - 31 GHz (other bands available)	
Input Frequency	950 - 1450 MHz	950 - 1700 MHz	950 - 1450 MHz	
LO Frequency	6.95 GHz	12.8 GHz	29.05 GHz	
Reference Signal Frequency	external 10 MHz -5 to +5 dBm (supplied by Baseband)	external 10 MHz -5 to +5 dBm (supplied by Baseband)	external 10 MHz -5 to +5 dBm (supplied by Baseband)	
Rated Power (1dB C.P.)	200 W (other options available)	40 W (other options available)	4 W (other options available)	
Power Control	0.1 dB res, 1 dB accuracy	0.1 dB res, 1 dB accuracy	0.1 dB res, 1 dB accuracy	
Max. SSG Variation over any narrow band	±1 dB per 54 MHz	±1 dB per 54 MHz	0.3 dB in 36 MHz band	
Spectral Regrowth at rated pwr.	-26 dBc	-26 dBc	-26 dBc	
Receive				
Receive Frequency	7.25 - 7.75 GHz	10.95 - 12.75 GHz	20.2 - 21.2 GHz (other bands available)	
LNB Noise Figure (typical)	0.7 dB	0.8 dB	1.3 dB	
LO Stability Maximum (over temp)	±10 KHz or ext. ref.	±5 KHz or ext. ref.	±40 KHz or ext. ref.	
Phase noise (SSB maximum) (SSB maximum)	-72 dBc/Hz at 1 kHz -82 dBc/Hz at 10 kHz -92 dBc/Hz at 100 kHz	-65 dBc/Hz at 1 kHz -75 dBc/Hz at 10 kHz -85 dBc/Hz at 100 kHz	-75 dBc/Hz at 1 kHz -80 dBc/Hz at 10 kHz -100 dBc/Hz at 100 kHz	
Output P1dB	10 dBm	7 dBm	3 dBm	
Transmit				
Onboard Spectrum Analyzer, Received Signal Strength Indicator, DVB Receiver, Compass, Inclinometer, GPS, Norsat proprietary LinkControl software with Satellite Almanac, Antenna Alignment Wizard				
Diagnostics				
Closed loop transmit power control, Temperature and current monitoring, Alarms and warnings logging, Transmit signal monitoring via DVB Receiver and Spectrum Analyzer				
Shock Protected Baseband				
Power conditioning, Environmental Control, USB, RS 232 (for maintenance), Single Board Computer, Built-in Ethernet switch, Pointing tools (Spectrum Analyzer, DVB Receiver) SSPA control and management				
Integrated Module				
Device	iDirect iNFINITI/Evolution Comtech EF Data Paradise Datacom MPEG-2/MPEG-4 H.264 AVC DVB-S2 Modulator			
(other hardware available)				
Environmental				
Operating Temp	-30 to +50°C			
Rainfall	15 mm/h Operational 30 mm/h Survival			
Wind Speed	60 km/h Operational 100 km/h Survival			
Humidity	5 - 95% (non-condensing)			
Altitude	up to 3000 m			
Power Supply				
Power Supply	Can be supplied with 400, 600, & 1000 W power supply depending on BUC options			
Prime power	110 / 220 V AC (50 / 60 Hz)			
Consumption	Baseband BUC	< 200 W Depends on options		

Packaging

IATA compliant cases, < 32 kg each

Baseband Case

25.6 x 19.5 x 15.6 in  
(65.1 x 49.5 x 39.7 cm)

Accessories Case

25.6 x 19.5 x 15.6 in  
(65.1 x 49.5x 39.7 cm)

X-Band Case

25.6 x 19.5 x 15.6 in  
(65.1 x 49.5 x 39.7 cm)

Ku-Band Case

25.6 x 19.5 x 15.6 in  
(65.1 x 49.5 x 39.7 cm)


Ka-Band Case

25.6 x 19.5 x 15.6 in  
(65.1 x 49.5 x 39.7 cm)

Other System Accessories

Wired Display

Military Grade  
Sunlight Readable



High Power X-Band Shown with  
Components Chassis



High Power X-Band Shown with Components Chassis



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