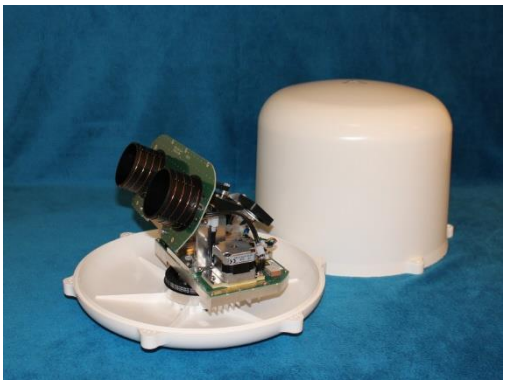
Inmarsat BGAN FB150
Product Brief



- 3-Axis tracking antenna (ADU) for Inmarsat BGAN system
- Connects to below deck terminal unit (BDU) through a single coaxial connection
- ASK Modem connection to terminal unit (BDU)
- Low noise high linearity Rx amplifier chain.
- RX Gain reduction (BDU Controlled) for enhanced system linearity
- Constant gain high power Tx amplifier chain
- Complete GPS engine included with high linearity front-end
- Pole-Mount and other accessories available

GENERAL SPECIFICATIONS	
Dimensions (in radome)	Ø:324mm/H:278mm/3.2kg
Shipment packaging	40 x 40 x 35cm / 4.3-4.5kg
RF/DC connector	N female
EMC & Safety (Note1)	IEC 60945, EN 60950
IP rating (Note 2)	IP56
Temperature (operating)	-25 to 55 °C
Temperature (storage)	-40 to 80 °C
Relative humidity at 40°C	≤ 95 %
Relative wind speed	≤ 200 km/h
Turn rate	6°/s
Roll	±30°/8s
Pitch	±10/6s
Yaw	±8/50s
Supply Voltage	38–45 V
DC power (Rx/Idle)	17–20 W
DC power (Tx/Max. EIRP)	37–40 W

Note 1: BDU manufacture must perform compliance approval for the entire system that is both BDU and ADU. Contact SpaceCom for further ADU details needed for compliance approval.

Note 2: For mounting options and details contact SpaceCom.

TX SPECIFICATIONS	
Frequency range	1626.5–1660.5 MHz
	1668.0–1675.0 MHz
Nominal EIRP	15.1 dBW
EIRP stability	±0.4 dB
Nominal input (ADU port)	-5 dBm
RX SPECIFICATIONS	
Frequency range	1518 – 1559 MHz
System G/T (Note3)	> -15.5 dB/K
LNA gain (Note 4)	39 dB
LNA gain variation (Temp)	+2/-3 dB
LNA reduction (from BDU)	0-15 dB
GPS SPECIFICATIONS	
GPS engine	u-Blox module
Data protocol	NMEA via ASK modem
Time to first fix	<120 s
2D accuracy	10 m (5 satellites visible)

Note 3: Calculated using the maximum cable loss and an estimated noise figure of the compatible BDU.

Note 4: Average across frequency and excl. antenna element, at 25°C.