DSi6 Ku PRO

Reflector diameter	Tracking speed	Max. BUC power	SIM LTE
60 cm	up to 50°/s	16 W	available

Maritime VSAT antenna with 60 cm dish size and 3-axis motion system for Ku-band services.

Like all VSAT systems within the DSi-Series, the DSi6 Ku PRO is specifically designed to meet even the hardest requirements in harsh seas. With its automated polarization tracking, the DSi6 Ku PRO guarantees excellent network availabilities even under the most challenging conditions.

The DSi6 Ku PRO combines the advantage of contained weight and dimensions with an astonishing tracking speed and all the reliability of the Ku-Band, in order to give to its users the best internet experience possible.

Remote Management Access
Access, monitor and control the DSi6 Ku PRO from any location in the world or set up an automated system diagnostics including event logging.

Web Interface
EPAK VSAT antennas feature an embedded web-server to provide a web user interface for making configurations and accessing live data from the antenna for simplified troubleshooting and monitoring performance.

SIM LTE
You can insert two local SIM cards into the antenna's control unit to access low-cost, high-speed Internet when a 3G/4G network is available.

Automatic Satellite Acquisition
The acquisition of the satellite is completely automated by DVB-S2-Receiver and Modem confirmation.

Diversity Kit Compatibility
No more blind spots by combining the free line of sight ranges of two antennas in one bundle. That will prevent nearly any loss of satellite signals through blockades.

Solid Hardware
Improved hardware reliability against sea conditions.

KEY FEATURES:

- 3-axis motion system + auto skew
- Range movement from -15° to +120°
- Tracking speed up to 50°/s
- LTE Plug & Go SIM cards
- LEO, MEO, GEO tracking supported
- Easy to install and refit
- Contained dimensions and weight
- Electronically switchable in x-pol and co-pol operation
- Compatible with most modems
- VoIP optional

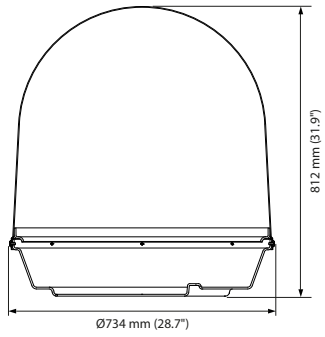
TECHNICAL SPECIFICATION

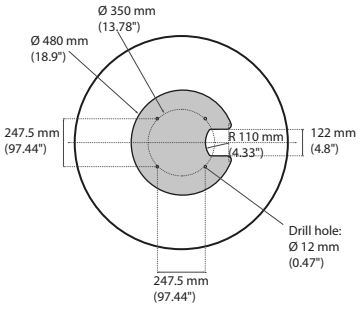
DSi6 Ku PRO

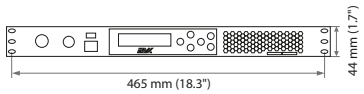
Feed Subsystem	
Reflector diameter	60 cm (23.62")
Minimum E.I.R.P.	46 dBW
LNB	Universal (LOF 9.75/10.6 GHz, PLL stabilized, internal ref.)
BUC	Super extended Ku (LOF 12.80 GHz, PLL stabilized, external ref.)
Available BUC power	4 W / 8 W / 16 W
RX antenna gain	36.3 dBi @ 12.5 GHz
TX antenna gain	37.0 dBi @ 14.25 GHz
RX / TX polarization	Linear, X-pol
G/T	>15 dB/K (clear sky, 30° elevation)
Position acquisition	Internal GNSS (GPS / Glonass / Galileo / Beidou / QZSS)
Tracking receiver	Internal, 950 - 2150 MHz; BW 0.5 - 50 MHz
Frequency Band	
RX frequency	10.7 - 12.75 GHz
TX frequency	13.75 - 14.5 GHz
Drive Subsystem	
Tracking technology	Twin RF tracking receiver + 6D inertial + GNSS (NMEA input optional)
Maximum tracking speed	50°/s (each axis)
Azimuth range	Unlimited
Elevation range	-15° to +120°
Skew range	-120° to +120°
Cross level range	-45° to +45°
Maximum ship motion	• Roll ±40° @ 6 sec • Pitch ±30° @ 6 sec • Yaw ±15° @ 6 sec
Ship motion (for stabilization accuracy tests)	• Roll ±30° @ 10-12 sec • Pitch ±20° @ 8-10 sec • Yaw ±8° @ 15 sec
Motion system	3-axis plus auto skew
Miscellaneous	
Lock on time	Typ. 20 sec (Time to Online depends on modem)
Satellite acquisition	Completely automated by DVB-S2-Receiver and/or modem confirmation (according to ETSI 302 340)
EPAK® Diversity-Kit compatible	✓
Modem approval	Standard type approval; CE & EPAK type approval
Operating temperature	-30°C to 55°C
Storage temperature	-30°C to 85°C
Humidity	According to IEC 60945, 100% condensing
Vibration	According to IEC 60945; MIL-STD-167-1
Shock	According to IEC 60721-4-6; MIL-STD-810F
Rain	IP56
Wind	• Operational: < 150 km/h • Survival: < 200 km/h
Compass safe distance	≥ 2.00 m (according to IEC 60945)
Compliance	• CE (Maritime), ETSI • Complies with the specifications of EC directive 2014/53/EU Radio & Telecommunications Terminal Equipment (R&TTE); compliance with EC directive 2014/35/EU, EMC directive 2014/30/EU and IEC 301-427
Power Specifications	
Power supply antenna (ODU)	48 V DC (supplied by ACU)
Antenna input voltage TX (BUC)	24, 48 V DC / 250 VA (supplied by ACU)
Power consumption (ODU excl. BUC)	Up to 150 VA (supplied by ACU)
Dimensions and Weight	
Radome (D x H)	73 cm x 81 cm (28.74" x 31.88")
Weight (incl. radome)	46 kg (101.41 lbs)

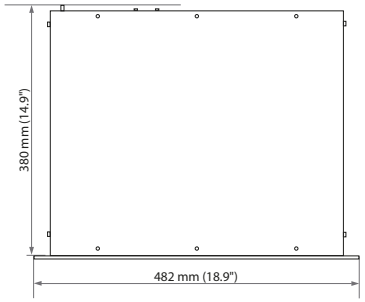
Antenna Control Unit	
Dimensions (WxHxD)	48.2 cm x 4.4 cm x 38 cm (19" x 1.7" x 14.9") (19" Rack 1HU size)
Weight	5.1 kg (11.24 lbs)
Gyro interface	NMEA0183 / NMEA2000 (via RS422 or RS485 or RS232) / SIMRAD RGC11
Input voltage, frequency	90~264 V AC, 47~63 Hz
Interfaces	• 1x RS232/RS422 (RJ45) • 4x Ethernet + 1x open BMIP (RJ45) • 2x USB • 1x GPIO
Local user interface	256x64px OLED-Display, 3 Status-LEDs, 6 Push-Buttons
Modem interface	Ethernet port + GPIO
Modem protocols	openAMIP / SNMP / Telnet / open BMIP
Remote access	TCP / IP
Position acquisition	Supplied by ODU
Operating temperature	-20°C to 55°C
Storage temperature	-40°C to 85°C
Humidity	According to IEC 60945
IP class	IP 30
Compass safe distance	0.5 m according to IEC 60945
Supported modems	
Modem type	• iDirect iNFINITI, Evolution, Velocity • Hughes HX200 • ViaSat SBT-M • Comtech CDM-250/840 • Gilat Skyedge II C4 • Paradise PD25L, Datacom Q-Flex • Advantech VR700, VR7400 • STM Satlink 1910 • Romantis / Eastar UHP 1000 / UHP 2000 • others on request
Cables and Connectors	
ACU to Antenna	• 2x Double shielded coax cable (ECOFLEX 10) with N-plugs
ACU to Modem	• 2x Double shielded coax cable (RG6) with F and TNC-plugs • 1x Ethernet with RJ45 plugs

Radome and ACU Dimensions









EPAK® GmbH
Spinnereistr. 7
04179 Leipzig, Germany
Phone +49 (0) 341 2 12 02 60
Fax +49 (0) 341 2 12 02 66

For more information visit **www.epak.de**