DSi9 Ku *Pro*

Reflector diameter	Tracking speed	Max. BUC power
90 cm	up to 50°/s	25 W

Maritime VSAT antenna with 90 cm dish size and 3-axis motion system for Ku-Band services.

The DSi9 Ku *Pro* employs state-of-the-art technology and is our most sought VSAT antenna in Ku-band. With the latest generation of tracking technology the DSi9 Ku *Pro* represents the perfect solution for all requirements of a reliable and fast internet on any type of maritime vessel.

EPAK designs and builds VSAT antennas to work even in the harshest weather conditions at sea. Only top quality materials are used and manufacturing is done in-house, observing tight quality control regulations and safety norms.

The result is a robust and rugged stabilized antenna system with high tracking accuracy. In short, the perfect solution for those who venture into the open seas without wanting to give up a stable and fast internet connection.

The DSi9 Ku *Pro* reaches excellent tracking performance under the hardest maritime motion profile "Class A", defined by Global VSAT Forum and Fraunhofer Institute.

Remote Management Access
Access, monitor and control the DSi9 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.

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
- Easy to install
- 90 cm dish for high-quality signal reception and transmission
- Electronically switchable in x-pol and co-pol operation
- Compatible with most modems
- Ku-Band / Ka-Band convertible
- VoIP optional

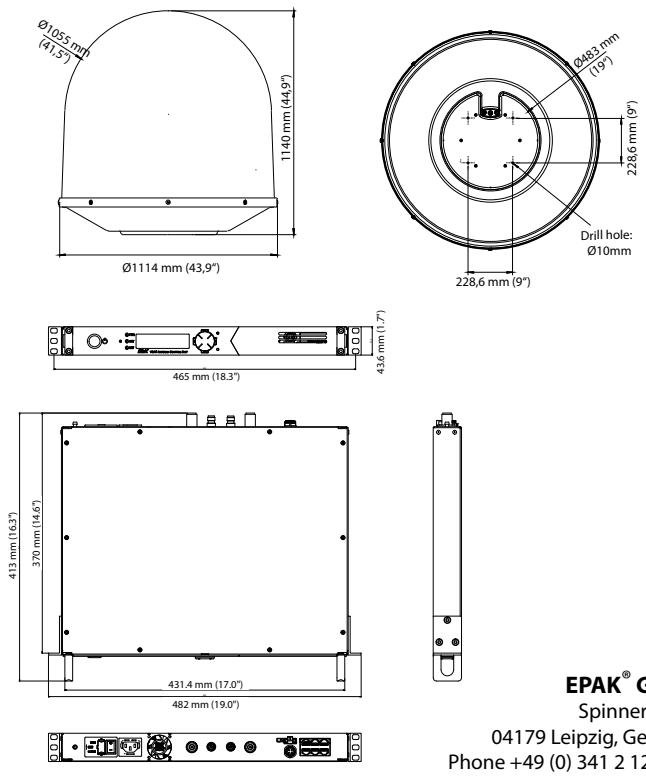
TECHNICAL SPECIFICATION

DSi9 Ku *Pro*

Feed Subsystem	
Reflector diameter	90 cm (35.43")
Minimum E.I.R.P.	43 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	8 W / 16 W / 25 W
RX antenna gain	39.5 dBi @ 12.5 GHz
TX antenna gain	40.3 dBi @ 14.25 GHz
RX / TX polarization	Linear, Co-pol and X-pol
G/T	>18.2 dB/K (clear sky, 30° elevation)
Position acquisition	Internal GNSS (GPS / Glonass / Galileo / Beido 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
Convertible	From Ku- to Ka-Band via separate kit
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 ±35° @ 6 sec • Pitch ±25° @ 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 + 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, 30, 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)	111 cm x 114 cm (43.7" x 44.9")
Weight (incl. radome)	75 kg (165.35 lbs)

Antenna Control Unit	
Dimensions	48 cm x 4.45 cm x 47.8 cm (18.9" x 1.75" x 18.82") (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
External I/O	RS232, RS422, Ethernet, USB, GPIO
Local user interface	OLED, directional pad, 2 push keys
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 crosslink with RJ45 plugs
ACU to Network	• Ethernet patch with RJ45 plugs • RS422/RS232 (9 Pin Sub-D)

Radome and ACU Dimensions



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