DSi9 Ka - Evo

Reflector diameter	Max. Tracking Speed	Max. BUC power
90 cm	30°/s	5 W

Maritime VSAT antenna with 90 cm dish size for Ka-band services.

The DSi 9 Ka Evo is the EPAK maritime VSAT tracking antenna operating in Ka-band that brings to you the fastest satellite internet connection.

Due to the Ka-band technology, the DSi9 Ka Evo can reach breath-taking speeds both in download and in upload - via satellite connection. The DSi9 Ka Evo is the perfect solution for high data-volume demands on board: its impressive speed both in download and in upload is ideal for Internet services and applications such as video phone calls, music and video streaming.

KEY FEATURES:

- Evolution: 2 Gyro techniques together for a perfect satellite pointing
- Dual Band: easily convertible from Ka- to Ku-band and vice versa
- Easy to install
- Tracking speed up to 30°/s
- Elevation range from -10 ° to +90 °
- Significantly higher throughput at lower monthly rates than Ku-band services
- Spotbeam technology for improved performance of shared access airtime plans
- Compatible with most common modems

Due to the solid, rugged and robust design the antenna is made to meet even the hardest requirements in harsh seas.

Evolution Series

Remote Management Access
Access, monitor and control the DSi9 Ku - Evo from every location in the world or set up an automated system diagnostics including event logging.

Dual Band
Keep your options open.
Convert from Ka- to Ku-Band and vice versa.

EPAK® Evolution
Most precise satellite pointing accuracy thanks to the combination of two different tracking systems, an Electronic Beamforming (EBF) Gyro together with a 3D Gyro module.

Secured Traffic
If necessary, the whole traffic can be encrypted.

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.

Flexible Networks
Set up three different networks to set variable prioritizations, handle each network separately and set up various user rights.

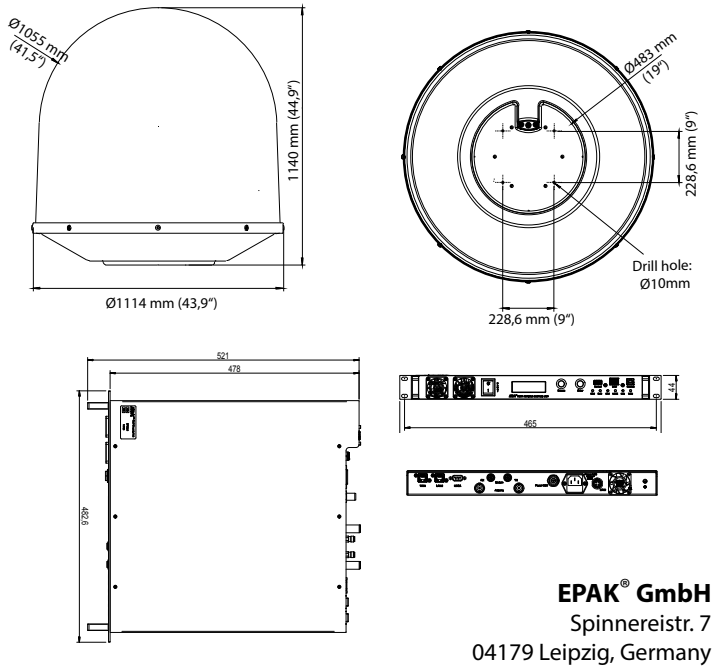
TECHNICAL SPECIFICATION

DSi9 Ka - Evo

Feed Subsystem	
Reflector diameter	90 cm (35.43")
Converter / Transceiver	NJR, Skyware (other transceivers optional)
LNB	Integrated in transceiver (LOF 18.25 GHz, other LOFs optional)
BUC	Integrated in transceiver (LOF 28.05 GHz, other LOFs optional)
Available BUC power	5 W (other wattages optional)
RX antenna gain	42.9 dBi @ 19.7 GHz
TX antenna gain	46.7 dBi @ 29.5 GHz
RX / TX polarization	Circular, X-pol
G/T	> 18.5 dB/K (clear sky, 30° elevation)
Position acquisition	Internal GNSS (GPS)
Tracking Receiver	Internal, 950 - 2150 MHz; BW 2.5 - 10 MHz
Frequency Band	
RX frequency	19.7 - 20.2 GHz
TX frequency	29.5 - 30.0 GHz
Convertible	Ku- and Ka-band
Drive Subsystem	
Tracking technology	EPAK® Evo: Electronic Beam Forming (EBF-Gyro) + 3D Rate Gyro + 3D inertial + GNSS
EBF Gyro drift calibration rate	12.5 msec (80 times per sec)
Maximum tracking speed	30°/s (each axis)
Azimuth range	Unlimited
Elevation range	-10° to +90°
Maximum ship motion	• Roll ±30° @ 6 sec • Pitch ±20° @ 6 sec • Yaw ±8° @ 6 sec
Ship motion (for stabilization accuracy tests)	• Roll ±30° @ 10-12 sec • Pitch ±20° @ 8-10 sec • Yaw ±8° @ 15 sec
Motion system	2-axis
Miscellaneous	
Lock on time	Typ. 60 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	Telenor type approval; Standard type approval; CE & EPAK type approval;
Operating temperature	-20°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 (< 81 knots) • Survival < 200 km/h (< 108 knots)
Compass safe distance	≥2.00 m according to IEC 60945
Compliance	• CE (Maritime), ETSI • Complies with the specifications of EC directive 1999/5/EC Radio & Telecommunications Terminal Equipment (R&TTE), per compliance with EC directive 2006/95/EC, EMC directive 2004/108/EC and IEC 301-427
Power Specifications	
Power supply antenna (ODU)	24 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)	20-100 VA (supplied by ACU)
Dimensions and Weight	
Radome (D x H)	111 cm x 114 cm (43.9" x 44.9")
Weight (incl. radome)	58 kg (127.87 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 RS232) / SIMRAD RGC11
Input voltage, frequency	90~264 V AC, 47~63 Hz
External I/O	RS232, RS422, Ethernet, USB
Local user interface	LCD - 2 push keys
Modem interface	Ethernet port
Modem protocols	openAMIP / SNMP / Telnet
Remote access	TCP / IP
Position acquisition	Supplied by ODU
Operating temperature	-20°C to 55°C
Storage temperature	-30°C to 85°C
Humidity	According to IEC 60945
IP class	IP 30
Compass safe distance	0.5 m according to IEC 60945
Modems implemented	
Modem types	• 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	• 3x Double shielded coax cable (ECOFLEX 10) with N-plugs
ACU to Modem	• 1x 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

Radome and ACU Dimensions



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