

Reflector diameter



60 cm

Max. Tracking Speed



30°/s

Max. BUC power



16 w

Compact maritime VSAT antenna with 60 cm dish size for Ku-band services.

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

The DSi6 Ku Evo 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.

KEY FEATURES:

- Evolution: 2 Gyro techniques together for a perfect satellite pointing
- Tracking performance approved by Fraunhofer IIS (Institute for Integrated Circuits) on hardest maritime motion profile "Class A"
- Easy to install
- Tracking speed up to 30°/s
- Elevation range from -10 ° to +90 °
- Automatic satellite acquisition
- Compatible with most common modems

Remote Management Access

Access, monitor and control the DSi6 Ku Evo from every location in the world or set up an automated system diagnostics including event logging.

Easy installation

Simple 3-wire-coax cable connection between ODU and IDU.

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.



Evolution Series



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	35.6 dBi @ 11.75 GHz
TX antenna gain	37.0 dBi @ 14.25 GHz
RX / TX polarisation	Linear, X-pol
G/T	>15 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	10.7 - 12.75 GHz
TX frequency	13.75 - 14.5 GHz

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°
Skew range	-120° to +120°
Maximum ship motion	<ul style="list-style-type: none"> Roll ±30° @ 6 sec Pitch ±20° @ 6 sec Yaw ±8° @ 6 sec
Ship motion (for stabilization accuracy tests)	<ul style="list-style-type: none"> Roll ±30° @ 10-12 sec Pitch ±20° @ 8-10 sec Yaw ±8° @ 15 sec
Motion system	2-axis plus auto skew

Miscellaneous	
Lock on time	Typ. 30 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	✓
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	<ul style="list-style-type: none"> Operational: < 150 km/h (< 81 knots) Survival < 200 km/h (< 108 knots)
Compass safe distance	≥ 2.00 m (according to IEC 60945)
Compliance	<ul style="list-style-type: none"> CE (Maritime), ETSI Complies with the specifications of EC directive 1999/5/EC Radio & Telecommunications Terminal Equipment (R&TTE); 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)	73 cm x 81 cm (28.74" x 31.88")
Weight (incl. radome)	37 kg (81.57 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

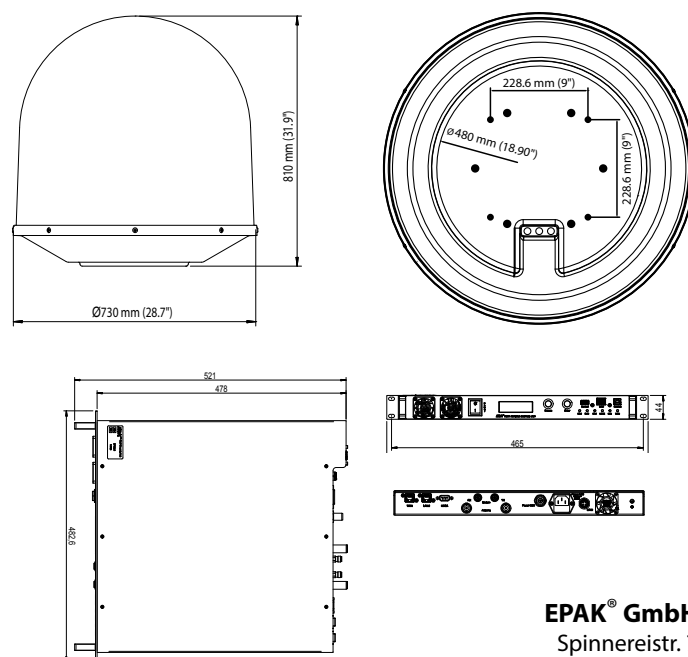
- iDirect iNFINITI, Evolution, Velocity
- Hughes HX200
- ViaSat SBT-M
- Comtech CDM-250/840
- Gilat Skyedge II C4
- Paradise PD25L, Datacom Q-Flex
- Advantech VR700, VR7400
- STM Satlink 1910
- Romantis / Eastar UHP 1000 / UHP 2000
- others on request

Modem types

Cables and Connectors

ACU to Antenna	<ul style="list-style-type: none"> • 3x Double shielded coax cable (ECO-FLEX 10) with N-plugs
ACU to Modem	<ul style="list-style-type: none"> • 2x Double shielded coax cable (RG6) with F and TNC-plugs • 1x Ethernet crosslink with RJ45 plugs
ACU to Network	<ul style="list-style-type: none"> • Ethernet patch with RJ45 plugs • RS422/RS232 (9 Pin Sub-D)

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