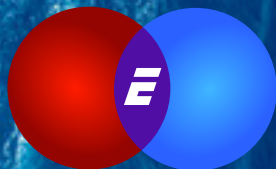


# DSi13 - Evo

VSAT Evo-Series



Evolution Series

**EPAK**<sup>®</sup>



## DSi13 - Evo

### Stabilized Maritime VSAT Antenna for Ku-Band Services with 130 cm Dish Diameter

#### Easy installation

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

#### Remote Management Access

Access, monitor and control the DSi13 - Evo from every location in the world. Therefore, a lot of automated system diagnostics including event logging can be done.

#### 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.

#### Flexible Networks

Set-up three different networks to set variable prioritizations, handle each network separated and set up various user rights.

#### Automatic Satellite Acquisition

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

#### Modem Platforms

The DSi13 - Evo is compatible with various modems such as STM, iDirect, Satnet, Hughes, Paradise Datacom, Romantis...



Evolution Series

**EPAK**®

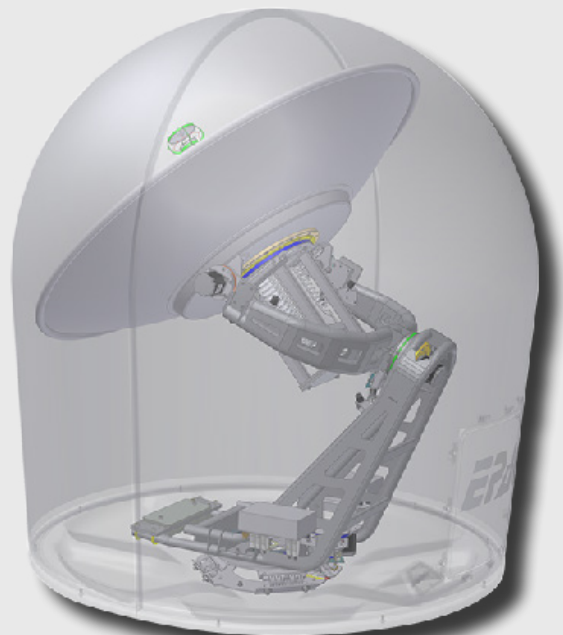
The **DSi13 - Evo** is the latest addition to the already rich EPAK's portfolio: with a **130 cm dish diameter** and a 4 independent rotary motions, our new **Ku-band** satellite antenna has outstanding tracking performance, allowing a stable and seamless connection to the satellite, indispensable to workboats, offshore vessels, the oil and gas industry and many other vessels.

Like all VSAT systems within the DSi-Series, the **DSi13 - Evo** is specifically designed to meet even the hardest requirements in harsh seas. With its automated polarization tracking and an elevation range from -20 to +120 degrees, the **DSi13 - Evo** guarantee excellent network availabilities even under the most challenging conditions.

#### DSi13 - Evo benefits:

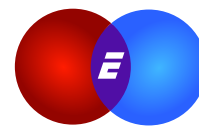
- **4-axis** servo belt
- **Evolution:** 2 Gyro techniques together for a perfect orientation  
Significantly higher throughput at lower monthly rates than Ku-band services
- **Elevation** range: -20° to +120°
- **130cm dish** for clearest signal reception

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



## DSi13 - Evo

Stabilized Maritime VSAT Antenna for Ku-Band Services with  
130 cm Dish Diameter



Evolution Series

### Dimensions, Weight and Material

Radome (D x H)	153 x 168 cm (60.24" x 66.14")
Weight (incl. Radome)	120 kg (264 lbs)
Radome material	Honeycomb FRP

### Reflector & Feed Subsystem

Reflector diameter	130 cm (51.18")
Minimum E.I.R.P.	41 dBW
LNB	Universal (PLL stabilized, internal Ref.)
BUC	Standard Ku (PLL stabilized, external Ref.)
Available BUC power	7 / 10 / 16 / 25 / 40 Watt
RX / TX Frequency	Rx 10.7 - 12.75 GHz / Tx 13.75 - 14.5 GHz (optional Tx 12.75 - 13.50 GHz)
RX / TX Antenna gain	Rx 42.5 dBi / Tx 44.5 dBi
G/T	>20.9 dB/K

### Drive Subsystem

Tracking Gyros	Electronic Beamforming (EBF-Gyro) / full 3D Gyro Sensors for highest tracking performance
Maximum tracking speed	up to 30° /s (each axis)
Azimuth movement	unlimited
Elevation movement	-20° to 120°
Skew movement	Automated ±120° from zero point
Cross angle	±45°
Ship Motion: Roll - Pitch - Yaw	Roll ±25° /T=10-12s Pitch ±15° /T=8-10s Yaw ±8° /T=15s
Motion system	4-axis servo belt

### Power Specification

Power supply	24 VDC via Antenna Control Unit (ACU)
Power consumption	20-40 VA (only ODU), BUC excluded
Antenna input power RX / TX	RX: 48V/100VA (supplied by ACU) TX: 48V/250VA (supplied by ACU) @ 25WBUC

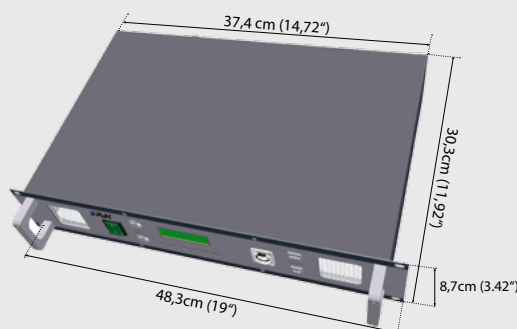
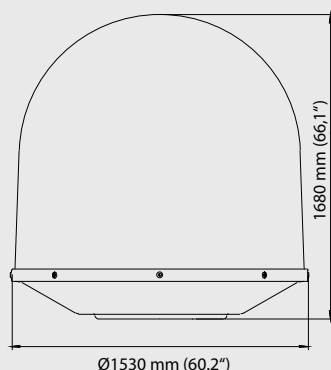
### Miscellaneous

Lock on time	typ. 30 sec.
Satellite acquisition	Completely automated by DVB-S2-Receiver and Modem confirmation (according to ETSI 302 340)
Operation temperature	-20°C to 55°C

### Antenna Control Unit

Dimensions	48 cm x 4,45 cm x 37,4 cm (19" Rack 1u size)
Gyro interface	NMEA / NMEA2000 (via RS422 or RS232) / SIMRAD RGC11
Input Power	100~240 V AC, 50~60 Hz
External I/O	RS232, RS422, Ethernet, USB
Display	1 line 8 character LCD
Key	2 push keys
Modem interface	Ethernet port
Remote Access	TCP / IP
GPS	NMEA in

### Radome and ACU Dimensions



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