



# Maritime TVRO antenna for seamless TV reception with 90 cm diameter dish

EPAK DS9 Evo is the most powerful and robust antenna in EPAK's TVRO family.

This maritime satellite television antenna is specifically designed to meet even the hardest requirements in harsh seas and with its automated polarization tracking system it guarantees best signal quality even during extreme tilted positions.

Enjoy the quality of onboard television entertainment in High-Definition, in your language and wherever you are. With our Diversity Kit, you can forget about blind spots and signal interruptions, for a flawless and relaxing television experience at sea.

#### **KEY FEATURES:**

- Evolution: 2 Gyro techniques together for a perfect satellite pointing
- Extended elevation range from -10° to +90°
- Affordable hardware leasing available
- Tracking speed up to 30% per axis
- High-quality material for operating even under the hardest conditions
- Quattro LNB, for connecting as many receivers you want
- Unlimited azimuth range (no cable unwrap)

### **DS9 Evo**

Reflector diameter

Max. Tracking Speed



90cm

30°/s

#### Easy installation

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

#### **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.

#### Sensor-based Satellite Reacquisition

Instant relock feature after passing obstacles like bridges, buildings, trees etc.

#### All your favourite channels

Up to 4 satellites can be stored and changed by the user at anytime, allowing you to watch all your favourite programs in your language.

#### **Multi-user Kit**

Through connection of multi-user kits an unlimited number of TV places can be served.



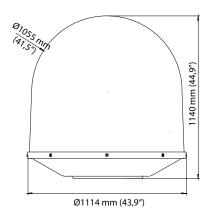


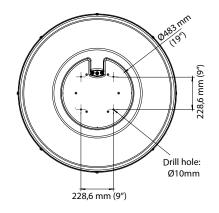
## **TECHNICAL SPECIFICATION**

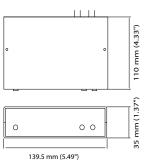
Feed Subsystem	
Reflector diameter	90 cm (35.4")
Minimum E.I.R.P.	43 dBW
LNB	Universal Linear (LOF 9.75/10.6 GHz) or Highband Circular (LOF 10.75 GHz) or other LNB on request
LNB type	Quattro
Frequency	10.7 - 12.75 GHz
Antenna gain	39.5 dBi @ 12.5 GHz
Position acquisition	Internal GNSS (GPS)
Tracking receiver	Internal, 950 - 2150 MHz; BW 2.5 - 10 MHz
Drive Subsystem	
Tracking technology	EPAK® Evo: Electronic Beam Forming (EBF-Gy-ro) + 3D Rate Gyro + 3D inertial + GNSS
Maximum tracking speed	30°/s (each axis)
Azimuth range	Unlimited
Elevation range	-10° to +90°
Skew movement	Automated -120° to +120°
Maximum ship motion	<ul> <li>Roll ±30° @ 6 sec</li> <li>Pitch ±20° @ 6 sec</li> <li>Yaw ±8° @ 6 sec</li> </ul>
Ship motion (for stabilization accuracy tests)	<ul> <li>Roll ±30° @ 10-12 sec</li> <li>Pitch ±20° @ 8-10 sec</li> <li>Yaw ±8° @ 15 sec</li> </ul>
Motion system	2-axis plus skew
Miscellaneous	
Lock on time	Typ. 30 sec
Satellite acquisition	Completely automated by SatFingerprint technology
Satellite positions	Up to 4 freely programmable active positions / Preconfigured database
Satellite selection	Manually via Control Unit
EPAK <sup>®</sup> Diversity-Kit compatible	✓
Operating temperature	-20°C to 55°C
Storage temperature	-30°C to 85°C
Power Specifications	
Power supply	14-32 V DC
Power consumption	30-80 VA
Dimensions and Weight	
Radome (D x H)	111 cm x 114 cm (43.7" x 44.9")
Weight (incl. radome)	56 kg (123.46 lbs)
Shipping dimensions	
Box type	Wooden box
Dimensions - gross weight	126 cm x 126 cm x 137 cm - 180 kg (49.57" x 49.57" x 54.02" - 396 lbs)

Control Unit	
Dimensions	14 cm x 3,5 cm x 11 cm (5.49" x 1.37" x 4.33")
Weight	300 g (0.66 lbs)
Power supply	12-20 V DC (powered by receiver)
Power consumption	100 mA
Operating temperature	-20°C to 70°C
Storage temperature	-30°C to 85°C

#### 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