

# DS9 PRO

Reflector diameter



90 cm

Tracking speed



up to 50°/s

SIM LTE



available



## *Maritime TVRO antenna for seamless TV reception with 90 cm diameter dish and 3-axis motion system.*

EPAK DS9 PRO is a very reliable and robust antenna 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.



### **Easy installation**

Due to its restrained weight for a 90 cm system, the DS9 PRO can be easily transported and refitted.

### **SIM LTE**

You can insert two local SIM cards into the antenna's control unit to access low-cost, high-speed Internet when a 3G/4G network is available.

### **No more blind spots**

EPAK Diversity Kit combines 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**

A large variety of satellites can be remotely stored by the user at anytime through the antenna Web Interface, allowing you to watch all your favourite TV programs in your language.

### **Multi-user kit**

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

### **KEY FEATURES:**

- 3-axis motion system + auto skew
- Elevation range from -15° to +120°
- Tracking speed up to 50°/s per axis
- LTE Plug & Go SIM cards
- LEO, MEO, GEO tracking supported
- Easy to install
- 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)

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 High-band 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 / Glonass / Galileo / Beidou / QZSS)
Tracking receiver	Internal, 950 - 2150 MHz; BW 0.5 - 50 MHz

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 movement	Automated -120° to +120°
Cross level range	-45° to +45°
Maximum ship motion	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Roll ±30° @ 10-12 sec</li> <li>Pitch ±20° @ 8-10 sec</li> <li>Yaw ±8° @ 15 sec</li> </ul>
Motion system	3-axis + auto skew

Miscellaneous	
Lock on time	Typ. 30 sec
Satellite acquisition	Completely automated by DVB-S2 & SatFingerprint technology
Satellite positions	Customizable through webinterface or control panel
Satellite selection	Manually via Control Unit or through web interface
EPAK® Diversity-Kit compatible	✓
Operating temperature	-20°C to 55°C
Storage temperature	-30°C to 85°C

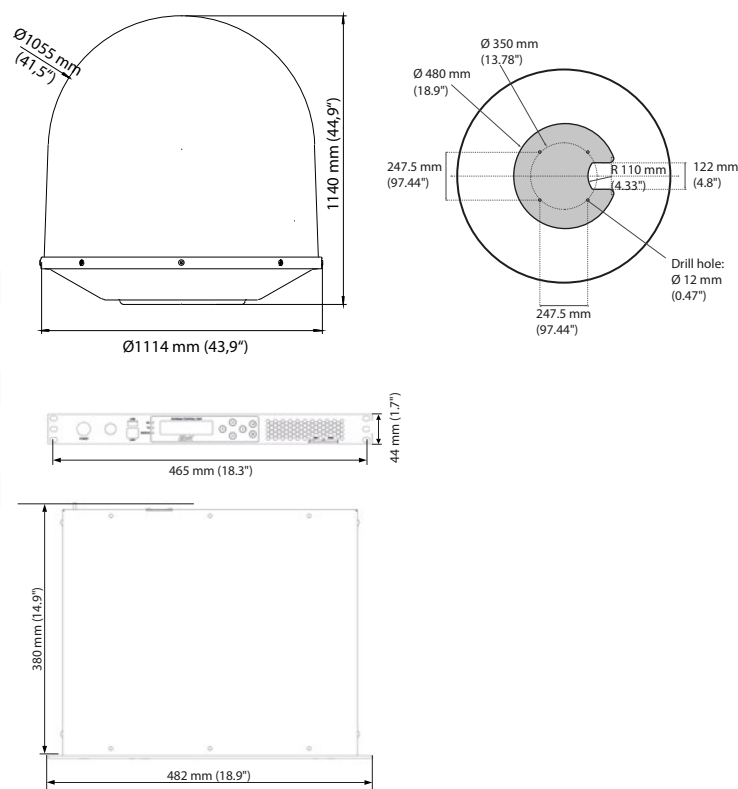
Power Specifications	
Power supply	48 V DC (supplied by ACU)
Power consumption	160 VA

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)

Shipping dimensions	
Box type	Wooden box
Dimensions - gross weight	126 cm x 126 cm x 137 cm - 197 kg (49.57" x 49.57" x 54.02" - 434.31 lbs)

Antenna Control Unit	
Dimensions (WxHxD)	48.2 cm x 4.4 cm x 38 cm (18.9" x 1.7" x 14.9") (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
Interfaces	<ul style="list-style-type: none"> <li>1x NMEA [2 wire]</li> <li>1x R232 [RJ45]</li> <li>1x RS422 (open BMIP) [RJ45]</li> <li>1x Ethernet front [RJ45]</li> <li>3x Ethernet back</li> <li>1x USB front</li> <li>1x USB back</li> <li>2x GPIO (opt.)</li> </ul>
Local user interface	256x64px OLED-Display, 3 Status-LEDs, 6 Push-Buttons
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

## Radome and ACU Dimensions



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