DS13 PRO











Maritime TVRO antenna for seamless TV reception with 130 cm diameter dish and 3-axis motion system.

EPAK DS13 PRO provides a strong signal for TV and HDTV channels on a very wide footprint, being compatible with most leading satellite providers in the world. The automated tracking system guarantees best signal guality even during extremely tilted positions and rough sea movement. The DS13 is a state-of-the-art television system for medium and large vessels travelling far distances.

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



Easy installation

Simple plug-and-play installation.

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 remotly stored by the user at anytime through the antenna Web Interface, allowing you to watch all your favourite TV rograms 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 -20° to +115°
- Tracking speed up to 35% 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)

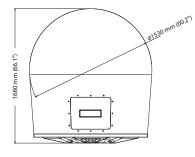


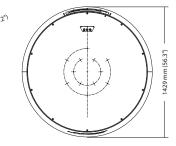
TECHNICAL SPECIFICATION

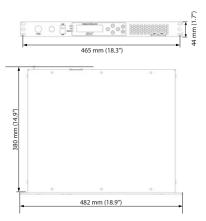
Feed Subsystem	
Reflector diameter	130 cm (51 18")
Minimum E.I.R.P.	130 cm (51.18") 40 dBW
LNB	Universal Linear (LOF 9.75/10.6 GHz) or High- band Circular (LOF 10.75 GHz) or other LNB on request
LNB type	Quattro
Frequency	10.7 - 12.75 GHz
Antenna gain	43.1 dBi @ 12.5 GHz
Position acquisition	Internal 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	35°/s (each axis)
Azimuth range	Unlimited
Elevation range	-20° to +115°
Skew movement	Automated -120° to +120°
Cross level range	-45° to +45°
Maximum ship motion	 Roll ±30° @ 9 sec Pitch ±20° @ 9 sec Yaw ±8° @ 12 sec
Ship motion (for stabilization accuracy tests)	 Roll ±30° @ 10-12 sec Pitch ±20° @ 8-10 sec Yaw ±8° @ 15 sec
Motion system	3-axis + auto skew
Miscellaneous	
Lock on time	Typ. 20 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	\checkmark
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	Up to 180 VA (supplied by ACU)
Dimensions and Weight	
Radome (D x H)	153 cm x 168 cm (60.24" x 66.14")
Weight (incl. radome)	120 kg (264 lbs)

Antenna Control Unit	
Dimensions (W×H×D)	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	 1x NMEA [2 wire] 1x R232 [RJ45] 1x R5422 (open BMIP) [RJ45] 1x Ethernet front [RJ45] 3x Ethernet back 1x USB front 1x USB back 2x GPIO (opt.)
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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