# **DS6** PRO

Reflector diameter



60 cm

Tracking speed



up to **50°**/s

SIM LTE



available



# Maritime TVRO antenna for seamless TV reception with 60 cm diameter dish and 3-axis motion system.

EPAK DS6 PRO is the right choice for those who want a reliable and powerful television reception system on board, keeping an eye on the dimensions of the antenna. With its 60 cm diameter dish, the DS6 PRO offers you a seamless signal reception and can face the toughest weather conditions while moving in opens seas.

Its contained dimensions allow you to use the DS6 PRO on almost every kind of vessel and the implementation of our Diversity Kit is the perfect solution for getting rid of all bothering blind spots.

Storing a large variety of different satellites, the DS6 PRO is the maritime satellite system that brings TV entertainment to your boat: in your language and wherever you want.



#### **Small dimensions**

Rugged and reliable, the DS6 PRO is indeed extremely light-weighted and its very contained dimensions fit the needs of even the smallest boats.

#### **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.

#### Easy installation: no crane needed

Due to its restrained weight, the DS6 PRO can be easily transported and refitted.

#### 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 -15° to +120°
- Tracking speed up to 50% per axis
- LTE Plug & Go SIM cards
- LEO, MEO, GEO tracking supported
- Easy to install
- Quattro LNB, for connecting as many receivers you want
- High-quality material for operating even under the hardest conditions
- Unlimited azimuth range (no cable unwrap)

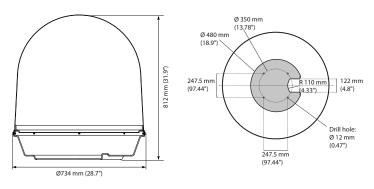


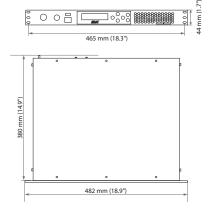
### **TECHNICAL SPECIFICATION**

Reflector diameter  Minimum E.I.R.P.  Minimum E.	Feed Subsystem	
Minimum E.I.R.P.		60 cm (23 6")
LNB Universal Linear (LOF 9.75/10.6 GHz) or Highband Circular (LOF 10.75 GHz) or theigh band Circular (LOF 10.75 GHz) or other LNB on request  Frequency Quattro  Frequency 10.7 - 12.75 GHz  Antenna gain 36.3 dBi @ 12.5 GHz  Position acquisition Internal GNSS (GPS / Glonass / Galileo / Beldou / QZSS)  Tracking receiver Internal , 950 - 2150 MHz; BW 0.5 - 50 MHz  Drive Subsystem  Tracking technology Twin RF tracking receiver + 6D inertial + GNSS (MRE input optional)  Maximum tracking speed 50% (each axis)  Azimuth range Unlimited  Elevation range 1.5° to +120°  Skew movement Automated -120° to +120°  Skew movement Automated -120° to +120°  Skew movement Pitch ±30° @ 6 sec Pitch ±30° @ 6 sec Pitch ±20° @ 8-10 sec Pitch ±20° @ 8-10 sec Pitch ±20° @ 8-10 sec Yaw ±15° @ 6 sec  Yaw ±15° @ 6 sec  Yaw ±15° @ 6 sec  Yaw ±15° @ 6 sec  Yaw ±8° @ 15 sec  Motion system 3-axis + auto skew  Miscellaneous  Lock on time Typ. 20 sec  Satellite acquisition Currous Pitch ±20° @ 10-12 sec Pitch ±20° @ 8-10 sec Yaw ±8° @ 15 sec  Satellite positions Currous Pitch ±20° @ 10-12 sec Pitch ±20° @ 10-12 sec Yaw ±8° @ 15 sec  Monaula yiu a control panel Currous Pitch ±20° @ 10-12 sec Yaw ±8° @ 15 sec  FACH Typ. 20 sec  Satellite positions Currous Pitch ±20° @ 10-12 sec Yaw ±8° @ 15 sec  Satellite positions Currous Pitch ±20° @ 10-12 sec Yaw ±10° @ 10-12 sec Yaw		· · · · · · · · · · · · · · · · · · ·
Frequency  Antenna gain  36.3 dBi @ 12.5 GHz  Position acquisition  Internal GNSS (GPS / Glonass / Galileo / Beidou / QZSS)  Tracking receiver  Internal, 950 - 2150 MHz; BW 0.5 - 50 MHz  Prive Subsystem  Tracking technology  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°  - Roll ±40° @ 6 sec - Yaw ±15° @ 6 sec - Yaw ±15° @ 6 sec - Yaw ±15° @ 8 +10 sec - Yaw ±8° @ 15 sec  Motion system  Typ. 20 sec  Satellite acquisition  Satellite acquisition  Satellite selection  Manually via Control Unit or through web interface  EPAK* Diversity-Kit compatible  Cperating temperature  - 20°C to 55°C  Storage temperature  - 20°C to 55°C  Storage temperature  - 20°C to 55°C  Storage temperature  - 30°C to 85°C  Power Specifications  Box type  Cardboard box  Plimensions - gross weight  Plimensions - gross weight  Fa cm x 78 cm x 101 cm - 58 kg		Universal Linear (LOF 9.75/10.6 GHz) or Highband Circular (LOF 10.75 GHz) or other LNB on
Antenna gain  36.3 dBi @ 12.5 GHz  Internal GNSS (GPS / Glonass / Galileo / Beidou / QZSS)  Tracking receiver  Internal, 950 - 2150 MHz; BW 0.5 - 50 MHz  Drive Subsystem  Tracking technology  Maximum tracking speed  50% (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  First h ±30° @ 6 sec - Yaw ±15° @ 6 sec - Yaw ±15° @ 6 sec - Yaw ±15° @ 6 sec - Yaw ±8° @ 15 sec  Motion system  3-axis + auto skew  Miscellaneous  Lock on time  Typ. 20 sec  Satellite acquisition  Customizable through webinterface or control panel  Satellite positions  Customizable through webinterface or control panel  Satellite selection  Manually via Control Unit or through web interface  EPAK° Diversity-Kit compatible  V  Operating temperature  -20°C to 55°C  Storage temperature  -20°C to 85°C  Power Specifications  Power consumption  160 VA  Dimensions and Weight  Radome (D x H)  Value (ardboard box  Plimensions aross weight  78 cm x 78 cm x 101 cm - 58 kg	LNB type	Quattro
Internal GNSS (GPS / Glonass / Galileo / Beidou / QZSS)   Tracking receiver	Frequency	10.7 - 12.75 GHz
Tracking receiver  Internal, 950 - 2150 MHz; BW 0.5 - 50 MHz  Drive Subsystem  Tracking technology  Maximum tracking speed  Azimuth range  Elevation range  Internal, 950 - 2150 MHz; BW 0.5 - 50 MHz  Maximum tracking speed  Azimuth range  Unlimited  Elevation range  -15° to +120°  Skew movement  Automated -120° to +120°  Cross level range  -45° to +45°  - Roll ±40° @ 6 sec - Pitch ±30° @ 6 sec - Pitch ±30° @ 10 -12 sec - Pitch ±20° @ 8-10 sec - Yaw ±15° @ 6 sec - Pitch ±20° @ 8-10 sec - Yaw ±8° @ 15 sec  Motion system  Miscellaneous  Lock on time  Typ. 20 sec  Satellite acquisition  Completely automated by DVB-52 & SatFingerprint technology  Satellite positions  Customizable through webinterface or control panel  Satellite selection  Manually via Control Unit or through web interface  EPAK® Diversity-Kit compatible  - Completely automated by ACU)  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)  73 cm x 81 cm (28.74" x 31.88")  Weight (incl. radome)  Shipping dimensions  Box type  Cardboard box  Pimensions - gross weight  78 cm x 78 cm x 78 cm x 101 cm - 58 kg	Antenna gain	36.3 dBi @ 12.5 GHz
Tracking technology  Twin RF tracking receiver + 6D inertial + GNSS (NMEA input optional)  Maximum tracking speed  Azimuth range Unlimited  Elevation range -15° to +120°  Skew movement Automated -120° to +120°  Cross level range -45° to +45°  Maximum ship motion -10	Position acquisition	
Tracking technology  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 -8 Roll ±30° @ 6 sec - Pitch ±30° @ 6 sec - Pitch ±30° @ 6 sec - Pitch ±20° @ 8-10 sec - Yaw ±15° @ 6 sec - Pitch ±20° @ 8-10 sec - Yaw ±8° @ 15 sec  Motion system -8 Jayp. 20 sec  Satellite acquisition -8 Completely automated by DVB-52 & SatFingerprint technology  Satellite positions -9 Customizable through webinterface or control panel  Satellite selection -9 Customizable through webinterface or control panel  Satellite selection -9 Completely automated by DVB-52 & SatFingerprint technology  Satellite selection -9 Customizable through webinterface or control panel  Satellite selection -9 Customizable through webinterface or control panel  Satellite selection -9 Completely automated by DVB-52 & SatFingerprint technology  48 V DC (supplied by ACU)  Power Specifications -9 Over Specifications -9 Over Consumption -9 Completely automated by DVB-52 & SatFingerprint technology  48 V DC (supplied by ACU)  Power Specifications -9 Over Consumption -9	Tracking receiver	Internal, 950 - 2150 MHz; BW 0.5 - 50 MHz
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 -10	Drive Subsystem	
Azimuth range  Elevation range  -15° to +120°  Skew movement  Automated -120° to +120°  Cross level range  -45° to +45°  Roll ±40° @ 6 sec - Pitch ±30° @ 6 sec - Pitch ±30° @ 6 sec - Yaw ±15° @ 6 sec - Yaw ±15° @ 6 sec - Yaw ±15° @ 6 sec - Yaw ±8° @ 15 sec  Motion system  3-axis + auto skew  Miscellaneous  Lock on time  Typ. 20 sec  Satellite acquisition  Customizable through webinterface or control panel  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  -20°C to 55°C  Storage temperature  -30°C to 85°C  Power Specifications  Power supply  48 ∨ DC (supplied by ACU)  Power consumption  160 ∨A  Dimensions and Weight  Radome (D x H)  73 cm x 81 cm (28.74° x 31.88°)  Weight (incl. radome)  50 kg (110.23 lbs)  Shipping dimensions  Box type  Cardboard box  78 cm x 78 cm x 101 cm - 58 kg	Tracking technology	9
Elevation range	Maximum tracking speed	50°/s (each axis)
Skew movement  Cross level range  -45° to +45°  -8 Roll ±40° @ 6 sec -9 Ritch ±30° @ 6 sec -9 Ritch ±30° @ 6 sec -9 Ritch ±20° @ 8-10 sec -9 Ritch ±20° @ 10-12 sec -9 Ritch ±20°	Azimuth range	Unlimited
Cross level range  -45° to +45°  Roll ±40° @ 6 sec - Pitch ±30° @ 6 sec - Yaw ±15° @ 6 sec - Yaw ±15° @ 6 sec - Yaw ±15° @ 8-10 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  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)  73 cm x 81 cm (28.74" x 31.88")  Weight (incl. radome)  Shipping dimensions  Box type  Cardboard box  78 cm x 78 cm x 78 cm x 101 cm - 58 kg	<b>Elevation range</b>	-15° to +120°
Maximum ship motion  • Roll ±40° @ 6 sec • Pitch ±30° @ 6 sec • Yaw ±15° @ 6 sec • 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-52 & 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)  73 cm x 81 cm (28.74" x 31.88")  Weight (incl. radome)  Shipping dimensions  Box type  Cardboard box  78 cm x 78 cm x 101 cm - 58 kg	Skew movement	Automated -120° to +120°
Maximum ship motion       • Pitch ±30° @ 6 sec         Ship motion (for stabilization accuracy tests)       • Roll ±30° @ 10-12 sec         Pitch ±20° @ 8-10 sec       • Pitch ±20° @ 8-10 sec         Yaw ±8° @ 15 sec         Motion system       3-axis + auto skew         Miscellaneous       Completely automated by DVB-52 & SatFingerprint technology         Satellite acquisition       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       48 V DC (supplied by ACU)         Power consumption       160 VA         Dimensions and Weight       Radome (D x H)       73 cm x 81 cm (28.74" x 31.88")         Weight (incl. radome)       50 kg (110.23 lbs)         Shipping dimensions       Form x 78 cm x 101 cm - 58 kg	Cross level range	-45° to +45°
Ship motion (for stabilization accuracy tests) Notion system 3-axis + auto skew  Miscellaneous Lock on time Typ. 20 sec  Satellite acquisition 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 ∨ DC (supplied by ACU) Power consumption 160 ∨A  Dimensions and Weight Radome (D x H) 73 cm x 81 cm (28.74" x 31.88")  Weight (incl. radome) Shipping dimensions Box type Cardboard box 78 cm x 78	Maximum ship motion	• Pitch ±30° @ 6 sec
Miscellaneous         Lock on time       Typ. 20 sec         Satellite acquisition       Completely automated by DVB-52 & 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       48 V DC (supplied by ACU)         Power consumption       160 VA         Dimensions and Weight       73 cm x 81 cm (28.74" x 31.88")         Weight (incl. radome)       50 kg (110.23 lbs)         Shipping dimensions       Shipping dimensions         Box type       Cardboard box         Pimensions - gross weight       78 cm x 78 cm x 101 cm - 58 kg	Ship motion (for stabilization accuracy tests)	• Pitch ±20° @ 8-10 sec
Lock on time     Typ. 20 sec       Satellite acquisition     Completely automated by DVB-52 & 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     V       Power consumption     160 VA       Dimensions and Weight     T3 cm x 81 cm (28.74" x 31.88")       Weight (incl. radome)     50 kg (110.23 lbs)       Shipping dimensions     Shipping dimensions       Box type     Cardboard box       Pimensions - gross weight     78 cm x 78 cm x 70 cm x 101 cm - 58 kg	Motion system	3-axis + auto skew
Satellite acquisition  Completely automated by DVB-52 & SatFingerprint technology  Satellite positions  Customizable through webinterface or control panel  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)  73 cm x 81 cm (28.74" x 31.88")  Weight (incl. radome)  Shipping dimensions  Box type  Cardboard box  78 cm x 78 cm x 78 cm x 101 cm - 58 kg	Miscellaneous	
Satellite acquisition  Satellite positions  Customizable through webinterface or control panel  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)  73 cm x 81 cm (28.74" x 31.88")  Weight (incl. radome)  Shipping dimensions  Box type  Cardboard box  78 cm x 78 cm x 78 cm x 101 cm - 58 kg	Lock on time	Typ. 20 sec
Satellite positions  control panel  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)  73 cm x 81 cm (28.74" x 31.88")  Weight (incl. radome)  50 kg (110.23 lbs)  Shipping dimensions  Box type  Cardboard box  78 cm x 78 cm x 78 cm x 101 cm - 58 kg	Satellite acquisition	·
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)  73 cm x 81 cm (28.74" x 31.88")  Weight (incl. radome)  Shipping dimensions  Box type  Cardboard box  78 cm x 78 cm x 78 cm x 101 cm - 58 kg	Satellite positions	5
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) 73 cm x 81 cm (28.74" x 31.88")  Weight (incl. radome) 50 kg (110.23 lbs)  Shipping dimensions  Box type Cardboard box 78 cm x 78 cm x 78 cm x 101 cm - 58 kg	Satellite selection	
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) 73 cm x 81 cm (28.74" x 31.88")  Weight (incl. radome) 50 kg (110.23 lbs)  Shipping dimensions  Box type Cardboard box 78 cm x 78 cm x 78 cm x 101 cm - 58 kg	EPAK® Diversity-Kit compatible	✓
Power Specifications           Power supply         48 V DC (supplied by ACU)           Power consumption         160 VA           Dimensions and Weight         73 cm x 81 cm (28.74" x 31.88")           Weight (incl. radome)         50 kg (110.23 lbs)           Shipping dimensions         Shipping dimensions           Box type         Cardboard box           Dimensions - gross weight         78 cm x 78 cm x 101 cm - 58 kg	Operating temperature	-20°C to 55°C
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Weight (incl. radome) 50 kg (110.23 lbs)  Shipping dimensions  Box type Cardboard box  78 cm x 78 cm x 101 cm - 58 kg	Dimensions and Weight	
Shipping dimensions  Box type  Cardboard box  78 cm x 78 cm x 101 cm - 58 kg	Radome (D x H)	73 cm x 81 cm (28.74" x 31.88")
Box type Cardboard box 78 cm x 78 cm x 101 cm - 58 kg	Weight (incl. radome)	50 kg (110.23 lbs)
Dimensions - gross weight 78 cm x 78 cm x 101 cm - 58 kg	Shipping dimensions	
Dimensions - dross Weight	Box type	Cardboard box
	Dimensions - gross weight	_

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> <li>1x NMEA [2 wire]</li> <li>1x R232 [RJ45]</li> <li>1x R5422 (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





### **EPAK®** GmbH

Spinnereistr. 7 04179 Leipzig, Germany Phone +49 (0) 341 2 12 02 60 Fax +49 (0) 341 2 12 02 66