



Marine Satellite Systems and Services



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 **Made in Germany**

ABOUT US



MARINE SATELLITE SYSTEMS

EPAK's stabilized internet and TV systems are specifically designed to overcome the unique challenges when operating at sea.



INTERNET AT SEA

Customers get one-stop solutions and services including individual consultation, hardware installation, airtime management and technical support.



TECHNOLOGY

EPAK is a technology leader with a very strong focus on Research and Development. In many ways EPAK has shown to lead the way rather than follow the trend.

ABOUT EPAK

Designer and manufacturer of stabilized satellite antennas

EPAK was founded in 2000 with the vision of worldwide mobile communications on land, at sea, and in the air. Today, the scope of work is focused on developing, manufacturing, and distributing fully automatic satellite tracking antennas. The core competence of EPAK's activities is to provide perfect solutions for TV and internet via satellite, specifically in the maritime sector.

EPAK's key to success is offering highly innovative products by controlling all essential processes, from researching and prototyping to series production and customer support. All the key competencies are available in-house. As a reliable R&D partner, EPAK's expertise has been sought by several satellite communication technology projects.

Operating in maritime markets worldwide

Along with hardware supply, EPAK also offers maritime satellite broadband services for coverage areas worldwide. In combination with professional 24/7 support, users get a one-stop solution designed to meet the high expectations of the maritime market. Customers who already trust EPAK's solutions can be found among yacht owners, inland cruise ships, oil and gas offshore industries, offshore research platforms, and international navy fleets.



- All products are engineered and manufactured in Germany and fulfil industry standards of the European Union.
- As designer and manufacturer, EPAK owns all the essential competences to provide you with customized solutions.
- EPAK uses only high-end materials and components for best product performance.
- EPAK offers one-stop solutions including satellite services and technical support.

PRO SERIES

New generation of antennas

DSi9 PRO FEATURES

- 3-axis mechanical design allows tracking of satellites at high elevation
- manage blockage zones by defining zones in azimuth with transmission lock
- transmit lock possible via hardware and software setting
- full functionality without need for NMEA data from ship's compass
- simple update of software and firmware of the ACU and antenna by upload via web interface
- ABS (automatic beam switch / automatic satellite change) via OpenAMIP
- easy satellite configuration and manual satellite switching
- scan function to support the detection of alternative tracking carriers



Quality Performance

Speed of 50°/s per axis and highest tracking accuracy for a stable connection in any weather.



Plug & Go Calling

Slots for local SIM cards integrated in the ACU. Easy switching to 4G network.



New Design

Robust construction with additional roll axis for extended range of motion and improved design.



Remote Control

Web interface for configuration, performance analysis and antenna data live monitoring on your devices.



High BUC Power

Equipped with powerful transmitter units -up to 40W for increased upload performance.



Help Desk

Remote assistance and technical support available any time during and after warranty.



TV SOLUTIONS



TV SYSTEMS

All EPAK TV antennas have been adjusted to overcome the specific challenges of their respective applications.

The main differences between the antennas are their dish diameter and tracking speed.

The antennas of the DS-Series guarantee reliable signal quality even under the hardest conditions in harsh waters.

They are all part of the PRO-Serie, the latest development of stabilized antenna systems, incorporating a 3-axis servo belt motion system plus automatic skew for ultimate performance.

PRO



DS6 PRO



DS9 PRO



DS13 PRO

	DS6 PRO	DS9 PRO	DS13 PRO
Dish size	60 cm (23.6")	90 cm (35.43")	130 cm (51.2")
Frequency	10.7 - 12.75 GHz	10.7 - 12.75 GHz	10.7 - 12.75 GHz
Antenna gain	36.3 dBi @12.5 GHz	39.5 dBi @12.5 GHz	43.1 dBi @12.5 GHz
Min. EIRP	46 dBW	43 dBW	40 dBW
LNB type	Quattro	Quattro	Quattro
Tracking speed	up to 50°/s	up to 50°/s	up to 35°/s
Elevation range	-15° to +120°	-15° to +120°	-20° to +115°
Azimuth range	Unlimited	Unlimited	Unlimited
Polarization range	-120° to +120°	-120° to +120°	-120° to +120°
Cross level range	-45° to +45°	-45° to +45°	-45° to +45°
Motion system	3-axis plus auto skew	3-axis plus auto skew	3-axis plus auto skew

VSAT SOLUTIONS



VSAT SYSTEMS

Benefit from EPAK's long-term expertise in VSAT antennas supply and airtime provision. EPAK VSAT systems guarantee highest network availabilities for broadband services even under hardest conditions.

Together with our offer for optimized airtime, a one-stop solution called "connectivity" is brought to every vessel.

EPAK's DSi satellite VSAT antennas are specifically designed to master the tough requirements in Deep Seas. Excellent pointing accuracy guarantees network availability even under the most challenging conditions.


Ku-Ka
Dual-Band Option


Distinguished
Technology


Flexible
Solutions


Open
System

PRO



DSi6 Ku PRO



DSi9 Ku PRO



DSi9 Ka PRO



DSi13 Ku PRO

	DSi6 Ku PRO	DSi9 Ku PRO	DSi9 Ka PRO	DSi13 Ku PRO
Dish size	60 cm (23.6")	90 cm (35.4")	90 cm (35.4")	130 cm (51.2")
Frequency	RX 10.7 - 12.75 GHz	10.7 - 12.75 GHz	19.7 - 20.2 GHz	10.7 - 12.75 GHz
	TX 13.75 - 14.5 GHz	13.75 - 14.5 GHz	29.5 - 30.0 GHz	13.75 - 14.5 GHz
Gain	RX 36.3 dBi @12.5 GHz	39.5 dBi @12.5 GHz	43.0 dBi @20.2 GHz	43.1 dBi @12.5 GHz
	TX 37.0 dBi @14.25 GHz	40.3 dBi @14.25 GHz	46.7 dBi @29.5 GHz	44.3 dBi @14.25 GHz
G/T	> 15 dB/K	> 18.2 dB/K	> 18.5 dB/K	> 20.9 dB/K
LNB type	Universal, PLL stabilized	Universal, PLL stabilized	Integrated in transceiver	Universal, PLL stabilized
Max. BUC power	16 W	25 W	5 W	40 W
Tracking speed	up to 50°/s	up to 50°/s	up to 50°/s	up to 35°/s
Elevation range	-15° to +120°	-15° to +120°	-15° to +120°	-20° to +115°
Azimuth range	Unlimited	Unlimited	Unlimited	Unlimited
Polarization range	-120° to +120°	-120° to +120°	Not required	-120° to +120°
Cross level range	-45° to +45°	-45° to +45°	-45° to +45°	-45° to +45°
Motion system	3-axis plus auto skew	3-axis plus auto skew	3-axis	3-axis plus auto skew



COASTAL SERVICE

LTE Antenna

The integration of an LTE Antenna allows your maritime satellite system to automatically switch from a satellite service to a 4G Network whenever your vessel approaches a coastal area (approx. 40 kilometers off the coast).

This innovative method provides customers with fast and affordable internet at sea.

The most obvious advantages of being able to switch from satellite broadband to 4G broadband are in fact:

- 1 – **Better SPEED:** 4G solutions are capable of much higher speeds compared to satellite broadband.
- 2 – **Lower COSTS:** 4G broadband offers plans much cheaper than satellite services.



Max Download Speed



150 Mbps

MaxUpload Speed



50 Mbps

LTE Region



Europe
North America
Asia
Australia

South America
Africa
APAC

EPK®

Switching to 4G broadband is convenient!
To give you an idea: 10 GB on a satellite service cost between **360 and 3.000 EUR** depending on geographic coverage zone, antenna hardware, service provider and bandwidth. The same amount of data on any LTE network costs about **15 to 20 EUR**.

COMPLETE SOLUTIONS

EPAK is your one-stop provider for Internet or TV on Board.

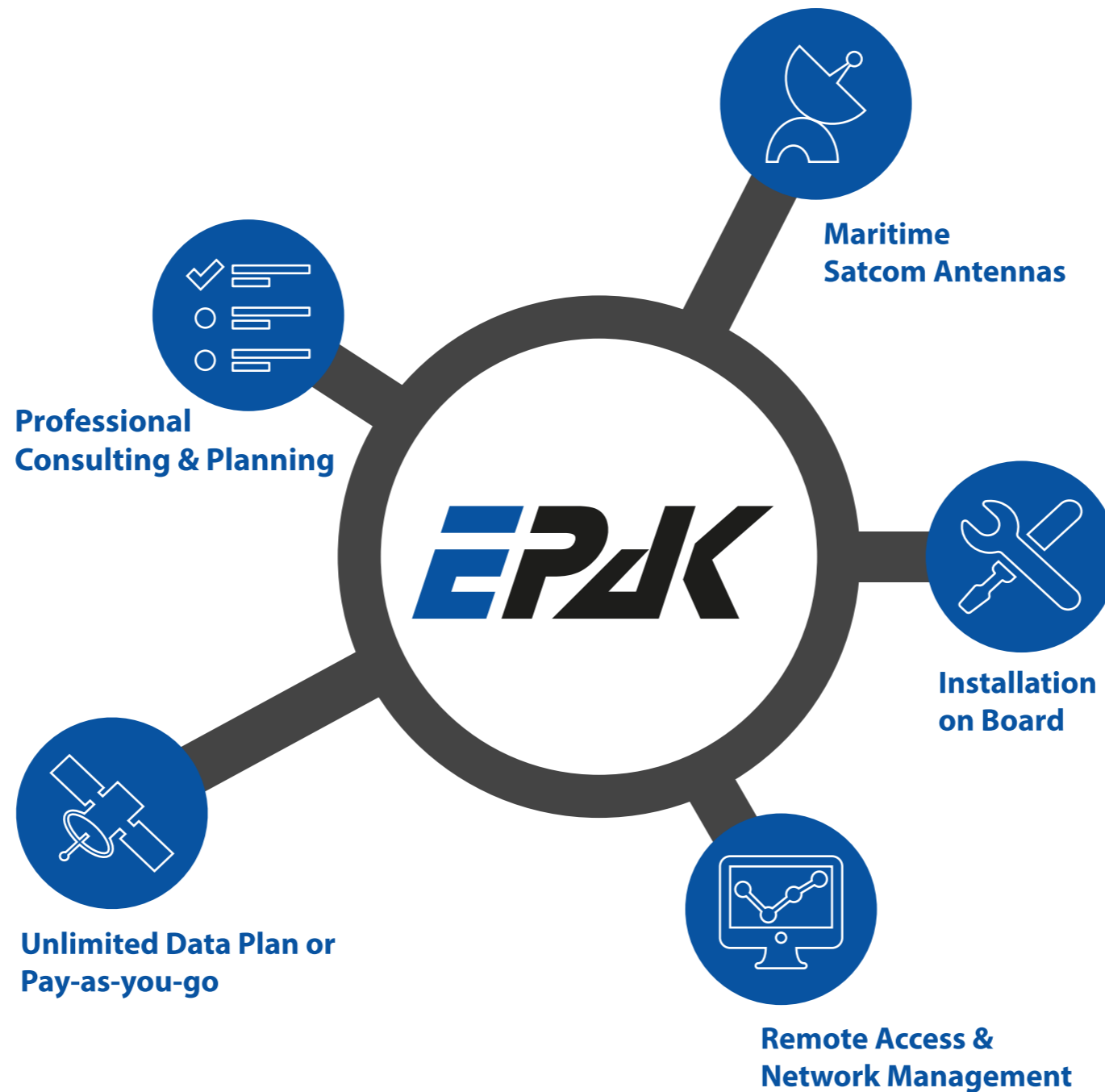
Professional Consulting & Planning: Rely on EPAK's expert advice during the process of finding the right product – and beyond. All customers benefit from tailored solutions and continuous support.

Hardware: EPAK maritime satellite antennas are assembled and tested under one roof. The straight and highly efficient communication between the R&D team and the production ensures steadily ongoing improvements as well as development of new products and features. With our expert knowledge we are flexible to realise customer-tailored solutions.

Installation & Customer Support: EPAK staff provides Telephone and E-mail assistance as well as on-site support. When required, EPAK technicians can be at the customer site within 24 to 36 hours in Europe and 40 to 54 hours worldwide. A network of trained distributors is also available for professional assistance.

Remote Access & Monitoring: Customers get free of charge access to an online monitoring portal for their own systems and for managing their onboard network.

Airtime: A large number of maritime satellite broadband services are managed internally. Having direct influence on the satellite ground stations enables EPAK to guarantee reliable quality and to offer flexible terms and data contracts, including dedicated traffic lines.



Add-Ons

A number of add-ons can be added to make the broadband service fit your vessel's requirements:

- Telemedical assistance
- Back-up
- Vessel Network Management for crew calling
- Redundant antenna with automatic handover (DivKit)
- Voice over IP
- Conversion between Ku- and Ka-band
- Hotspot management

FLEXIBLE SOLUTIONS

PACKAGE OFFER

by way of example

HARDWARE

EPAK DSi9 Ku VSAT - PRO

Three axis (roll, pitch, yaw) maritime tracking antenna for satellite communication

- ACU
- 16W BUC
- Modem
- Online UPS
- Transport Box



WARRANTY and SUPPORT

2 Years Warranty on parts and labour

Plus unlimited remote support, consulting, airtime management



DATA

AIRTIMESERVICE - Monthly Data Plan

Service: worldwide coverage

Data: unlimited

Contention: 1:10

Contract duration: 12 months

- Bandwidth option **medium**
2 Mbps down/ 1 Mbps upload
- Bandwidth option **large**
4 Mbps down/ 1 Mbps upload

OPTIONS

- Installation & Commissioning on board
- Inspection and Maintenance
- Spare Part Kit
- Lifting Tool
- LTE antenna
- Upgrade to 25W BUC
- VoIP Phone
- Upgrade to dual antenna system



For info about other package offers and pricing please [contact us](#)





REFERENCES

SECTORS

- Platforms and ships of the oil and gas offshore industry
- Research platforms
- European River Cruise Fleets
- Coast guards
- Ferries
- Private yachts
- Ships of the European inland navigation
- German and international marine projects
- Ships of fishing fleets

In order to be always one step ahead, EPAK cooperates in several projects with some of the most important companies in the technological field.

Vision, Strategy and Teamwork lead us and our partners towards Innovation for everyone.

CUSTOMERS (SELECTION)

And many more...

CERTIFICATIONS



APPROVALS



PUBLIC PROJECTS

