GmbH
Entwicklungs- und Produktionsgesellschaft für
Automobil- und Kommunikationselektronik mbH

Spinnereistrasse 7
04179
Leipzig

GERMANY

Technical Data

EPAK ® SC90Ku

Maritime VSAT Tracking Antenna

Data sheet for EPAK® SC90ku

Maritime VSAT tracking Antenna

Antenna:

Type:	Fully automated maritime tracking VSAT antenna, 3 Axis Servo System
Applicable Standard:	ETSI EN 302 340 (Earth Station on Vessels)
Azimut turns:	unlimited (Rotary Joint)
Antenna Elevation Range:	-10° to +90°
Polarization Angle: Range is	+/- 120° from Zero Position
Reflector:	90cm, Cassegrain
Feed:	included
BUC:	5 Watt
Tx/Rx Polarization:	X-Polar or Co-Polar (electronic switchable) with 5W BUC
GPS:	included in antenna
In Door Unit:	19" Rack Unit (2HU) (see data sheet)
Modem:	External (Approval necessary)
Modem Approval:	Standard type approval; CE & EPAK Type Approval
Power supply IDU:	220/230V AC
Power Supply ODU:	integrated in IDU
Interface (Network):	Ethernet 100BaseT; DHCP; freely configurable
Weight:	about 60 kg (ODU)
Radome Diameter:	111,4cm
Radome Hight:	114,0cm
TX-EIRP Maximum, Linear Operation:	46,3 dBW
RX LOF:	9,75 GHz / 10,6 GHz, electronic switchable, PLL stabilized
RX - G/T:	about 18 dB/K
X-Pol Isolation:	better 35 dB

Tracking Parameters:

External interface:	no external interface for tracking necessary.
Tracking speed:	up to 30°/second available, (each axis).
Polarization angle tracking:	fully automated, accuracy 1°.
Azimut tracking:	fully automated.
Elevation tracking:	fully automated.
Resolution Azimut:	0.020°
Resolution Elevation:	0.045°
Maximum Mispointing during tracking:	0.2° (can be changed on request)
Tracking Sensors:	All necessary tracking information, including Electronic Beamforming Sensors are built in the ODU (Outdoor Unit - Antenna). No data from the boat is needed.
EBF-Sensor Rate (refresh):	12.5 msec (80 times per second)

The total costs are influenced by the type of the BUC, Modem and other customer specific parts or designs. All data are measured including Radome losses.

The antenna works fully automated.
(Ku Band). TX and RX Transponders have to be on the same satellite or at least on the same satellite position.

Remark:
The Antenna will switch off Tx automatically until the Modem is operational and is booked in the network on Rx.
The Antenna is switching off Tx, if the tracking mispointing is more than 0,2 degree.

The Antenna will be delivered in a wooden transportation box.

Dimensions EPAK® TV 90 (ODU)