

Sales Introduction

SAILOR 900 VSAT High Power

COBHAM

The most important thing we build is trust



CONTENT

1	Introduction	3
1.1	8W the standard in global Ku band networks – for now... ..	3
1.2	High Throughput Satellites – HTS	3
1.2.1	Coverage area HTS – e.g. Intelsat Epic ^{NG}	4
2	The SAILOR 900 VSAT High Power product.....	4
2.1	Syslog and SNMP Traps	4
2.2	Accessories.....	5
2.3	Conversion Kits	5
2.4	Features & Benefits	5
2.5	Media.....	6
2.6	Service & Installation.....	6
2.7	Unique Selling Points	7
2.8	SAILOR 900 VSAT High Power - Technical Specifications	7
2.9	Availability	8
2.9.1	Hardware.....	8
2.9.2	Satellite Services.....	8

1 Introduction

The ever growing demand for more data throughput and bandwidths requires a technology shift in the industry. Maritime VSAT has seen tremendous growth since the start of the Millennium, first in the offshore energy sector, then large passenger vessels and some Yachts. Although these are fringe segments of the maritime industry, they have been driving the demand for more data throughput and bandwidth using systems operating in the C and Ku bands.

In recent years, the global maritime community has grown tremendous appetite for more data and IP services and solutions, fuelled by the extraordinary success of Inmarsat FleetBroadband resulting in more than 45,000 SAILOR FleetBroadband installations. Most recently large scale roll-outs in global Ku band services with typically a 1m antenna system like the Cobham SATCOM SAILOR 900 VSAT have become a new standard. The one metre antennas started with 4W BUCs in the '00s but efficient 8W BUCs have become the standard. Now that is beginning to change as well.

1.1 8W the standard in global Ku band networks – for now...

SAILOR 900 VSAT was the first maritime VSAT antenna system that standardised the entire hardware configuration specifically for the RF equipment for the receive part two LNBS, one for x-pol, one for co-pol and the transmit part, the BUC where 8W has become a standard for all global Ku band antennas and networks.

With customers requiring much higher amounts of data– also for the return links – we have now successfully integrated a new high performance 20W BUC into the SAILOR 900 VSAT – cue High Power.

1.2 High Throughput Satellites – HTS

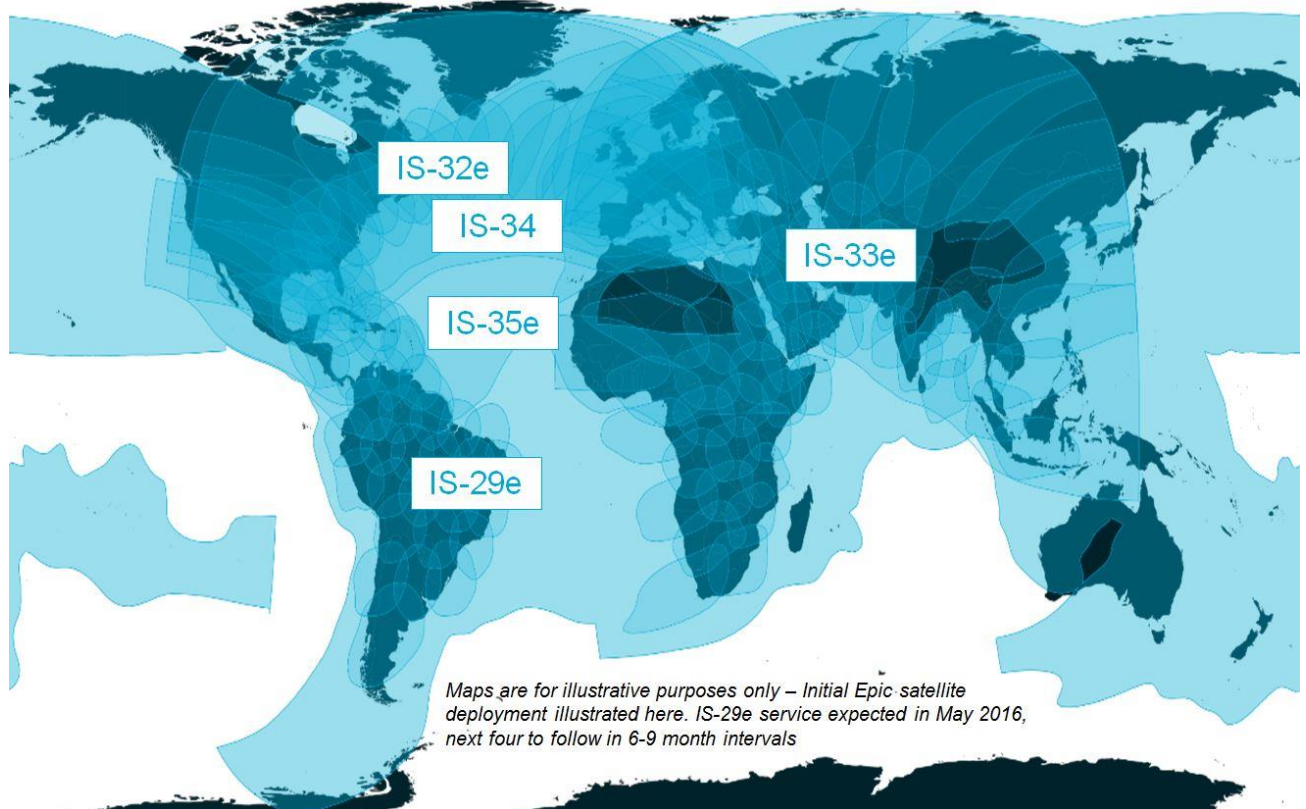
With the advent of HTS, the possibility to get much higher bandwidths and throughput from the same RF equipment and modems has come closer. Satellite companies like Intelsat SES, Eutelsat, Telesat and others will have dozens of new Ku band satellites in spot beam or wide beam architectures.

SAILOR antennas are used on existing Ku band mobility beams world-wide. There are no upgrades required for existing antennas to operate in the new HTS networks. Some providers will likely move towards more powerful modems like the iDirect X7 Satellite Router to support HTS and higher bandwidths/throughput.

The SAILOR 900 VSAT High Power will deliver higher and better return links both on existing and new HTS spot beams and wide beams.

1.2.1 Coverage area HTS – e.g. Intelsat Epic^{NG}

Intelsat Epic^{NG}: Designed as an overlay to existing Ku-band Network, Capacity will Scale over Time, Offering Continuity, Growth, Resilience



2 The SAILOR 900 VSAT High Power product

This advanced Ku band antenna system has been directly derived from the immensely successful SAILOR VSAT and SAILOR FleetBroadband satcom systems, each in its own right a benchmark in their respective arena.

2.1 Syslog and SNMP Traps

With the launch of SAILOR 900 VSAT High Power we are introducing software release 1.54 which supports Syslog and SNMP traps. This software can also be uploaded to all other SAILOR VSAT antenna systems.

SAILOR 900 VSAT High Power system, item no. 407090E-00500 is comprised of the Ku-band above-deck unit 407009E with its 20W Ku-band BUC and two LNBs for linear co-pol and x-pol.

The below-deck equipment consists of the antenna control unit 407016C-00500.

The Manufacturer's Suggested Retail Price (MSRP) for the complete antenna system incl. ADE and BDE is \$ 59,995 USD ex works Pandrup, Denmark.

2.2 Accessories

The list of accessories includes following items:

Item no.	Description	MSRP (USD)
407090A-950	Antenna Cable 50m, N-Conn, male/male	\$ 795
407090A-020	iDirect Serial & RSSI cable	\$ 60
407090A-021	Comtech Serial and RSSI cable	\$ 60
407090A-925	Pigtail cable 1.25m, N-Connector male/female	\$ 60
407090A-010	Dual VSAT antenna kit	\$ 130

Just like other VSAT systems all the below deck systems have to be mounted in a 19" cabinet.

2.3 Conversion Kits

Later on, we are planning to introduce Conversion Kits as follows:

1. Converting SAILOR 900 VSAT => to => SAILOR 900 VSAT High Power
 - a. Includes new antenna control unit, 20WBUC, accessories.
2. Converting SAILOR 900 VSAT High Power => to => SAILOR 100 GX
 - a. Includes Ka-band RF pack and SAILOR GX Modem Unit

2.4 Features & Benefits

The SAILOR 900 VSAT High Power is an advanced maritime antenna system with stabilised Ku-band antenna for all Ku band networks, both regional and global. It is built with the same high quality and performance characteristics that have made SAILOR the leading brand in professional maritime communication equipment.

Every SAILOR 900 VSAT High Power antenna system ships factory-tested, ready-to-go and equipped with top quality RF components.

The antenna electronics run built-in testing (BIT), which constantly monitors the operation of the antenna.

2.5 Media

As always photos of all our products are available for download in multiple resolutions from our Media Bank <http://mediabank.thrane.com/> under the 'Maritime' category.

2.6 Service & Installation

The antenna system is supported and serviced by Cobham SATCOM's world-wide network of Technical Service Partners (TSP).

All TSPs are listed on the 'Find service' list on Cobham SATCOM's web-site, and easily accessible from the new Cobham SYNC partner portal. For each product group and for a specific port/city a TSP can be at STANDARD, SILVER or GOLD level. The GOLD level is equivalent to the renowned Thrane & Thrane On board Service Centre (OSC) program, and the obligations imply that a 95% first-time-fix rate can be expected from GOLD partners and 85% from SILVER partners even at short notice because spare parts are in stock and factory trained technicians employed.

Cobham SATCOM supports all Partners with technical support, training, factory repair services and a range of spare part solutions including:

- Spare parts are available on the eShop for 24/7 ordering, automated order processing and next business day shipment
- Expensive non-repairable items with a low turnover are classified in eShop as Return for Credit items, meaning that unused items can be returned for credit within 30 days against a restocking fee
- Repairable high value items are available on Advance Replacement (AR) terms, meaning that STANDARD TSPs (and other Partners) who do not stock spares will have access to Cobham SATCOM's stock of factory refurbished exchange items at pay-per-use basis
- Complete Fly-Away Service Kits (FASKs) are available from strategic locations and can be requested via Cobham SYNC.

The TSP network builds on trust, transparency and a set of commitments and obligations assuring customers second-to-none service and support. Whether warranty or out of warranty, the service is always at the same high level.

In addition to the above-mentioned traditional support, Cobham SATCOM offers total Service Agreement packages comprising service coordination, spare part coordination and 24/7 tier-3 technical support for the SAILOR 900 VSAT High Power system. Adding this to the Extended Warranties can ensure a fixed cost of ownership for up to 5 years, and is a great tool for Partners to offer better agreements to their customers.

2.7 Unique Selling Points

- Developed and built to the high standards of the SAILOR brand for quality and reliability
- Highest possible shock & vibration testing according to IEC EN 60721
- Large cost savings compared to other antennas:
 - **Quick and easy to deploy** – up and running fast and trouble free
 - **Single cable to ADU** – save time with installation, save money on cables
 - **Dynamic Motor Brakes** – no fittings or straps to remove inside the radome; saves time during preparation and installation
 - **Automatic Azimuth Calibration** – a software feature – no mechanical home flag setting, saves time during installation
 - **Automatic Cable Calibration** – a software feature – ensures optimum system performance with standard antenna cable up to 300 metres.
- Simple and intuitive configuration using built-in web interface
- Secure remote access via HTTPS, SSH and SNMP for remote monitoring
- 100% compatible with SAILOR FleetBroadband for fail-over and link redundancy
- Attractive warranty packages, Customer Protection Plans and Service Agreements

2.8 SAILOR 900 VSAT High Power - Technical Specifications

Antenna size and weight	
Reflector size	103 cm / 41 in.
Radome diameter	ø 130 cm / 51 in.
Radome height	h 150 cm / 59 in.
Weight	127 kgs. / 279 lbs.
Pedestal performance	
Platform	3-axis
Azimuth	Unlimited
Elevation	-25° to +125°
Cross-level	± 42°
Stabilization	0.1° RMS
Motor brake system	3-axis dynamic
ADU-ACU connection	Single coax cable

RF performance	
Rx frequency	10.7 – 21.75 GHz
Rx gain	40.6 dBi typ. @ 11.70 GHz (excl. radome)
G/T	19.9 dB/K typ. @ 12.75 GHz, at $\geq 30^\circ$ elevation and clear sky (incl. radome)
LNB	2 units, multi-band LNBs (band selection by ACU)
Tx frequency	13.75 to 14.50 GHz (extended)
Tx gain	41.6 dBi typ. @ 14.25 GHz (excl. radome)
Polarisation	Linear x-pol or co-pol, selected by antenna control unit
EIRP	≥ 54.3 dBW (incl. radome)
BUC	20W Ku-band

2.9 Availability

2.9.1 Hardware

Production of the SAILOR 900 VSAT High Power has started in June 2016 with a gradual ramp-up throughout H2, 2016.

2.9.2 Satellite Services

Ku band services are available from a large number of maritime VSAT service providers including Marlink, NSSL Global, SpeedCast, Globecommm Maritime, Telemar, Radio Holland, Harris CapRock and many more.

For more information about the SAILOR 900 VSAT High Power antenna system please consult the product page on [Cobham SYNC](#) (please click on [link](#)), contact your Regional Sales Manager or our Product Line Manager for SAILOR VSAT & GX, Henrik Møller, henrik.moller@cobham.com