SRT Marine Technology Ltd

Class B AIS VHF Antenna Splitter

The SRT Class B AIS VHF Antenna splitter is designed to simplify installation of the SRT range of Class B Automatic Identification Systems (AIS).

The unit removes the need for a separate VHF antenna for an AIS transponder and allows a single antenna to be shared with a VHF radio, whilst maintaining the performance required for international type approvals.

Features

Simplifies installation

Use a single VHF antenna for both AIS and VHF operation. Save installation cost and time.

Failsafe operation

Guarantees priority to VHF voice & DSC radio operation, even if the splitter power supply fails.

FM Antenna connection

Additional output for FM radio antenna connection.

Compatible with Class B AIS Transponders

Designed for use with SRT Class B transponders and compatible with all Class B AIS transponders.

LED Status indication

Simple LED indicators show when VHF voice radio or AIS is transmitting or receiving.

Patent pending technology

Ensures connected AIS and DSC units continue to operate to international specifications and meet requirements for type approval.

Designed for Class B

Failsafe VHF operation

Minimise installation costs

SRT Marine Technology Ltd

Class B AIS VHF Antenna Splitter

Product Features

Physical

- Overall dimensions - 120mm x 80mm x 50mm
- SO-239 socket for VHF antenna connection
- SO-239 socket for VHF radio connection
- BNC socket for AIS transponder connection
- BNC socket for FM radio connection
- Flying leads for power supply

Electrical

- 12 to 24VDC (abs. max 9 to 32V)
- Current draw <150mA continuous @ 12V DC
- All antenna grounds isolated from power supply ground.

User interface

- Green LED for power indication
- Amber LED for VHF TX indication
- Amber LED for AIS TX indication

RF Performance

- Insertion loss (AIS or VHF RX paths) < 4dB
- Insertion loss (AIS or VHF TX paths) < 1dB
- Power handing, VHF port, 25W
- Power handling, AIS port, 12.5W
- Operating frequency range 156.000 - 163.425MHz

Supplied with

- 0.5m flying lead to VHF voice radio antenna connector
- 2m RF cable for AIS connection (BNC to BNC)
- 1m power cable
- Installation and user guide

Installation requirements

- Existing marine band VHF antenna
- SRT-MTB based Class B AIS Transponder
- 12 – 24VDC power supply

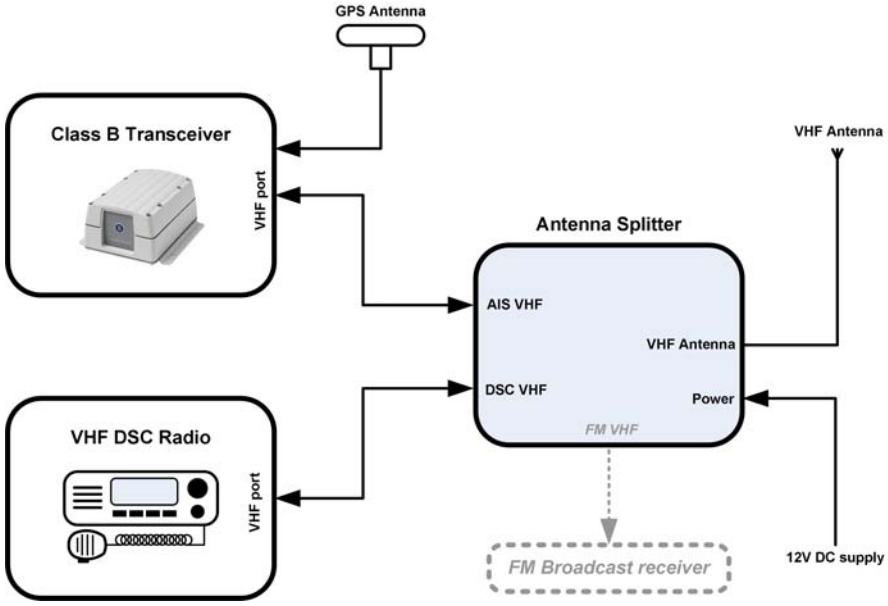
Approvals

- CE (R&TTE directive applies)

Order code

- SRT-ANS-OEM

Typical system diagram



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PRODUCTS
RvA C 228

BABT

Certificate

This certificate is issued to

SRT Marine Technology Ltd

of

Wireless House
Westfield Industrial Estate
Midsomer Norton
Bath
BA3 4BS
United Kingdom

to certify that the Equipment known as

SRT-MTB-ANS

as described in the Annex to this certificate
conforms to the essential requirements of Directive 1999/5/EC
of the European Parliament and European Council on the basis
of Technical Construction File number LD3021
in relation to the essential requirements of
Articles 3.1(a), 3.1(b), 3.2 & 3.3 of the Directive.

Signed:

On Behalf of BABT

Issue Date: 28 July 2008

Number: NC/13544 Issue: 01

This certificate is issued by BABT and represents a formal Notified Body opinion under Annex IV of Directive 1999/5/EC
permitting the use of the BABT CE0168 mark on the equipment described above
subject to the equipment meeting the compliance requirements of all applicable EU directives.
This certificate is not transferable and remains the property of BABT.

British Approvals Board for Telecommunications • TÜV SÜD Group •
Balfour House • Churchfield Road • Walton-on-Thames • Surrey • KT12 2TD • United Kingdom

TÜV SÜD

Annex to

CERTIFICATE

Equipment Details:

Total Units:	1
Unit Type:	Antenna splitter, R&TTE class 2
Equipment Category:	Maritime radio equipment.
Trade Name:	SRT Class B AIS VHF Antenna splitter
Type Designation:	SRT-MTB-ANS
Intended Use of Equipment:	Fixed VHF antenna splitter suitable for use with VHF radio and Class B AIS , for use onboard non-SOLAS vessels.
Frequency Range(s):	Transmitter: 156.025 – 163.425 MHz Receiver: 156.025 – 163.4 25 MHz
Temperature Range(s):	-25ºC to +55ºC
Designation of Emissions: (ITU)	Installation dependent
Power Characteristics:	Conducted, VHF port 25 W, AIS 12.5 W
Modulation Modes:	25kHz GMSK (AIS, TX and RX) 25kHz AFSK (DSC, RX only)

Specifications(s):

R&TTE Article 3.1(a)	EN 50384: 2002 EN 50385: 2002 EN 50383: 2002 EN 60950-1: 2001 IEC 60945: 2002-08
R&TTE Article 3.1(b)	EN 301 843-1 v1.2.1 (2004-06) IEC 60945: 2002-08
R&TTE Article 3.2	IEC 62287-1: 2006-03 Clause 11, for the AIS transmitter and receivers IEC 62287-1: 2006-03 Annex C, Clause C4, for the DSC receiver IEC 61108-1: 2003-07 Clauses 4.3.7 & 4.3.8, for the GPS receiver
R&TTE Article 3.3	IEC 62287-1: 2006-03 Clause 9, for operation in intended environment IEC 62287-1: 2006-03 Clauses 10, 12,13 for operational requirements

SRT-MTB-ANS Application for test waivers Document: LD3023 Issue 1

Comments:

R&TTE Article 3.1(a) [Safety] tested by TÜV Product Service
Test Report Number: 071-75903879-000
Supplier statements in the Technical Construction File
MPE calculations performed by SRT

R&TTE Article 3.1(b) [EMC] tested by Hursley EMC Services
Test Report Number: 08R241 CR

R&TTE Article 3.2 [Spectrum Usage] tested by TÜV Product Service
Test Report Numbers: 75903879 Report 02 Issue 1
75903879 Report 03 Issue 1

Additional Information:

Compliance with the R&TTE directive will depend upon installation conditions and how the equipment exists in its final form. Positioning of the equipment must be such as to ensure that the equipment is protected from the ingress of water. This responsibility resides with the system installer.

Signed: ..... A.J. Hurrell .....
on behalf of BABT

Date: 28/7/08