



**To Explore,  
and Be in Control!**

## Product Overview

CAMINO-108S is a smart combination of AMEC AIS Class B with our latest antenna splitter. It allows you to share a single VHF antenna with VHF radio, which simplifies installation and reduces cable runs.

The unit is designed to provide high performance and great reliability, resulting from our year long field experience. It contains 1 VHF transmitter, 2 AIS receivers on 2 VHF channels and 1 MCU with cutting edge software defined radio technology. Chart plotter and PC can be integrated with ease over its NMEA2000, NMEA0183 or waterproof USB port.

The built-in splitter featuring zero insertion loss on reception path ensures optimal range of your VHF radio and AIS transponder. The built-in test function gives a simple diagnosis in the event of antenna problem and system failure. Its transparent mode guarantees priority to VHF radio operation even if the splitter has power failure.

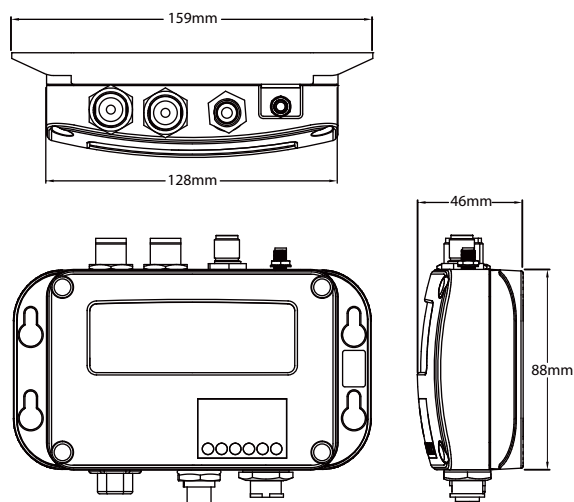
## Key Features

- ▶ Globally certified AIS Class B transponder
- ▶ Built-in high performance splitter
- ▶ Universal connectivity via NMEA 2000, NMEA 0183, and USB
- ▶ Durable housing design with IPX5 waterproof
- ▶ Optional silent mode (Tx off) operation
- ▶ Fail-safe function for uninterrupted VHF/DSC radio operation
- ▶ Self-test function alerting possible antenna issue
- ▶ FM radio interface

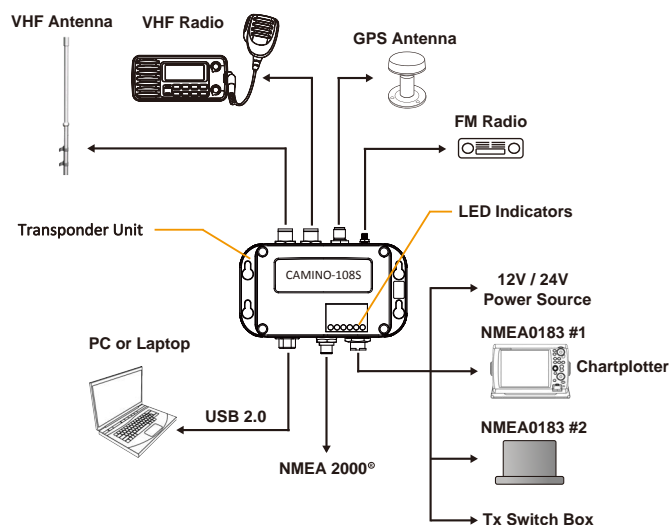
## Applications



## DIMENSIONS



## CONNECTION DIAGRAM



## SPECIFICATIONS

### ▶ APPLICABLE STANDARDS

EN 301 489-1 V2.1.0 / EN 301 489-3 V2.1.0	IEC 60945 Ed. 4:2002
EN 301 489-1 V2.1.0 / EN 301 489-17 V3.1.0	IEC 62287-1 Ed. 2:2010
IEN 301 843-1 V2.1.1 / EN 301 843-2 V2.1.1	IEC 61108-1 Ed. 2:2003
EN 300 440 V2.1.0	EN 300 328 V2.1.0
ITU-R .1371-5, 2014	EN 62311:2008
EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013	

### ▶ VHF TRANSCEIVER

Frequency Range	156.025 MHz ~ 162.025 MHz
Channel Bandwidth	25 KHz
Modulation	GMSK / FM
Data Rate	9,600 bps
Number of AIS Transmitter	1
Number of AIS Receiver	2 (one time-shared between AIS and DSC)
Number of DSC Receiver	1 (time-shared between AIS and DSC)
AIS Channel 1	CH 87B (161.975 MHz)
AIS Channel 2	CH 88B (162.025 MHz)
Tx Power Output	2 Watt (33 dBm ± 1.5 dB)
Rx Sensitivity	< -107 dBm @ 20% PER
Rx Message Format	AIS Class A & B messages

### ▶ DSC RECEIVER

Modulation	1,300 Hz / 2,100 Hz FSK
Data Rate	1,200 bps ± 30 ppm
Spurious Response Rejection	≥ 70 dB for signal @ -104 dBm; BER ≤ 1 %
Blocking	≥ 84 dB for signal @ -104 dBm; BER ≤ 1 %

### ▶ GPS RECEIVER (INTEGRATED)

Receiving Channels	50 channels
Accuracy	IEC 61108-1 compliant
Output Rate	1 Hz

### ▶ POWER SUPPLY

Supply Voltage	12V / 24V DC
Power Consumption	Typically less than 3W average @ 12V DC

### ▶ CONNECTION INTERFACE

GPS Antenna Connector	TNC (Female)
VHF Antenna Connector	SO-239 (Female)
VHF Radio Connector	SO-239 (Female)
NMEA2000	Standard connector LEN=1
Silent Mode Setting	Set by optional Tx Switch Box SB-181
USB	Mini type, waterproof
FM Radio	SMA (Female)
NMEA 0183 (RS-422)	Support two NMEA0183 interfaces Baud rate configurable (default 38,400 bps) Separate Tx/Rx baud rate Standard IEC 61162-1 / IEC 61162-2 sentences

### ▶ RF PERFORMANCE (SPLITTER)

Insertion loss, VHF Radio Receive path	Typical 0dB
Insertion loss, VHF Radio Transmit path	Typical 1dB

### ▶ ENVIRONMENTAL

Operating Conditions	IEC 60945 "protected" category
Operating Temperature	-15°C ~ +55°C (+5°F ~ +130°F)
Waterproof	IP54

### ▶ PHYSICAL

Width	157 mm (6.18 inches)
Height	47 mm (1.85 inches)
Depth	88 mm (3.46 inches) (exclude connector)
Weight	306 g

### ▶ SOFTWARE TOOL

AMEC AIS Configuration	Configuration utility
AMEC AIS Viewer	AIS Viewer for PC

Note: Specifications are subject to change without prior notice.



The AIS Specialists

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