



# R5 SUPREME

## NETWORKED AIS FOR SOLAS AND ADVANCED APPLICATIONS

The SAAB R5 SUPREME AIS system is designed for SOLAS vessels and advanced applications such as Secure and Warship AIS. It fully utilises our fifth generation transponder technology, building on the success of the R4 AIS system, which is in operation in over 20,000 ships worldwide.

The R5 system features cutting-edge digital radio design, resulting from more than five years' research into software defined radios.

Sharing radio technology with military grade systems, the R5 technology is a major leap forward into the future of AIS radios.

The highly versatile R5 platform will continue to evolve as new requirements are introduced, and will remain at the forefront of AIS technology for many years to come.

The SUPREME version of the R5 technology provides the user with a flexible, future-proof product. The large colour touch-screen display and multitude of interfaces make the system highly appropriate for integration into modern networked bridge solutions.

### FEATURES

- 7" ultra-bright high contrast colour LCD
- Touch screen, keypad and USB keyboard support
- Ethernet, RS-422 and USB interfaces
- Use USB memory for quick software upgrades
- Load/save configuration with USB Memory
- Pilot Plug integrated in display
- Full AIS SART support
- Text messaging
- VHF communication test function
- R4 Navigation Sensor Compatible
- Gimbal or flush mounting
- Water resistant design
- Alarm acknowledge binary port
- Dual AIS systems in Hot Standby configuration

## TECHNICAL SPECIFICATION

### PHYSICAL

Transponder  
Size W × H × D: 227x77x192 mm  
Weight: 2.05 kg

Display  
Size W × H × D: 255x140x84 mm  
Weight: 1.6 kg  
Resolution: 800x480 (WVGA)  
TFT: IPS-Pro  
Touch: Resistive  
Brightness: 800 Nits  
Power input: 12/24 VDC

### POWER CONSUMPTION

Transponder: 20 W (60 W peak)  
Control & Display unit: 13 W

### GPS RECEIVER (INTERNAL)

50 channels (Ready for DGPS)  
Frequency: L1 (1575.42 MHz)  
Update rate: 1 Hz  
Antenna feed: 5 V DC  
  
Position accuracy (SA off)  
Position <2.0 m: DGPS (CEP)  
Position <2.5 m: GPS (CEP)  
Sensitivity: Tracking -162 dBm  
Cold Start -148 dBm

### VHF TRANSCEIVER

AIS receivers: 3  
DSC receivers: 1  
AIS transmitters: 1  
Frequency: 155–163 MHz  
Output power: 1/12.5 W (±1.5 dB)  
Sensitivity: <-111 dBm

### ELECTRICAL INTERFACES

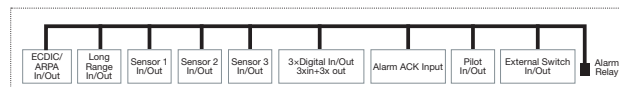
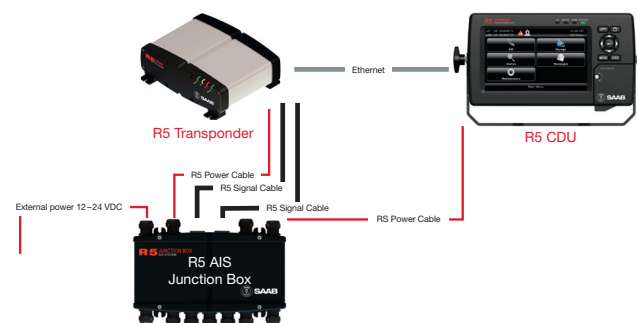
Transponder: Ethernet 10/100 Mbit (LWE IEC 61162-450)  
6 RS-422 I/O (NMEA / IEC 61162-1 Ed.4)  
3 Digital In, 3 Digital Out (3x in + 3x out)  
Alarm Relay  
Alarm Relay Output  
Alarm Ack Input  
Silent switch  
  
Display: Ethernet 10/100 Mbit (LWE IEC 61162-450)  
Pilot plug  
USB Host 2.0  
SDHC Reader

### ENVIRONMENTAL DATA

IEC 60945 (Protected)  
Operating temperature: -15°C to 55°C  
Storage temperature: -30°C to 80°C

### R5 SUPREME AIS SYSTEM INCL. JUNCTION BOX

With its multitude of interfaces the system is designed and very suitable for integration into modern networked bridge solutions.



R5 SUPREME Transponder rear view

### STANDARDS

ITU-R M. 1371-4 (Class A) 2010  
ITU-R M. 825-3, 1998  
ITU-R M. 1084-5, 2012  
IEC 61993-2 Ed.2, 2012  
IEC 61108-1Ed 2.0 2003  
IEC 60945 Ed. 4.0 2002 incl Corr .1 2008  
IEC 61162-1 Ed 4.0 2010  
IEC 61162-2 Ed 1.0, 1998  
IEC 62288Ed 1.0. 2008

Specifications subject to change without notice