

AIS Class B Transceiver

TECHNICAL DATASHEET



easyTRX3S (A20021)



EXCELLENCE IN RADIO TECHNOLOGIES
Safety • Navigation • Tracking

Standards

AIS Standards	IEC 62287-2:2017; ITU-R M.1371-5
Environmental	IEC 60945:2002 + Corr.1:2018
GPS Performance	IEC 61108-1:2003
Product Safety	IEC 62368-1; EN 301843-1:2004

AIS Specification

AIS Transmitter Class	B
Transmitter	1 Transmitter (AIS1/AIS2)
Receiver	2 Receiver (AIS1/AIS2) DSC (AIS Channel Management)
Access Scheme	SOTDMA
Tx Frequency	AIS 1: 161.975 MHz; AIS 2: 162.025 MHz
Option:	Marine Band: 156,025MHz - 162,025MHz
Rx Sensitivity	≤-112dBm 25kHz (<20% PER)
Transmission Power	5Watt / 1Watt (50Ohm) (switchable by coastal station)
Channel width / grid	25kHz
Modulation	GMSK (AIS, TX und RX) / FSK (DSC, RX only)
Transmission rate	9600b/s / 1200b/s

GNSS Receiver

Receiving Antenna	Internal and external (BNC)
Receiving Channels	99 channels
Supported GNSS	GPS, Galileo, Beidou, GLONASS up to 3 concurrent GNSS constellations

Interface

	A20021 (easyTRX3S Gen2)	A20023 (easyTRX3S-DVBT Gen2)
VHF Antenna Connector	SO239	SO239
VHF Radio connector	TNC	TNC
GNSS Antenna Connector	BNC	BNC
USB	USB-C	USB-C
NMEA0183	2 x IN, 1 x OUT	2 x IN, 1 x OUT
NMEA2000	M12 Micro-C	M12 Micro-C
WiFi	SMA-Antenna	SMA-Antenna
DVB-T/FM-Radio	-	2x BNC BNC
ME SENSE	+	+

Dimensions/Drawings

Weight	500 g
Dimensions (LxWxH):	186 x 138 x 61 mm

Variants

A20021	easyTRX3S Gen2
A20023	easyTRX3S-DVBT Gen2

Approval

BSH	BSH/4542/001/4323246/18
CE	

Environmental

Operating Temperature	-15°C to +55°C
Storage Temperature	-20 °C to +75 °C
Waterproof Rating	IP 67
Compass Safe Distance	min. 80 cm

Power Supply

Supply Voltage	12V or 24V
Operating voltage range	9,6 to 31,2V DC
Power consumption	2,6W @ 12V DC
Power input	3A (send), -220mA (stand.) at 12V DC
NMEA2000 LEN Value	2

