

X-Pack DS

NAUTICAST

The AIS Company.

According to ISO 9001 and IMO Standard.

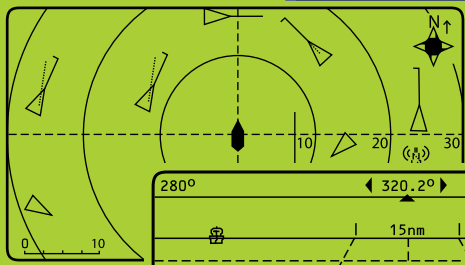


Alphanumeric View

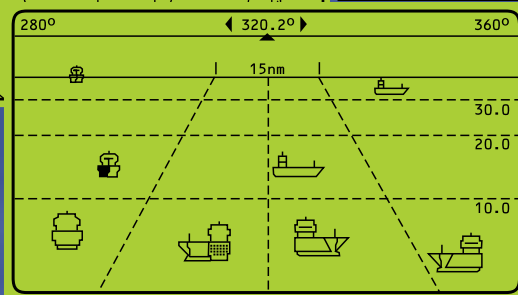
LAT: N 48-15'58" SOG:0.0kn 17-09-2002
LON: E 16-25'22" COG:0.0 UTC11:21.28
GPS: 3D-INT-----Ships:4-----AIS1

***** Ship Settings *****
IMO No. : 3031741
CallSign : DQQ
Ship Name : Euro
Length : 220m
Beam : 43m
RefPoint : 33m
Ship Type : <Sea

Radar View



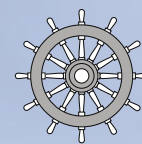
Fairway View



- ▶ The X-Pack DS includes the innovative 3-in-1 Graphical Display with 3 different views at a fingertip: Alphanumeric, Radar View and Fairway View. This representation of the surrounding traffic scenario also with different zoom-levels is a completely unique way of capturing and representing vessel data (worldwide patent pending).
- ▶ The X-Pack DS Transponder fully corresponds to the technical specifications for the Universal Automatic Identification System (AIS) Transponder, issued by the International Maritime Organization (IMO).
- ▶ The X-Pack DS Transponder is specifically designed for commercial shipping, e.g. for vessels which are subject to the SOLAS regulations. The X-Pack DS Transponder makes a significant contribution to increasing safety at sea.

Class A – SOLAS AIS Transponder:

- Most compact AIS-System
- All-In-One Unit
- Built in Sensor Configuration
- Best value
- Proven quality with thousands of units already installed worldwide



CCS

Worldwide approved quality:

FCC



PHYSICAL	
Size (w)	281,26 mm / 10,07 "
Size (h)	60 mm / 2,36 "
Size (d)	201,26 mm / 7,92 "
Weight	2490 g / 5,50 lbs
Operating Temperature	-15°C to +55°C / 5°F to 131°F

POWER SUPPLY	
Supply Voltage (galvanic isolated)	24 V DC (-10% +30%)
Input Current	min.7 A (24V)

INTERFACES	
Number of Data Ports	3 Input / 4 I-O / 1 Output
IEC 61162-1/2	(RS422 / NMEA 0183)
ITU-R M.823-2	(RS422 / RTCM SC104)
Bitrate	
CH1 Sensor Input; (e.g.: GPS)	4800 bps / 38400 bps
CH2 Sensor Input; (e.g.: GYRO)	4800 bps / 38400 bps
CH3 Sensor Input; (e.g.: HDG)	4800 bps / 38400 bps
CH4 ECDIS Port (In- / Output) AIS targets, AIS messages	in / out 38400 bps
CH5 Pilot Port (In- / Output) AIS targets, AIS messages	in / out 38400 bps
CH8 Long Range Port (In- / Output)	in / out 38400 bps
CH9 DGPS correction (In- / Output) (RTCM SC104)	in / out 9600 bps
Alarm Circuit CH10	Dry relay contact (see BIIT-Alarm System)

BUILT IN GPS	
Receiver Architecture	12 channel differential
Tracking Capability	12 satellites sim.
Accuracy Horizontal	10 m / 2 drms *
Accuracy Vertical	15 m / 2 drms *
GPS Antenna Connector	TNC
DGPS Accuracy	< 5 m / 2 drms
*) depends on SA	

GPS Solutions	
Beacon interoperability	
EGNOS interoperability	
WAAS interoperability	
OMNISTAR interoperability	
LongWave interoperability	
VHF interop. (DGPS over Msg.17)	
optional internal Beacon Receiver	
Combined GPS/DGPS Antenna	

BIIT – Alarm System	
Relay breaking capacity	
30V DC	8A
250V AC	8A

OPTIONAL INTERFACES	
Number of Data Ports RS232	up to 5
Bitrate	Up to 115000 bps
Simplex / Duplex	Duplex
Number of Data Ports IEC 61162-3 CAN (RS485)	1
Bitrate	up to 1 Mbps

KEYBOARD	
Integrated	alphanumeric

SPECIFIED STANDARDS	
IMO MSC.74(69) Annex 3	
ITU-R M.1371 (Class A)	
IALA Techn.Clar. of ITU-R M.1371-1 (Ed.1.3)	
IEC 61993-2 (2002)	
IEC 61162-1 (2000)	NMEA 0183-3
IEC 61162-2 (1998)	NMEA 0183-3
IEC 61162-3	NMEA 2000
ITU-R M.823-2	
IEC 61108-1 (1996)	
IEC 60 945 (1996)	
ITU-R M.825-3	
ITU-R M.1084-3	

VHF	
Frequency Range	156 MHz - 162 MHz
Channel Spacing	12.5 or 25 KHz
Number of RF Channels	3 Receiv. / 1 Transm.
Number of AIS Receivers	2
Number of DSC Receivers	1
Frequency Error	+/- 2.5ppm

VHF TRANSMITTER	
Output Power	2 Watt to 12.5 Watt (adjustable)
Receive to Transmit Switching Time	< 1 ms
Transmit release time	< 1 ms
Automatic shutdown	1 sec.
Channel switching time	< 25 ms
Attack Time	< 1 ms

VHF RECEIVER	
Max. Useable Sensitivity	< -110 dBm
Co-channel Rejection	> -8 dB (25 kHz); > -12 dBm (12.5 kHz)
Adjacent Channel Selectivity	> 70 dB (25 kHz); > 60 dB (12.5 kHz)
Inter-modulation Rejection	> 65 dB
Spurious Response Rejection	> 70 dB
Blocking	> 84 dB

VHF MODEM	
Bitrate GMSK	9600 bps
RF Baud Rate (DSC)	1200 bps
Modulation	GMSK / FSK

SOFTWARE	
X-Pack DS Version 2.0.x	
- installed and ready for use	
- implemented configuration Software	
- User friendly Interface to System and AIS Information	
- Additional Interface to System Configuration (Windows 2000®)	
- X-Pack DS Demonstrator for training purposes (Text only) (Windows 2000®, Windows XP®)	

HARDWARE	
X-Pack DS Version 1.0.x	

DISPLAY	
Integrated	Text: 40 x 16 chars Graphical: 240 x 128 dots adjustable brightness and contrast



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X-PACK DS FEATURES:

► Graphical Display

The 3 in 1 Graphical Display includes 3 different views and an adjustable zoom-functionality. Targets can be selected directly using cursor keys with both graphical views (are shown in a minimized view including a ship list of receiving AIS-signals).

► Sensor Configuration

The X-Pack DS software enables you to automatically check, read out/trace and evaluate the data received from your sensor-interfaces. This gives you a detailed overview of how to configure and setup the interfaces for accurate input and display of all your ship sensor-data within the Automatic Identification System.

► Size it up!

The X-Pack's alluring measurements are W 28 cm x D 20cm and its height is only 6 cm. It's a lightweight at 2,5 Kg, and won't take up precious space on your bridge, even though keyboard and display are integrated.

► Plug & Play

Inventive technology at its best! Two sockets suffice to connect power, sensors and antennas and initial Transponder operation is up and running within minutes.

Warnings:

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For more information on this or our other Transponder products, please contact us:

Nauticast

Navigationssysteme GmbH

Mariahilfer Strasse 50/2/11

A-1070 Vienna, Austria

info@nauticast.com

www.nauticast.com

Tel.: 0043-1-5 237 237-0

Fax.: 0043-1-5 237 237-150

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Partner