SPECIFICATI	ONS		
U-AIS Transponder GENERAL Standards IMO A.694(17), IMO N		POWER SUPPLY Transponder Unit 12-24 VDC: 7-3.5 A Display Unit 12-24 VDC: 0.3-0.15 A AC/DC Power Supply Unit PR-240 (option): 100/110/200/220 VAC, 1 Ø, 50/60 Hz	
IEC 61993-2, ITU-R M CCNR Test Standard Ship reporting capacit		ENVIRONMENT Temperature	
	y te, 4500 reports per minute on two channels	GPS Antenna Unit -25°C to +70°C Other Units -15°C to +55°C	
TRANSPONDER U TX/RX Frequency RX1: RX2: Output Power DSC Receiver	NIT 156.025 MHz to 162.025 MHz Default CH87B (161.975 MHz) Default CH88B (162.025 MHz) 1 W/ 12.5 W selectable CH70 fixed, 156.525 MHz, G2B, 1200 bps	Waterproofing (IEC 60529) Antenna Unit IPX6 Vibration (IEC 60945 ed.4) EQUIPMENT LIST Standard	
Bandwidth	25 kHz/ 12.5 kHz	1. Transponder Unit FA-1501 2. Display Unit FA-1502	1 u 1 u
DISPLAY UNIT Screen Size Effective Viewing Area Pixel Number	4.5" monochrome LCD 95 (H) x 60 (V) mm 120 (H) x 64 (V)	 Display of the resolution of the re	1 u 1 s
GPS RECEIVER Receiving Channels Rx Frequency/Rx Cod Position Fixing System Position Accuracy INTERFACE COM 1 - 4* Input:	10 m (HDOP ≤ 4) IEC 61162-1/61162-2 VSD, SSD, ABM, BBM, ACA, ACK, AIR, DTM, GBŞ, GGA, GLL, GNS, HDT, LRF, LRI, OSD, RMC, ROT, VBW VTG PIWWIVD, PIWWSSD, PIWWVSD	 Option 1. VHF Antenna Unit 150M-W2VN with bracket 2. Antenna Cable Kit For GPS/VHF Combined Antenna GVA-100 OP24-00300: 30 m, OP24-00310: 50 m For GSC-001 and GPA-017S TNC-PS-3D-15: 15 m, CP-20-02700: 30 m, CP-20-02710: 5 3. Antenna Base CP20-01111: Pipe mount, No. 13-QA310: Offset bracket, No. 13-QA330: Deck mount, No. 13-RC5160: Handrail mour 	50 m
Output: *Note: COM 4 also fur	VDM, VDO, ABK, ACA, ALR, TXT, LR1, LR2, LR3, LRF, LRI actions as SENSOR input	 Cable between Display and Transponder Unit MJ-A10SPF0012-050/100/250/500/1000: 5/10/25/50/100 m 	
SENSOR (input) COM 4 - 6 Input: AD-10 External Beacon	IEC 61162-1/61162-2 DTM, GNS, GLL, GGA, RMC, VBW, VTG, OSD, HDT, GBS, ROT AD-10 format (FURUNO gyro format) RS-232C	 Flush Mount Kit OP20-29: F type, OP20-17: S type Pilot Plug OP24-3 Software for PC Power Supply Unit PR-240 LAN Interface for PC 	
PC	RS-232C 10/100 Base-T Ethernet (Option)	Note: IMO requires that the AIS operate on ship's mains (115/230 VAC) a power source, then a PR-240 is required. Check with your authorities for power as it can be an emergency source (AC generator) or reserve sour	and alte alterna

INTERCONNECTION DIAGRAM

Contact closure

Alarm Output



-	No. 13-QA330: Deck mc 4. Cable between Display a MJ-A10SPF0012-050/10 5. Flush Mount Kit OP20-2 6. Pilot Plug OP24-3 7. Software for PC 8. Power Supply Unit PR-2 9. LAN Interface for PC Note: IMO requires that the AIS power source, then a PR-240 is	00/250/500/1000: 5/10/25/50/100 m 9: F type, OP20-17: S type
Trar	nsponder Unit	Display Unit
FA-1		FA-1502 0.6 kg, 1.3 lb
7.5	180 7.1" 2-Ø7	209 8.2"
ŧ		175 6.9"
	0 0	
15.9"	9	4-ø6
405	385	140 5.5" (
		GPS Antenna
		GSC-001-E GPA-017S-E
	(¹)	0.5 kg, 1.1 lb 0.15 kg, 0.3 lb
		ø156 6.1" 69 2.7" 50.
	250 9.8"	
		GPS/VHF 32 1.3"
		Combined Antenna
	ribution Box	GVA-100 g g
DB-1	0.9 kg, 2.0 lb 125 4.9"	3.3 kg, 7.3 lb
-	<u>113 4.5"</u> <u>2 ø5 57 2.2"</u>	
	3.9	1245
6	8	124
t		
Dilo	t Plug (Option)	
OP24		
91		ø 50 / 169 ø 155
3.5"		<u>966.7"</u>
88		

All brand and product names are registered trademarks, trademarks or service marks of their respective holders.

FURUNO ELECTRIC CO., LTD. FURUNO ESPAÑA S.A. FURUNO U.S.A., INC. FURUNO (UK) LIMITED

FURUNO FRANCE S.A.S. sordeaux-Mérignac, France ww.furuno.fr

FURUNO DANMARK AS FURUNO FINLAND OY FURUNO NORGE A/S adynia, i oici... www.furuno.pl Alesund, Norwa www.furuno.no

FURUNO DEUTSCHLAND GmbH FURUNO SVERIGE AB FURUNO EURUS LLC FURUNO POLSKA Sp. Z o.o. FURUNO HELLAS LTD.

98 3.9" 110 4.3"

ŏ.4"

110 4.3"

Trans

Catalogue No. N-864d SOY INK, 1001PDF Printed in Japan

1 unit 1 unit

1 unit 1 set



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE





A Class-A Universal Automatic Identification System (UAIS) transponder, the FA-150 is designed to improve navigation safety by observing other AIS equipped ships. The FA-150 complies with relevant international regulations and standards (e.g., IMO, ITU-R, IEC) as well as national class requirements.

The FA-150 offers real-time information exchange of your own ships data and other AIS-equipped ships or coastal stations within VHF coverage. Information that is exchanged includes static, dynamic, voyage related data, as well as short safety-related messages.

The FA-150 consists of a GPS antenna, a transponder unit, a display unit and other associated equipment. The internal GPS receiver provides UTC reference for system

In other ways we wanted way have we have the

FURUNG UNIVERSAL AIS

LTARGET LISTI

FUBUN01

FURUNO3

FURUN04

NAME

RNG (NM) BRG(*

1.12

1.15

FURUNO2 2.02 45.3 SE #3 DTLEENTS DNGE#3

0.81 242.5 0.97

119.5

55.

314.

FURUNO offers reliable AIS performance for safe navigation

synchronization. It also gives position, COG and SOG if no external positioning equipment is connected. There are two types of configurations for the antenna unit: GPS and VHF combined and separate antennas. Both types of GPS antennas feature a special interference shield that allows superior performance when they are in an area of influence by equipment such as radar and satellite phones. An exceptionally compact GPS antenna is also available in the separate configuration.

The FA-150 can be interfaced with Radar and ECDIS, allowing AIS information to be displayed on them. No additional interface units are required for connection to the latest FURUNO radar FAR-21x7/28x7 series or ECDIS FEA-2107/2807 series. Use of the WAGO connectors simplifies installation and connection.

SAA

115

MENU ENT

DISP DIM

NAV STATUS

FA-150 PWR

ANNUAR

- islands or other landmasses
- ROT display at tip of COG/SOG vector allows navigators to predict course changes of other vessels



FA-150

- Compact 4.5" silver bright display
- **Full compliance with international regulations and standards**
- IMO MSC.74(69) Annex 3 ITU-R M.1371 IEC 60993-2
- IEC 60945 MTSA 2002 U.S. AIS Requirements
- Integrates with Radar, ECDIS and Electronic Chart System
- **Easy to operate**
- ► Optional PC software
- Provides real-time AIS info for collision avoidance

TARGET LI	ISTI	
NAME RI	NG (NH)	BRG(*)
*"SART"	0.81	242.5
FURUN01	0.97	119.5
FURUNOS	1,12	55.9
FURUN04	1.15	314.3
FURUN02	2.02	45.8
1/ 55 -3	DTLCENT	3 DWGCH3

Target list

6(*)	10
2.5	(A . D)
9.5	K.a. 7 @ /
4.3	
5.8 60)1	1. SNM

	EFURUNC
0	HD6:341*
(A D)	506: 4.
H . + H	006:341.
(@ \.D.)	CPA: 0.5
-	TOPA: S
	INTED:
1. SNM	DETHIL
Plotter	

A	and the second second	
STATES.	EPFS	18/NO
Okn	L/L	18/NO1
7+	SOG	18/NO
SNM	COG	18/N01
17"	HDG	18/NO1
1	ROT	18/NO\
CENTO	11-10	-54 164
	Alarm	status

TALARM STATUS 1

02:29:15 02:29:11 02:29:19 02:29:19 02:29:20

COMM DIMINITO DULLING 1
18/NOV/2009 02:23:57
LAT: 34º 43, 5000 N
LON: 135*21.0000*E
SOG: 10.0 ks EXT GPS
006:155.4* HDG:155*
ROT: R 12.9*/min
PA: H RAIM: USED



	All ships of ${\geq}300~\text{GT}$ on international v	оуа
New build	Cargo ships \geq 500 GT not on internatio	nal
	Passenger ships irrespective of size on all	
Ships not on international voyages	Passenger ships	B
constructed before 1 July 2002	Ships, other than passenger ${\geq}500~\text{GT}$	D

100

02:29:19

Own dynamic data

L SIGN:	
) NO. 10	0000000
) NO. 10	000000

Combined antenna



Separate GPS antennas

COWN STR	ATIC DATA 1/5
NAME	: 100000000 : FURUNO
CALL SI	

Own static data

UNO



marinesales@mackaymarine.com +1 281 479 1515

service@mackaymarine.com