KODEN

GPS Navigator

KGP-920

Fully compliant with New IMO requirements

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FEATURES

Compliant with New IMO
Meeting with New IMO requirements MSC.112(73) and IEC 61108-1 Ed.2 for SOLAS carriage requirements. Approved for U.S. Coast Guard Module B.

GNSS sensor of AIS
The KGP-920 GPS Navigator can be used as a GNSS sensor of AIS.

SBAS ready
The satellite based positioning correction system will be fully operated within a few years time. The systems called WAAS (USA) and EGNOS (EU) are in trial phase which services are broadcast now. MSAS (ASIA) is expected soon too.

Quick positioning
The true parallel 18 channel GPS receiver provides precise and quick positioning at any time.

Optional Beacon DGPS
The built-in beacon receiver is available as an option. It can be used as a high-accuracy differential GPS navigator.

SPECIFICATIONS

GPS receiver

Receiving frequency		1575.42 MHz
Receiving channel		18 channel parallel
Receiving code		C/A code
Sensitivity		Better than -130 dBm (elevation angle: 5° or over)
Accuracy	Position	10 m 2drms (GPS), 5 m 2drms (DGPS), 8 m 2drms (SBAS)
	SOG	0.1 kt rms
(HDOP ≤ 4)	COG	±3° (SOG 1-17 kt), ±1° (SOG >17 kt)

Note: Accuracy is subject to change in accordance with DoD civil GPS user policy.

Display section

Display	LCD with backlight (128 x 64 dots, effective picture area: 85.71 x 54.35 mm)
Display mode	Standard text (NAV1), Navigation graph (NAV2), 3-D Highway (NAV3), Simple plotter (PLOT), MOB (Man Over Board)
Position data display	Latitude/longitude in increments of 0.0001 minute, converted Loran C LOPs, converted Loran A LOPs, converted Decca LOPs
Instant (event) memory	200 points
Waypoint memory	200 points
Route memory	20 routes (Max. 400 waypoints) reverse trail possible
Alarm	Proximity, Cross track error, CDI, Anchor watch
Position compensation	Latitude/longitude, LOPs, Datum
Magnetic compensation	Auto or manual
Power supply	10.8 to 31.2 VDC
Power consumption	4.5 W or less (at 24 VDC)

Environment

Operating temperature	Display unit: -15° to +55°
	Antenna unit: -25° to +70°
Waterproofing	Display unit: IPX4
	Antenna unit: IPX6

Data Input/Output

Output data format (DATA connector)	IEC 61162-1 / NMEA 0183 Ver.1.5 (NMEA1, 2) / CIF / SHIPMATE (AAM, APB, BOD, BWC, DCN, DTM, GBS, GGA, GLC, GLL, GNS, GSA, GSV, MSS, RMB, RMC, Rnn, RTE, SGR, VTG, WDC, WPL, XTE, ZDA)
Output data format (DATA2 connector)	IEC 61162-1 (AAM, APB, BOD, BWC, DCN, DTM, GBS, GGA, GLC, GLL, GNS, GSA, GSV, MSS, RMB, RMC, Rnn, RTE, SGR, VTG, WDC, WPL, XTE, ZDA)
Input data format	RTCM SC104 Ver.2.0 (DGPS)

EQUIPMENT LIST

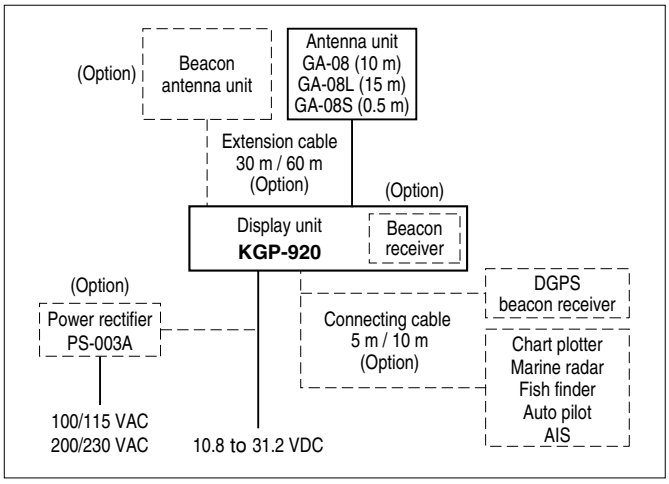
Standard Equipment

Display unit	KGP-920	With mounting bracket and vinyl cover	0.86 kg	1
Antenna unit	GA-08	For GPS reception, with 10 m antenna cable with BNC connector	0.62 kg 10 m	1
	GA-08L	For GPS reception, with 15 m antenna cable with BNC connector	0.81 kg 15 m	
	GA-08S	For GPS reception, with 0.5 m antenna cable with N-P connector	0.26 kg 0.5 m	
DC power cable, installation material, spare fuses, and operation manual				1 set

Main Options

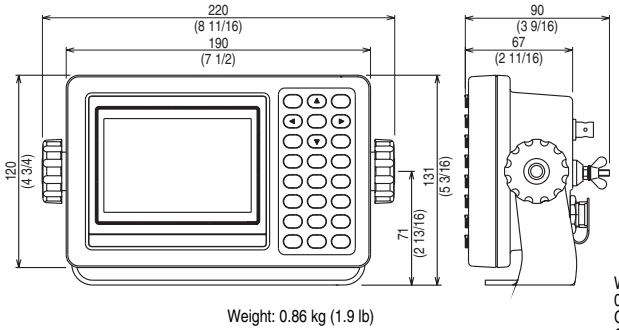
Internal beacon receiver kit	Int-DGPS kit factory built-in only	Receiver PCB, Connector, Harness	–
Beacon antenna unit	BA-02 / BA-03	E-field type / H-field type	–
Receiving antenna	RA-14	2.45 m whip for BA-02	0.3 kg
Hose band	738-1015	For antenna unit	–
Connecting cable	CW-373-1-5M/10M	6 pin waterproof connector both ends	5 m / 10 m
Flush mount kit	FMK-1	Flush mount frame with screws	–
Antenna cable extension kit	CW-839-30M kit	5 DFB cable with N-J connector one end and a loose N-J connector	30 m
Antenna cable extension kit	CW-394-60M kit	8 DSFA cable with N-J connector one end and a loose N-J connector	60 m
Conversion cable	CW-826	One end with N-P connector and the other end with BNC connector	0.5 m

CONNECTIONS



DIMENSIONS AND WEIGHT

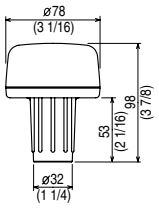
Display unit



Weight: 0.86 kg (1.9 lb)

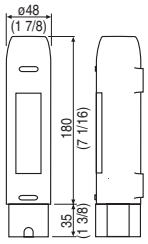
Unit: mm (inch)

Antenna unit (GPS) GA-08/08L/08S



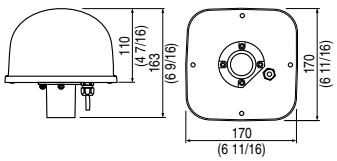
Weight:
0.19 kg (0.42 lb) without cable
GA-08: 0.62 kg (1.4 lb) including cable (10 m)
GA-08L: 0.81 kg (1.8 lb) including cable (15 m)
GA-08S: 0.26 kg (0.57 lb) including cable (0.5 m)

Antenna unit (beacon) BA-02-K/02-KL/02-KS



Weight:
0.4 kg (0.89 lb) without cable
BA-02-K: 0.85 kg (1.9 lb) including cable (10 m)
BA-02-KL: 1.2 kg (2.7 lb) including cable (15 m)
BA-02-KS: 0.33 kg (0.7 lb) including cable (0.5 m)

Antenna unit (beacon) BA-03/03L/03S



Weight:
0.92 kg (2.1 lb) without cable
BA-03: 1.4 kg (3.1 lb) including cable (10 m)
BA-03L: 1.6 kg (3.6 lb) including cable (15 m)
BA-03S: 0.99 kg (2.2 lb) including cable (0.5 m)

• Design and specifications are subject to change without notice.

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Safety precaution To ensure proper and safe use of the equipment, please carefully read and follow the instructions in the Operation Manual.

For details, please contact:

www.koden-electronics.co.jp

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