

DGPS Sensor / GPS Sensor

KBG-3/GPS-20A

Make Sense!

Seamless precise positioning anywhere, anytime



DGPS Sensor
KBG-3



GPS Sensor
GPS-20A

- Parallel 18-channel GPS receiver
- WAAS and EGNOS enabled

FEATURES

Precise and quick positioning

Parallel 18-channel receiver provides precise and quick positioning at any time.

WAAS and EGNOS enabled

SBAS, Satellite Based Augmentation Systems, are fully operated in USA (WAAS) and Europe (EGNOS). The KBG-3 and GPS-20A are able to receive the seamless correction signals provided from these systems.

Differential GPS (with beacon)

KBG-3 with built-in beacon receiver upgrades your navigators to the level of highly accurate DGPS navigation system.

SPECIFICATIONS			KBG-3	GPS-20A
GPS receiver section				
Receiving frequency	1575.42 MHz \pm 1 MHz			
Receiving channel	Parallel 18-channel			
Sensitivity	-130 dBm			
Accuracy	Position	GPS 10 m (2 drms, SA=OFF, PDOP \leq 3)		
		DGPS	5 m (2 drms, SA=OFF, PDOP \leq 3)	-
		SBAS	8 m (2 drms, SA=OFF, PDOP \leq 3)	
	Velocity	0.1 kt (rms, SA=OFF, PDOP \leq 3)		
Dynamics	Velocity	190 kt or less		
	Acceleration	1 G or less		
Position updated time	Every 1 second			
Time to position fix	Cold start	50 seconds (typical)		
	Warm start	45 seconds (typical)		
	Hot start	25 seconds (typical)		
Differential GPS	Receiver input	-	SBAS (WAAS, EGNOS, MSAS)	
	External input	-	RTCM SC-104	
Beacon receiver section				
Receiving frequency	283.5 to 325.0 kHz		-	
Receiving type	Double super heterodyne		-	
Antenna	Ferrite loop antenna		-	
Channel separation	500 Hz step		-	
Sensitivity	10 μ V/m or less		-	
Dynamic range	Better than 90 dB		-	
Station selection	Auto (required position information) or Manual		-	
Beacon station data (for automatic station selection)	Automatic beacon almanac entry, built-in station list in the world		-	
General				
Power supply	10.8 to 31.2 VDC			
Power consumption	2.5 W or less		1.3 W or less	
Temperature range	Operation	-25°C to +55°C		
	Storage	-30°C to +70°C		
Water protection	IPX6 (IEC60945)			
Data communication	Asynchronous data communication with RS-422			
Input data	Parameter setting, Beacon setting		Parameter setting	
Output data	Format	NMEA 0183 Ver. 2.0 (Note: Ver. 1.5 is available on option basis)		
	Sentence	GGA, GLL, VTG, RMC, ZDA, GSA, GSV, MSS	GGA, GLL, VTG, RMC, ZDA, GSA, GSV	
	Data level	RS-422		
Output current	20 mA or less		40 mA or less	

EQUIPMENT LIST

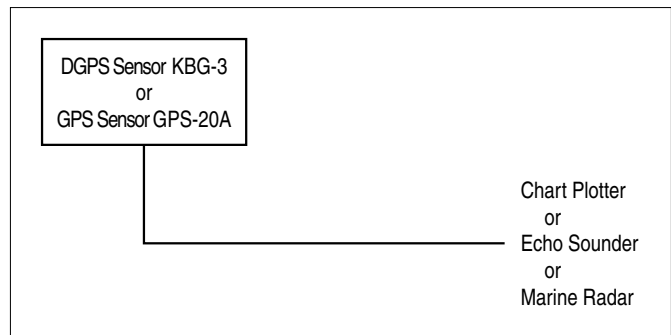
Standard equipment (KBG-3)

DGPS Sensor	KBG-3-A	With 15 m cable (with 6-pin connector)	1
	KBG-3-B	With 15 m cable (with 6-pin waterproof connector)	
Installation manual			1

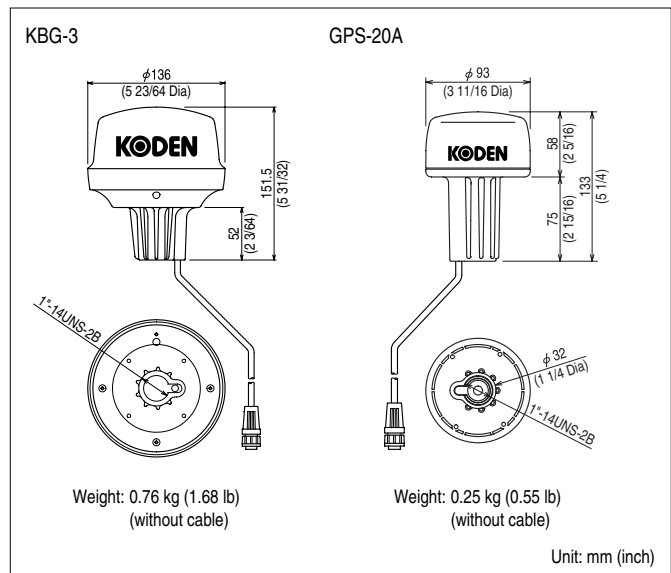
Standard equipment (GPS-20A)

GPS Sensor	GPS-20A	With 10 m cable (with connector)	1
		15 m cable is available on option basis	
Installation manual			1

CONNECTIONS



DIMENSIONS AND WEIGHT



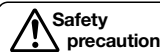
• Design and specifications are subject to change without notice.

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

For details, please contact: