

### *Make Sense!*

- *TRUE parallel 18 channel GPS receiver*
- *WAAS and EGNOS ready*
- *Seamless precise positioning anywhere, anytime*



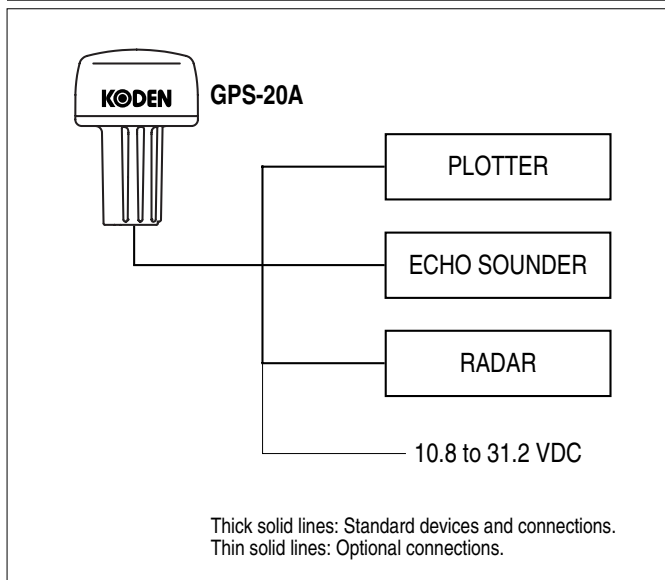
### **FEATURES**

- The TRUE 18 channel parallel receiver provides precise and quick positioning at any time.
- WAAS and EGNOS 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. The GPS-20A is ready for receiving the seamless correction signals provided from these systems.
- NMEA 0183 interface with provision for external RTCM SC-104 differential corrections.
- The NMEA output supplied as standard, providing highly accurate positioning and navigation data to externally connected equipment such as a radar, plotter, sounder, DSC VHF, etc.

## SPECIFICATIONS

Receiving frequency	1575.42 MHz $\pm$ 1 MHz
Receiving channel	Parallel 18 channel
Sensitivity	Better than -130 dBm
Accuracy (PDOP $\leq$ 3)	Position GPS: Better than 10 m (2 drms, SA=OFF, PDOP $\leq$ 3) DGPS: Better than 8 m (2 drms, SA=OFF, PDOP $\leq$ 3)
	Velocity Better than 1 m/sec (rms, SA=OFF)
Dynamics	Velocity Less than 350 km/h
	Acceleration Less than 1 G
Position update time	Every 1 second
Time to position fix	Cold start 50 seconds (typical)
	Warm start 45 seconds (typical)
	Hot start 20 seconds (typical)
Initial position data	Not necessary
Almanac and time data	Not necessary
Differential Receiver input	SBAS (WAAS, MSAS, EGNOS)
GPS External input	RTCM SC-104
Power supply	Voltage 10.8 to 31.2 VDC
	Consumption Less than 1.3 W
Temperature range	Operation -25°C to +55°C
	Storage -40°C to +85°C
Data communication	Asynchronous data communication with RS-422
Input data	DGPS RTCM SC-104, Baud rate: 4800
Output data	Format NMEA 0183 Ver. 2.0 (NOTE: Ver. 1.5 is available on option basis)
	Sentence GGA, GLL, VTG, RMC, ZDA, PKODA, PKODG1, PKODG7, GSA, GSV
	Data level RS-422
Output current	40 mA maximum

## CONNECTIONS



## EQUIPMENT LIST

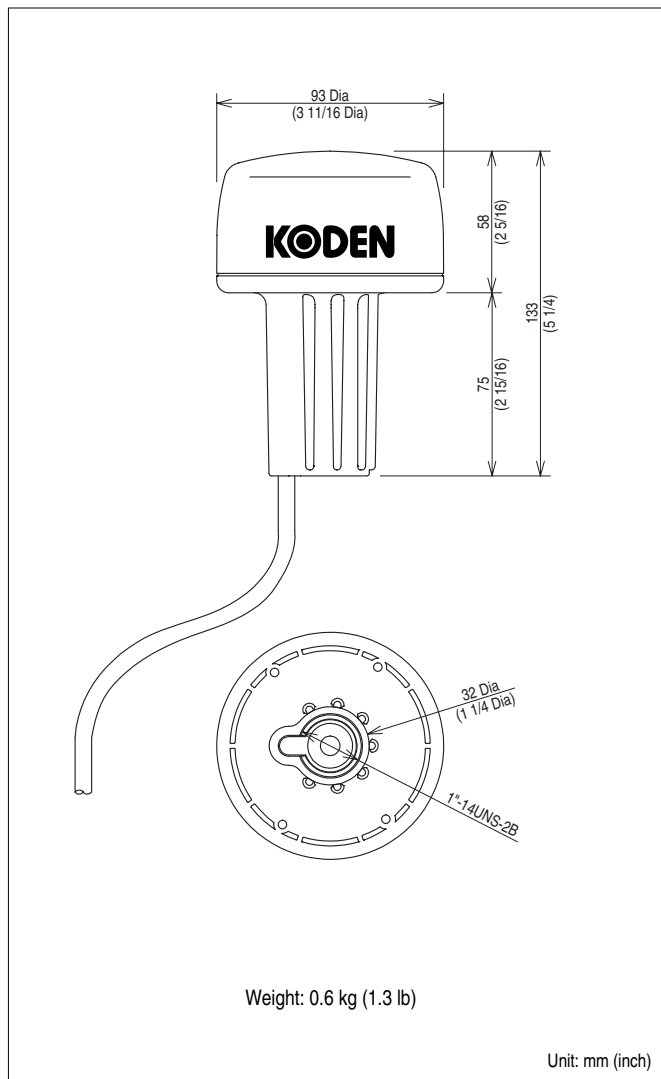
### Standard equipment

GPS sensor	GPS-20A	With 10 m cable (15 m cable is available on option basis)	1
Technical manual	TBA		

### Option

Connector	1005	5P	1
Connector	1006	6P	1
Connector	LTWBD-06BFFA-L180	6P	1
Connector	HDEB-9S	D-sub 9P	1
	HDE-CTF	Plug case	1
Hose band	738-1015		2

## DIMENSIONS AND WEIGHT



\* Specifications subject to change without notice.

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Certified to ISO 9001 ( TUV PRODUCT SERVICE )



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:

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