KODEN

GNSS Compass

# KC-1400

## Safe navigation with multi-GNSS compass system


## Features

- Compatible with GPS / QZSS, Galileo, BeiDou, GLONASS
- Highly accurate heading, position, speed, rolling, pitching and heaving data
- SBAS (MSAS / WAAS / EGNOS) enabled
- 10,000 waypoints, 100 routes and 3,000 track points
- Built-in high-precision gyro sensor for backup
- Equipped with four data ports of NMEA0183 x 3, LAN (IEC61162-450) x 1
- 4.3-inch high-resolution Color LCD
- Equipped with numeric keypad

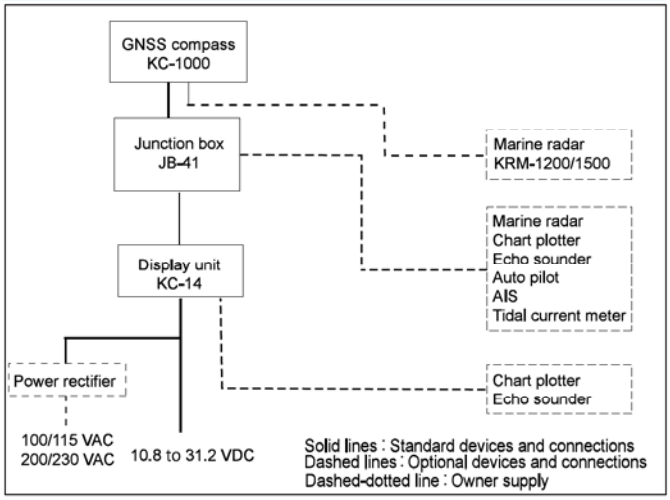
## SPECIFICATIONS

| | | | |
|---|---|---|---|
| Model | KC-1400 | | |
| Display unit | KC-14 | | |
| GNSS compass | KC-1000 | | |
| Display size and type | 4.3-inch color LCD (480x272 dots, effective picture area: 95.04x53.86 mm) | | |
| Receiving frequency | 1575.4200 MHz / 1561.0980 MHz / 1602.5625 MHz | | |
| Receiving channel | 72 channels | | |
| Received signal | GPS<br>QZSS<br>Galileo<br>SBAS | 1575.4200 MHz | L1 C/A<br>L1C/A, L1S<br>E1 B/C<br>L1 C/A |
| | BeiDou | 1561.0980 MHz | B1 |
| | GLONASS | 1602.5625 MHz | L1 OF |
| Sensitivity | -148 dBm or less | | |
| Setting time | 90 seconds or less (standard) | | |
| Time to position fix | 50 seconds or less (standard) | | |
| Accuracy — Heading | 0.5° rms or less | | |
| Accuracy — Position | GPS: 10m (2 drms, SA: OFF, PDOP: 3 or less)<br>SBAS: 3m (2 drms, SA: OFF, PDOP: 3 or less) | | |
| Accuracy — Velocity | 1 m / sec (rms, SA: OFF, PDOP: 3 or less) | | |
| Heading resolution | 0.1° | | |
| Maximum rate of turn | 45° / sec | | |
| Maximum role/pitch angle | 30° | | |
| Maximum follow-up acceleration | 1 g | | |
| Base line length | 0.5 m | | |
| Presentation mode | Compass 1, Compass 2, ROT, NAV1, NAV2, NAV3, Navigation Graph, Highway, Plotter, POB | | |
| Position data display | Latitude/longitude in increments of 0.0001 minutes, converted Loran C LOPs, converted Loran A LOPs, converted Decca LOPs | | |
| Navigational display | Speed, Course, Distance/Bearing/XTD/CDI/Time to Waypoint, Present time (UTC or LOC), Satellite status, Distance/Bearing between two points, POB display | | |
| Instant (event) memory | 1,000 points | | |
| Waypoint memory | 9,000 points | | |
| Route memory | 100 routes reverse trail possible | | |
| Alarm | GNSS Fix, ANCH, PROX, XTD, CDI | | |
| Compensation | Heading, Latitude/Longitude, LOP, Time difference, Pitch/Roll | | |
| Magnetic compensation | Automatic or Manual | | |
| Parameters | Sailing mode (Great circle / Rhumb Line), Position display (L/L Lop), Language, LOP (Loran C, Loran A, Decca), Memory of waypoints and name (up to 10 letters), Selection of measuring unit (nm, sm, km), Position/Velocity/Heading/Pitching/Rolling/ROT/Heaving averaging constant | | |
| Output data format and sentences | NMEA 0183 Ver.2.0, IEC 61162-1ed5, IEC 61162-450<br>AAM, APB, ATT, BOD, BWC, DTM, GBS, GGA, GLL, GNS, GSA, GSV, HDM, HDT, HVE, RMB, RMC, ROT, RTE, THS, VTG, WPL, XTE, ZDA, PKODG21, ALC, HBT (DATA3/4 only) | | |
| Power supply | 10.8 to 31.2 VDC | | |
| Power consumption (24 VDC) | 12W or less | | |

### Environmental

| | | |
|---|---|---|
| Operating temperature | Display unit | -15°C to +55°C |
| | GNSS compass | -25°C to +55°C |
| Water protection | Display unit | IPX4 |
| | GNSS compass | IPX6 |

## CONNECTIONS




## EQUIPMENT LIST

### Standard Equipment

| | | |
|---|---|---|
| Display unit | KC-14 | With mounting bracket and hard cover |
| GNSS compass | KC-1000 | With bird protector |
| DC power cable | CW-276-2M | With 5-pin connector and one end plain |
| Connecting cable | CW-430-5M | 6-pin water resistant connector and one end plain |
| NMEA cable | CW-427-15M | 12-pin water resistant connector and one end plain |
| Junction box | JB-41 | For connection between Display unit and GNSS compass |
| Operation Manual, Installation material | | |

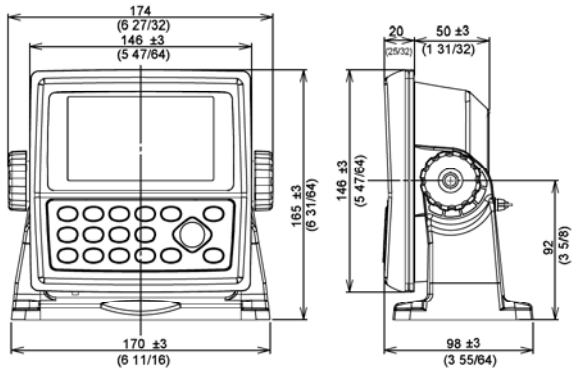
### Option

Connecting cable, Junction box, Power rectifier, AC power cable, LAN cable, NMEA extension cable, LAN extension cable

## DIMENSIONS AND WEIGHT

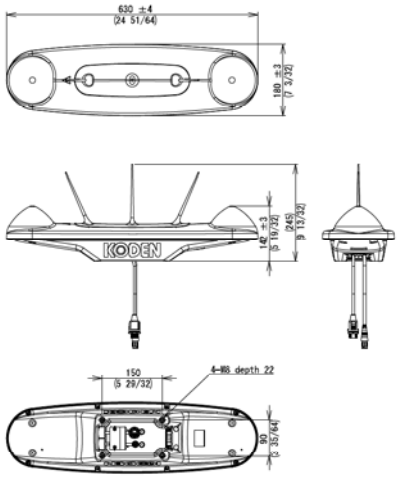
Display unit
KC-14

Unit: mm (inch)



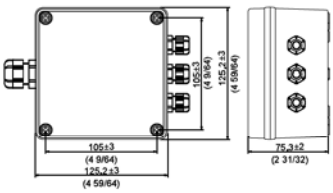

Weight : 0.89kg (1.96lb)

GNSS compass
KC-1000




Weight : 2.5kg (5.5lb)

Junction box
JB-41




Weight : 0.48kg (1.06lb)

• 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:


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24-12, Printed in Japan