SI-TEX MARINE ELECTRONICS




# GPK-22D GNSS Receiver

PRODUCT SHEET

## GPS / GNSS · Dual-band L1/L5

*More accurate data — for more confident navigation.*

| L1/L5 | Hz | 1m | NMEA |
|---|---|---|---|
| FREQUENCY | UPDATE RATE | ACCURACY* | PROTOCOL |
| **L1, L5** | **10 Hz** | **1.0 m CEP** | **NMEA 0183/2000** |

* with SBAS · 1.5 m CEP without SBAS

### NAVIGATE COASTAL WATERS WITH CONFIDENCE

The GPK-22D GNSS receiver and antenna gives you precise, dependable positioning with dual-band reception, even in the busiest harbors.

Reflections off hulls, bridges and marina structures throw off a standard GNSS fix right when you need it most. GPK-22D is built on the u-blox F10 dual-band platform to see past that noise — tracking L1 and L5 simultaneously for a fix you can trust. The receiver and antenna are integrated into a single compact, waterproof housing for easy installation on any vessel.

- Navigate in more locations with five-constellation GNSS support — GPS, Galileo, BeiDou, NavIC and QZSS
- Get high-sensitivity tracking with update rates up to 10 Hz
- See past reflections with dual-band L1/L5 reception, for 1.0 m CEP accuracy (with SBAS)
- It's water-resistant (IPX7) to withstand the elements, from –20°C to +60°C
- Available in NMEA 0183 or NMEA 2000 — just a cable choice, same receiver

### AVAILABLE VERSIONS



#### GPK-22D – NMEA 0183

**Code:** ***to be assigned***

GPK-22D with **10 m** NMEA 0183 output cable



#### GPK-22D – NMEA 2000

**Code:** ***to be assigned***

GPK-22D with **6 m** NMEA 2000 output cable

# GPS / GNSS

## TECHNICAL SPECIFICATIONS

### PERFORMANCE

| | |
|---|---|
| GNSS constellations | GPS, Galileo, BeiDou, NavIC, QZSS/SBAS (dual-band L1/L5) |
| Update rate | Up to 10 Hz |
| Accuracy | 1.0 m CEP (with SBAS)<br>1.5 m CEP (without SBAS) |
| Sensitivity | –167 dBm (tracking & navigation) |
| Electrical interface | UART, DDC (I2C compliant) |

### ENVIRONMENTAL

| | |
|---|---|
| Operating temp. | –20°C / +60°C |
| Storage temp. | –30°C / +85°C |
| Water resistance | IPX7 |

### COMMUNICATION

| | |
|---|---|
| Cable – version A | NMEA 0183 output cable, 10 m |
| Cable – version B | NMEA 2000 output cable, 6 m |

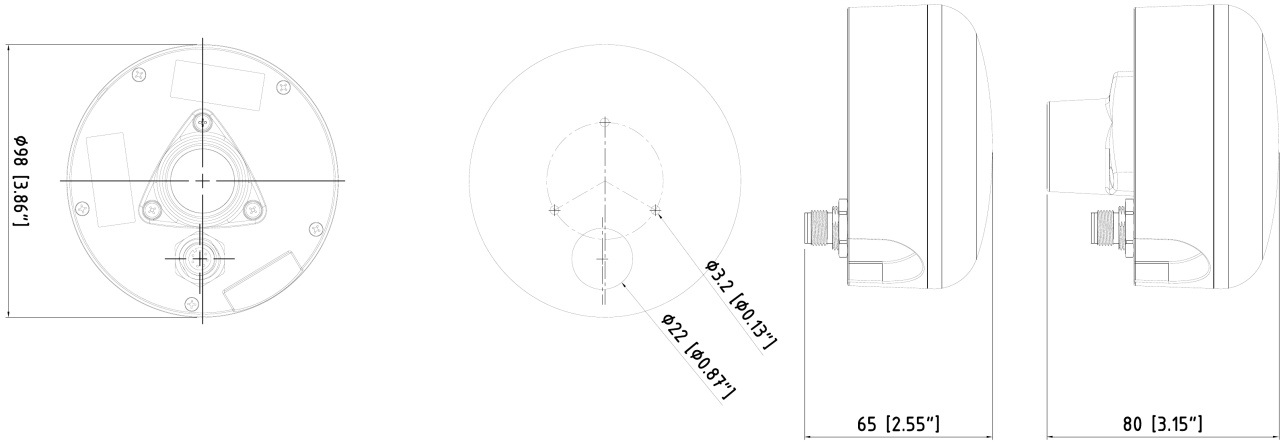
Same receiver head for both; NMEA 0183 or NMEA 2000 output is selected simply by which cable is connected.

### PHYSICAL AND ELECTRICAL

| | |
|---|---|
| Diameter | Ø98 mm [3.86"] |
| Depth | 65 mm [2.55"] / 80 mm [3.15"] (two housing profiles, see drawing) |
| Mounting pattern | Ø22 mm [0.87"] bolt circle<br>Ø3.2 mm [0.13"] mounting holes |
| Weight | 160 g without cable |
| Supply voltage | 10 – 35 Vdc |
| Power consumption | 0.8 W max |

### CONFIGURABLE PARAMETERS

| | |
|---|---|
| GNSS constellation selection | Configurable via UBX-CFG commands |
| Update rate | 1 – 10 Hz |
| Baud rate | 9600 baud (default), configurable |




### PRODUCT CUSTOMIZATION

- ▶ Stripe color
- ▶ Serigraphy
- ▶ Manuals translations
- ▶ Packaging

# GPK-22D GNSS Receiver

WHY GPK-22D

## Six reasons GPK-22D keeps a confident fix when the water gets difficult

L1/L5

### Dual-Band GNSS

Trust every fix with dual-band L1/L5 reception, for 1.0 m position accuracy (with SBAS) to compatible chartplotters, instrument displays and autopilots.

Hz

### High-Sensitivity Tracking

Get smooth, responsive tracking with update rates up to 10 Hz, delivering position, velocity and time data even during tight maneuvers.

GNSS

### Expanded GNSS Support

Navigate in more locations with concurrent access to five global satellite systems — GPS, Galileo, BeiDou, NavIC and QZSS.

SBAS

### SBAS Compatible

Count on corrected accuracy: onboard SBAS support fixes signal measurement errors for improved reliability.

IPX7

### Built for the Elements

Count on it season after season: IPX7 water resistance and a –20°C to +60°C operating range stand up to life on deck.

MNT

### Flexible Installation

Get up and running fast with simple pole-mount installation and a choice of NMEA 0183 or NMEA 2000 output cable.

**The advantage in one line:** other marine GNSS receivers ask you to trust a channel count. GPK-22D gives you a measured 1.0 m CEP result instead.

# GPK-22D GNSS Receiver

## WHERE GPK-22D DELIVERS

HBR

### Coastal & Harbor Navigation

Navigate tight harbors with confidence: breakwaters, marina buildings and moored vessels create the same reflected-signal problems as a city street — exactly where dual-band multipath rejection matters most, and exactly where boats make their slowest, most collision-sensitive maneuvers.

MFD

### Chartplotter & Autopilot Integration

Connect in minutes: NMEA 0183 and NMEA 2000 output means GPK-22D drops into existing MFDs, autopilots and instrument displays without custom wiring or protocol conversion — a reliable position source feeding every downstream system on the boat.

1m

### Fishing & Small Craft

Return to the same spot every time: 1.0 m CEP accuracy at up to 10 Hz update rate gives small-craft skippers repeatable waypoint returns and stable track lines, without paying for RTK precision the mission does not need.

GNSS

### Offshore & Cruising Yachts

Sail with confidence, passage after passage: concurrent access to five global satellite systems and IPX7-sealed construction keep a dependable fix on board, wherever the route takes you.

## Ready to bring dual-band precision aboard?

Contact SI-TEX for pricing, samples and integration support.