

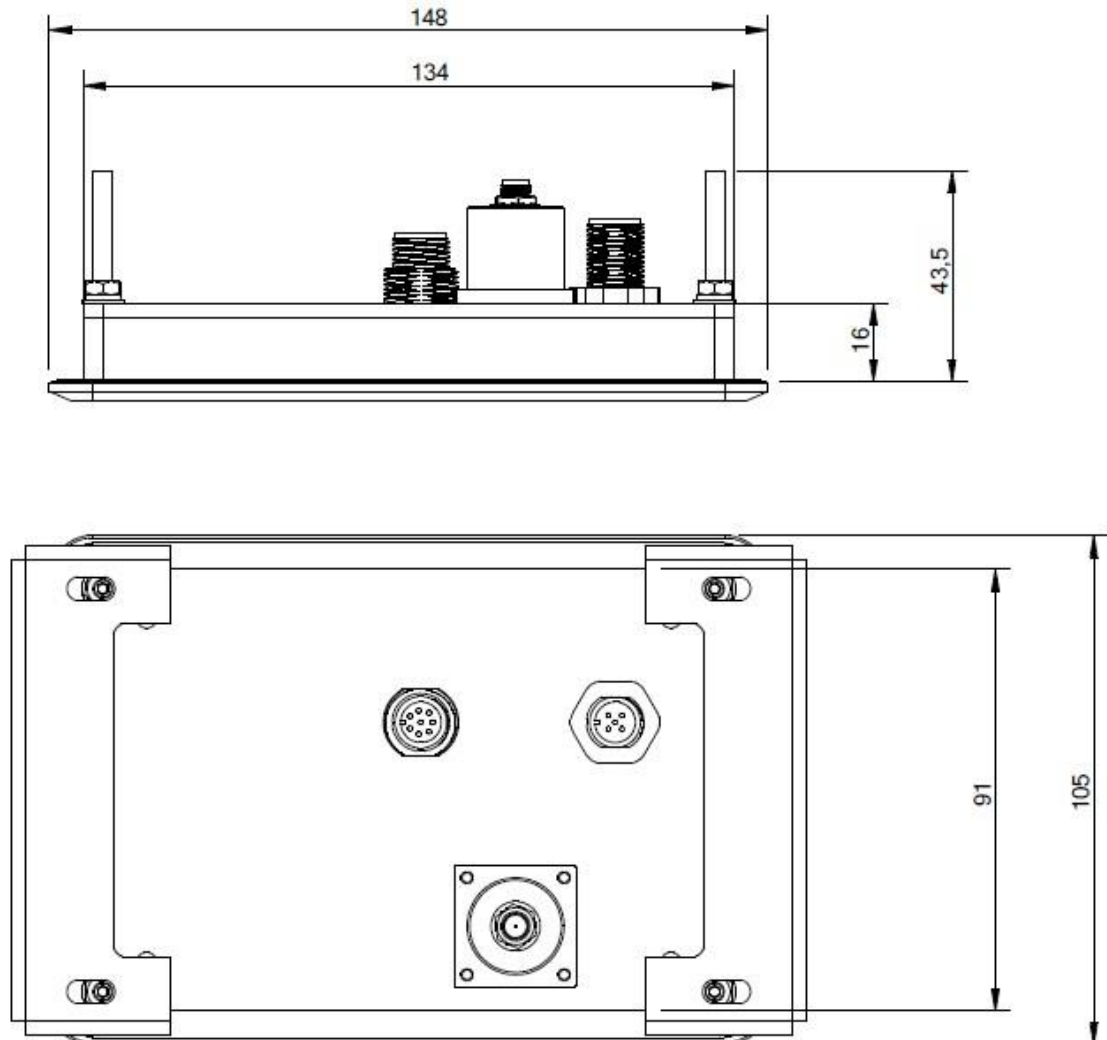
GD3

Installation Manual



1 Mounting of GD3

The measures of the device are in the figure below. Please consider them when preparing the boat for mounting of GD3.



Dimensions of the GD3 (for mounting)

The following instructions shall be taken into account at the mounting of the GD3:

- GD3 should be securely mounted on a flat surface where it can be clearly observed by the user.
- The position and orientation of the GD3 are not important, but it should be easily accessed and clearly visible for user.
- There should be enough space so that the cables for the boat electronics and antenna can be connected without excessive bending or pulling.
- The GD3 should preferably be mounted in a dry environment.
- Do not drill holes on the housing, as components can be damaged or dust and water sealing breached!

1.1 GPS antenna

Your GPS antenna comes with the SMA connector, with a screw-type coupling mechanism. Connect it to the dedicated connector on GD3. No excessive force is required.

For the best results, the antenna should get a clear view of the sky, with no obstacles in its way, to receive signals from GPS satellites. Ensure that there is a clear path to the sky from your GPS antenna.

Wood in combination with water (wet wood) and steel are good blockers for GPS signals. Fiberglass and glass do not typically block GPS and other signals. Also, the human body is a formidable obstacle for the antenna, so the antenna should be positioned in a position where the direct view of the sky is unobstructed by human bodies.

Do not mount it in the shadow of obstructions, or close to any bars (especially metallic) or radio antennas. Be sure to not have lots of wiring running above the GPS antenna. The antenna should be in an area where it will be minimally affected by multi-pathing; that is receiving unwanted reflected signals from the structure of your boat.

NMEA (USA National Marine Electronics Association) recommends 90 cm of separation between GPS antennas and most other antennas including VHF, cellular and Wi-Fi antennas. In case of radar on the boat place the GPS antenna well above or below the radar beam.

Unlike other antennas, you want to keep your GPS antenna closer to deck level. If it is installed high up on a mast or arch and you are in rough seas, the GPS will give inaccurate readings for the course over ground and speed over ground.



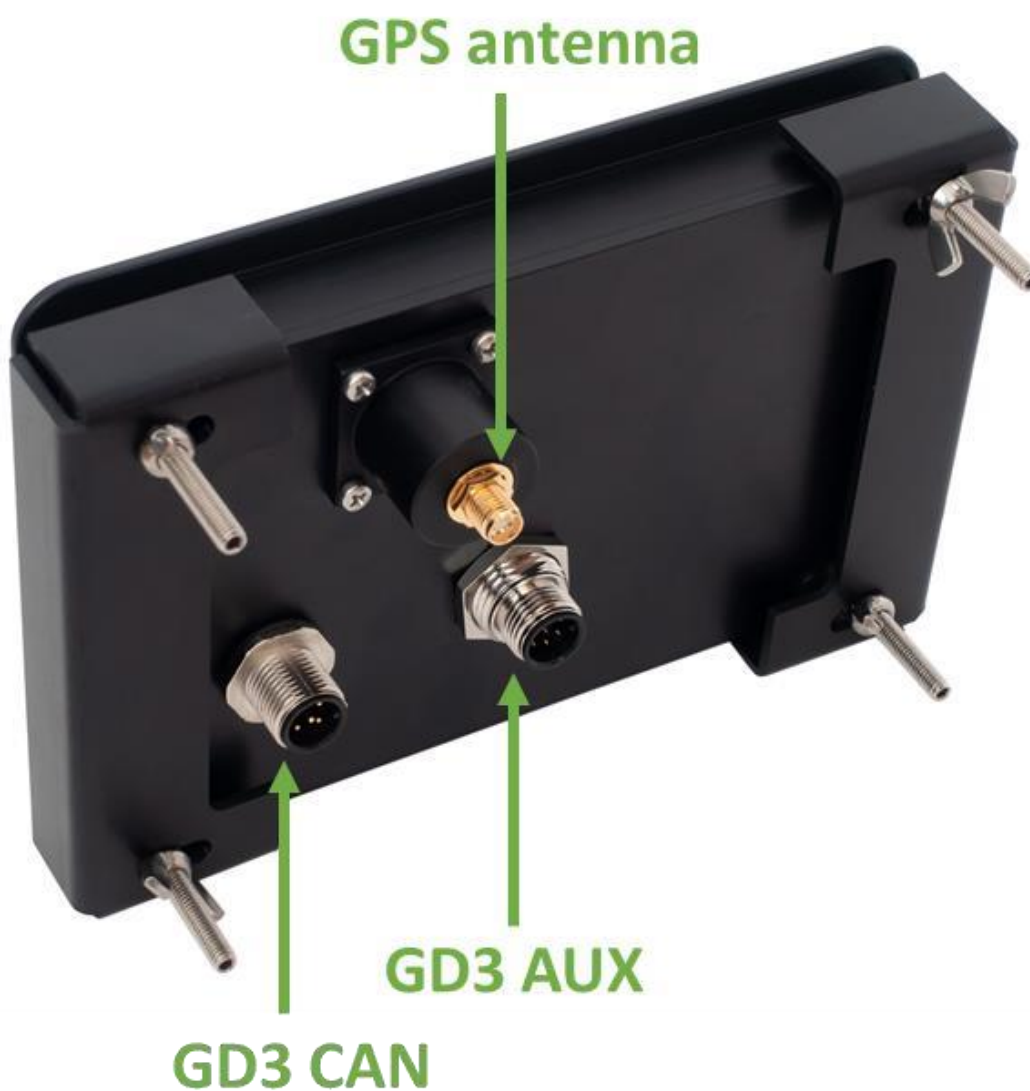
GPS antenna, contained in the box (ANTDOM-05-01-WPM GPS Antenna)

2 GD3 connections

GD3 has three connectors on the backside (see the figure below):

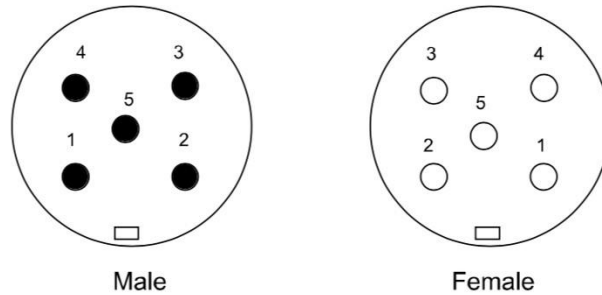
- GD3 CAN – CAN Bus connector
- GD3 AUX – Auxiliary connector
- GPS antenna – Connector for the active GPS antenna

In Piktronik systems you only need to connect GD3 CAN connector, which must be connected to CAN network of your boat and GPS antenna for the GPS data. For faster GPS positioning, it is recommended to connect the GD3 AUX connector as well to permanent 12V power.



GD3 backside

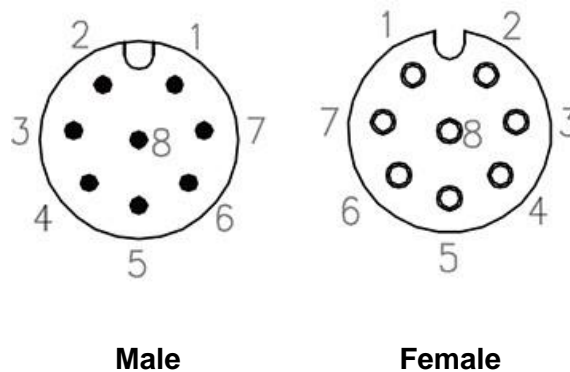
2.1 5-pin connector



GD3 CAN, 5-pin connector cable, M12

1. SHLD; optional CAN shield,
2. CAN_V+; positive power supply,
3. GND; ground,
4. CAN_H; CAN high bus line,
5. CAN_L; CAN low bus line.

2.2 8-pin connector



GD3 AUX, 8-pin connector cable, M12

1. +12VBAT, +12V power supply,
2. NA (reserved),
3. NA (reserved),
4. NA (reserved),
5. NA (reserved),
6. NA (reserved),
7. NA (reserved),
8. GND, ground.

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