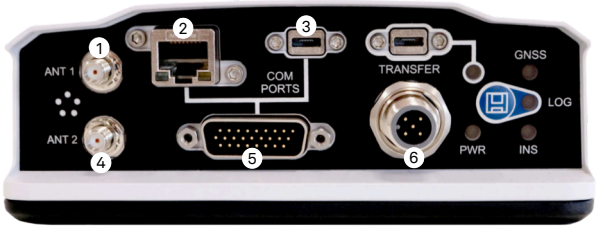
1 SMA Ant 2
L-band & GNSS position input

2 RJ45 port
For TCP/IP connectivity & web browser config

3 USB Micro A/B port
For computer to receiver communication via USB



4 SMA Ant 2
GNSS Heading input

5 DSub HD26
Provides access to x3 COM ports

6 Power supply input
Connects to 9V-36V power supply

Equipment required for setup: • Power supply • DSUB HD26 to DB9-Pin cable • Ethernet cable • Antennas and cabling

Initial setup

1. Mount the antenna/s. For setups where heading is required:
   - Place the GNSS antennas at the same height, which is required to ensure a consistent heading and avoid the heading solution becoming noisy due to each antenna being subject to different amounts of vessel motion.
   - Place both antennas as far from each other as possible. The GNSS heading direction is computed from Ant 1 to Ant 2 (see Figure 1). The accuracy of the solution is determined mainly by the distance (or baseline) between both antennas. The larger the baseline, the better the heading precision will be. Veripos recommend a minimum baseline of two metres.
   - Mount antennas along the vessel Fwd/Aft centreline, placing Ant 2 as the furthest forward antenna.
   - If the installation places antennas perpendicular to the vessel North, with Ant 1 at the Starboard side and Ant 2 at the Port side, a correction of approx. +90° would be needed in Quantum to align the GNSS heading to vessel North.
   - After antenna installation, following the guidelines listed here, a gyro calibration should be conducted to ensure the best possible heading accuracy. Once the initial setup is complete, initiate the heading output by sending the following command `LOG COM1 GPHDTDUALANTENNA ONTIME 1` (COM1 used as an example).
2. Mount the receiver in a well-ventilated location.
3. Connect one end of the antenna cable/s to the GNSS antenna/s and the other end to the antenna connector/s on the receiver.
4. Connect the Ethernet cable to a PC or laptop.
5. Connect the COM cables to any devices intended for data transmission.
6. Connect the supplied power cable to the PWR input and connect to a power supply.
7. Connect the power supply to the unit. The PWR LED should illuminate solid green.
8. The LD8 default IP is 192.168.2.8. Ensure that the connecting computer exists on the same subnet.
9. Using the latest version of Microsoft Edge, Mozilla Firefox, or Google Chrome, browse to 192.168.2.8 and navigate to **Tools > Terminal**.

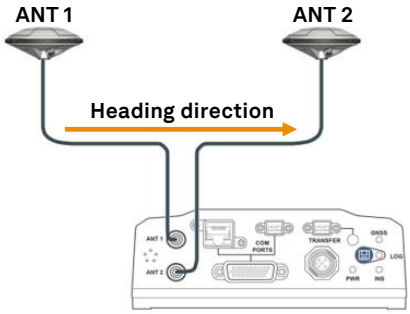


Figure 1: Heading direction, computed from Ant 1 to Ant 2

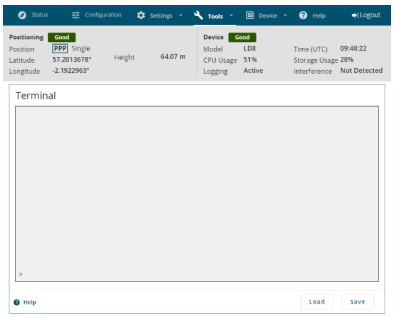


Figure 2: LD8 Tools > Terminal page

Enabling Veripos services

1. To use Veripos services, the LD8 requires an L-band beam connection.
2. To track up to three L-band beams simultaneously, enter `ASSIGNLBANDBEAM AUTO` into the terminal.
3. Send `LOG LBANDTRACKSTAT` to verify successful beam tracking. Any three Veripos beams ("25E", "IOR", "143.5E", "98W", "AORW") should be present in the echoed output.
4. With an established L-band beam connection, a user may now enable the unit. If the unit ID is unknown, use the terminal to send the command `LOG VERIPOSINFO`. An output similar to the below will be echoed (unit ID location highlighted):
   `VERIPOSINFO WCOM1 0 66.5 FINESTEERING 2040 378378.140 03008020 2bd7 14970 <123456 UNASSIGNED 80000733 ""`
5. Email Veripos Support (support@veripos.com) and specify the unit ID, vessel name, services required and vessel SAL number.
6. To verify the unit is enabled, enter the command `LOG VERIPOSSTATUSA`. An "`ENABLE`" status will appear in the terminal output:
   `VERIPOSSTATUSA,WCOM1,0,67.0,FINESTEERING,2040,375008.267,02008020,0719,14970;ENABLE,LOCKED*0d439ce3`

Contact Hexagon | Veripos

For further guidance, download the *LD8 Installation and Operations Manual* from www.veripos.com
Alternatively, for expert 24/7 advice via phone or email, raise a request for assistance via support@veripos.com.