

User Manual & Installation Manual

S-Link Gateway GW-1



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DECLARATION OF CONFORMITY

MC_0020



Sleipner Motor AS
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Declare that this product with accompanying standard control systems
complies with the essential health and safety requirements according to:

DIRECTIVE 2013/53/EU
DIRECTIVE 2014/30/EU
DIRECTIVE 2014/35/EU

It is the installers responsibility

When installing Sleipner equipment follow the outlined regulations/ classification rules (electrical/ mechanical) according to international or special national regulations. Instructions in this guide cannot be guaranteed to comply with global electric/ mechanic regulations/ classification rules.

Follow all health and safety laws in accordance with their local outlined regulations/ classification rules.

Before installation, it is important that the installer reads this guide to ensure necessary acquaintance with the product.

The recommendations made in this manual are guidelines ONLY, and Sleipner Motor AS (Sleipner) strongly recommend that before installation, advice is obtained from a naval architect familiar with the particular vessel and regulations/ classifications.

This manual is intended to support educated/ experienced staff and is therefore not sufficient in all details for professional installation. (NB: These instructions are only general instruction. If you are not skilled to do this work, please contact professional installers for assistance.)

All electrical work must be done by a licensed professional.

Faulty installation of Sleipner products will render all warranty given by Sleipner Motor AS void.

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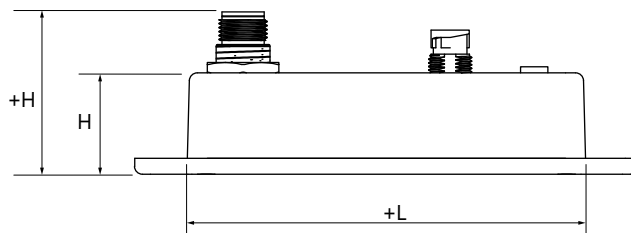
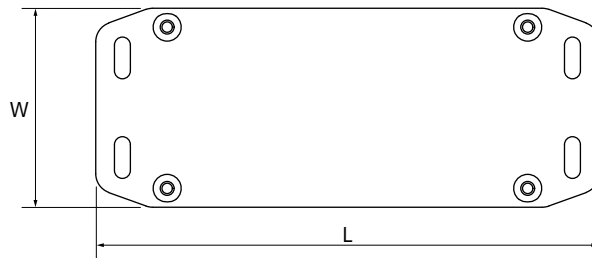
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Considerations and Precautions

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IMPORTANT

If installing S-link products DO NOT connect any other control equipment to the S-link controlled products except Sleipner original S-link products or via a Sleipner supplied interface product made for interfacing with other controls. Any attempt to directly control or at all connect into the S-link control system without the designated and approved interface will render all warranties and responsibilities for the complete line of Sleipner products connected void and null. If you are interfacing by agreement with Sleipner and through a designated Sleipner supplied interface, you are still required to also install at least one original Sleipner control panel to enable efficient troubleshooting if necessary.



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GW-1 Gateway Measurements

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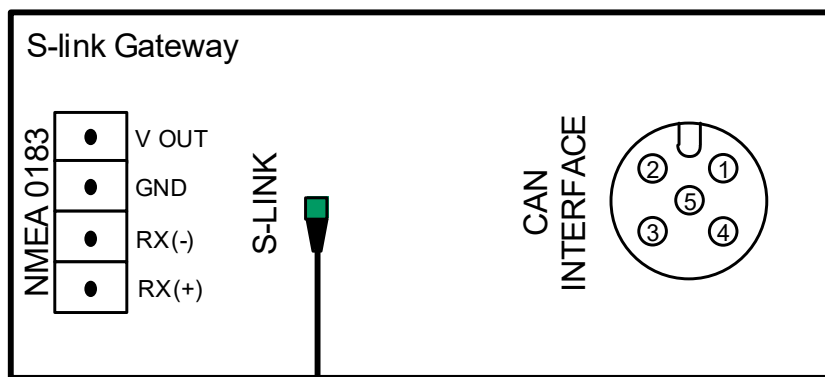
Measurement code	Measurement description	GW-1	
		mm	inch
+H	Total Gateway Height	41	1.6
H	Gateway Height	25,5	1
W	Gateway Width	50	2
L	Total Gateway Length	126,5	5
+L	Gateway Length	100	3.9

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Technical Specifications

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Supply Voltage	8-31VDC, Powered from S-Link
Power Consumption	1 W
CAN INTERFACE M12 male connector	CAN 2.0B, baud rate 250Kb
NMEA 0183 Connector	GPS RX @ 4800 baud or 38400 baud
NMEA 0183 Power Output	Max 100mA (internally fused)
Weight	200g/7.05oz



M12 Input Male Connector
(View into connector)
Pin 1 NC
Pin 2 NC
Pin 3 GND
Pin 4 CAN-H
Pin 5 CAN-L



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Introduction

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! Please refer to the graphic for special considerations relating to your model !

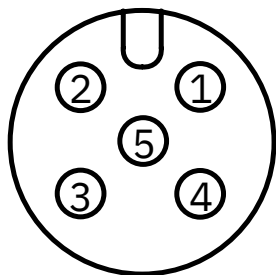
S-Link gateway GW-1 is a device for connecting NMEA2000 CAN bus equipment to the S-Link bus. Connect an S-Link spur cable from the gateway to S-Link backbone, and non S-Link equipment to the CAN Interface M12 male connector or NMEA0183 GPS antenna to the NMEA0183 connector.

Power to the gateway is supplied from the S-Link so no external power is required.

Connection

The GW-1 does not feed any power to the CAN-bus and connected devices has to be power feed from elsewhere. The GW-1 does not include any termination resistor on the M12 male connector output, so terminating resistors is required on the CAN-bus. CAN-L & CAN-H are galvanic isolated. Use standard NMEA 2000 micro cable to connect to the CAN interface connector. Sleipner Motor AS do not provide NMEA 2000 micro cables.

CAN
INTERFACE



M12 Input Male Connector (View into connector)

Pin 1 NC

Pin 2 NC

Pin 3 GND

Pin 4 CAN-H

Pin 5 CAN-L

Supported NMEA2000 PGN's

Navigation PGN's:

GPS Position - Rapid Update	PGN 129025
GPS COG & SOG - Rapid Update	PGN 129026
GPS System Time	PGN 126992
GPS GNSS Position Data	PGN 129029

Engine and transmission PGN's:

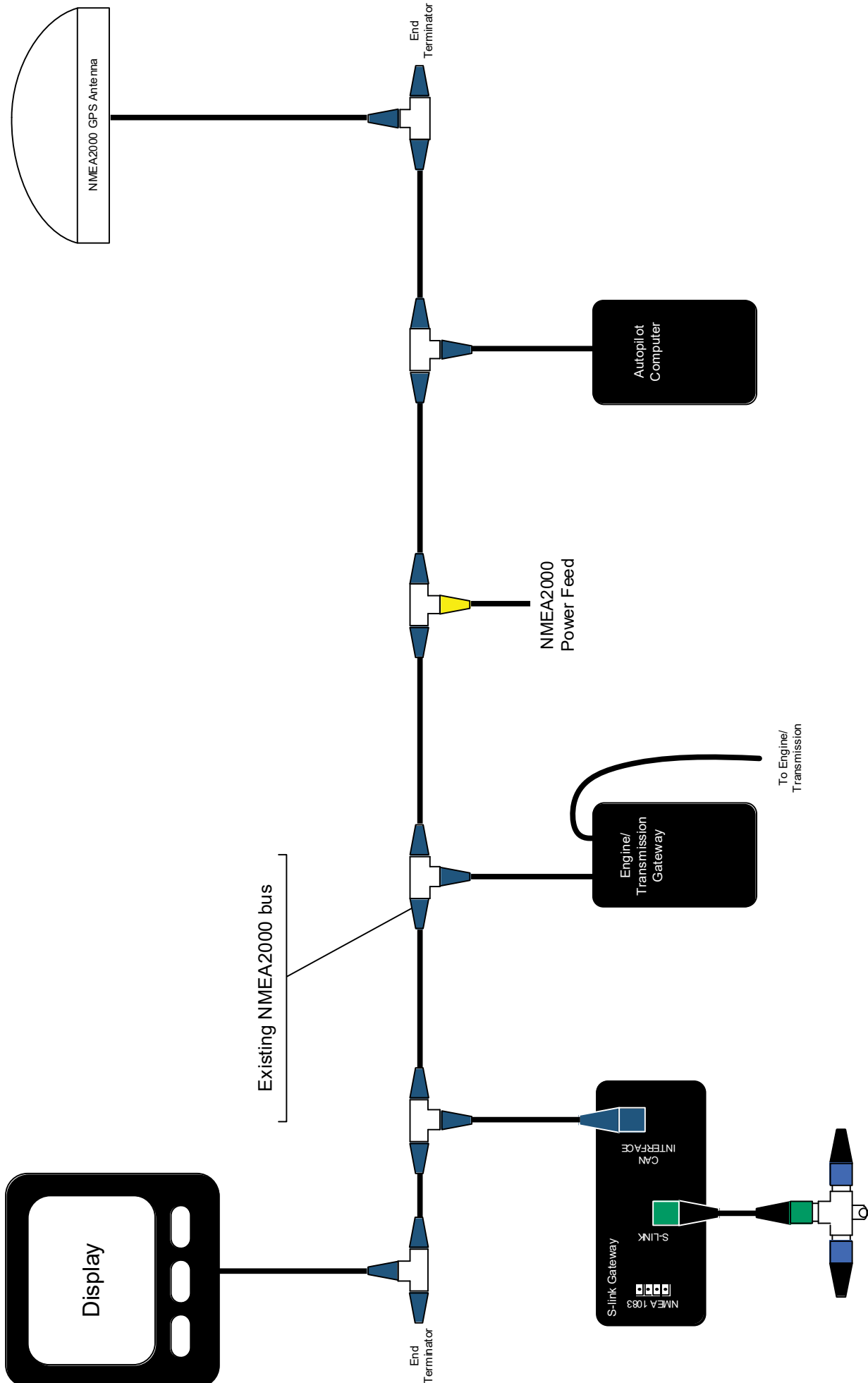
Engine Parameters, Rapid Update	PGN127488
Transmission Parameters, Dynamic	PGN127493

Autopilot PGN's:

Vessel Heading	PGN 127250
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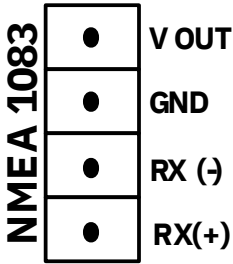
LED indication

TX LED off:	Not sending any messages.
TX LED flashing:	Flashing at max 100ms on and 100ms off when sending messages.
RX LED off:	Not receiving any messages.
RX LED flashing:	Flashing at max 100ms on and 100ms off when receiving messages



Connection

The V OUT pin can feed power to a single GPS antenna with maximum 100mA, and it is internally fused. V OUT is S-link bus voltage. RX A(+) & TX B(-) are galvanic isolated



Baud rate

4800 baud and 38400 baud is supported, and are set automatically.

Supported NMEA0183 sentences

\$GxRMC sentences from all positioning systems is supported.

LED indication

- LED off: No valid NMEA0183 GPS signals.
- LED flashing: Flashing 100ms on and 100 off for each valid GPS message received.
 - Valid GPS antenna message at 38400 baud normal flashing on/off (100ms/100ms).
 - Valid GPS antenna message at 4800 baud normal flashing on/off (100ms/900ms)

GNSS Antenna Prioritization

GNSS antennas priority sequence is 1. NMEA0183 with 100ms update rate 2. NMEA2000 3. NMEA0183 with 1000ms update rate. GW-1 will only forward one of the NMEA2000 GPS antenna signal to S-link if more than one antennas is present on the NMEA2000 bus. If more than one GW-1 have GNSS signal(s) then GW-1's will prioritize on antenna type from the list above and only one GW-1 will broadcast GNSS signals on the S-link bus.

All this requires GW-1 firmware V1.021 or newer.

Status LED

- LED off: No power to the device.
- LED on: S-Link communication and power OK.
- LED flashing (on/off (500ms/500ms)): No S-Link communication but power is OK.

For the most up to date documentation, we advise you to visit our website www.sleipnergrouper.com for the spare parts list.

For additional supporting documentation, we advise you to visit our website www.sleipnergrouper.com.

1. The equipment manufactured by Sleipner Motor AS (The "Warrantor") is warranted to be free from defects in workmanship and materials under normal use and service.
2. This Warranty is in effect for of two years (Leisure Use) or one year (Commercial use) from the date of purchase by the user. Proof of purchase must be included, to establish that it is inside the warranty period.
3. This Warranty is transferable and covers the product for the specified time period.
4. In case any part of the equipment proves to be defective, other than those parts excluded in paragraph 5 below, the owner should do the following:
 - (a) Prepare a detailed written statement of the nature and circumstances of the defect, to the best of the Owner's knowledge, including the date of purchase, the place of purchase, the name and address of the installer, and the Purchaser's name, address and telephone number;
 - (b) The Owner should return the defective part or unit along with the statement referenced in the preceding paragraph to the warrantor, Sleipner Motor AS or an authorized Service Centre, postage/shipping prepaid and at the expense of the Purchaser;
 - (c) If upon the Warrantor's or Authorized Service Centre's examination, the defect is determined to result from defective material or workmanship, the equipment will be repaired or replaced at the Warrantor's option without charge, and returned to the Purchaser at the Warrantor's expense;
 - (d) no refund of the purchase price will be granted to the Purchaser, unless the Warrantor is unable to remedy the defect after having a reasonable number of opportunities to do so. Prior to refund of the purchase price, Purchaser must submit a statement in writing from a professional boating equipment supplier that the installation instructions of the Installation and Operation Manual have been complied with and that the defect remains;
 - (e) warranty service shall be performed only by the Warrantor, or an authorized Service Centre, and any attempt to remedy the defect by anyone else shall render this warranty void.
5. There shall be no warranty for defects or damages caused by faulty installation or hook-up, abuse or misuse of the equipment including exposure to excessive heat, salt or fresh water spray, or water immersion except for equipment specifically designed as waterproof.
6. No other express warranty is hereby given and there are no warranties which extend beyond those described in section 4 above. This Warranty is expressly in lieu of any other expressed or implied warranties, including any implied warranty of merchantability, fitness for the ordinary purposes for which such goods are used, or fitness for a particular purpose, and any other obligations on the part of the Warrantor or its employees and representatives.
7. There shall be no responsibility or liability whatsoever on the part of the Warrantor or its employees and representatives for injury to any person or persons, or damage to property, loss of income or profit, or any other consequential or resulting damage or cost which may be claimed to have been incurred through the use or sale of the equipment, including any possible failure or malfunction of the equipment, or part thereof.
8. The Warrantor assumes no liability for incidental or consequential damages of any kind including damages arising from collision with other vessels or objects.
9. This warranty gives you specific legal rights, and you may also have other rights which vary from country to country.

[illegible]

www.sleipnergroun.com



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