SIDE-POWER
Thruster Systems

GW-1 S-link Gateway

EN Installation and user's manual v1.0.2

S-link™

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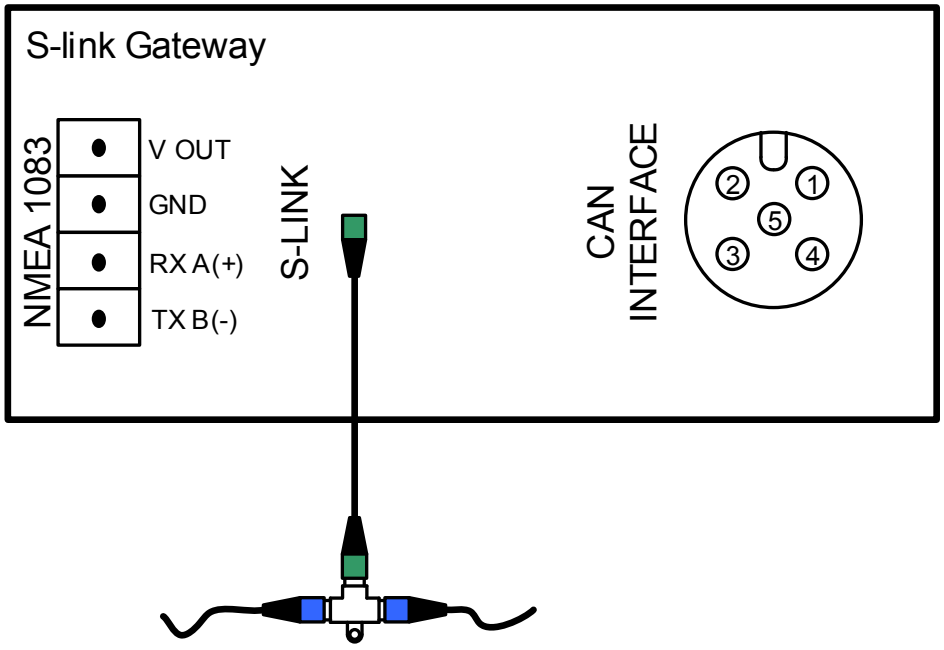
Content

1. Introduction

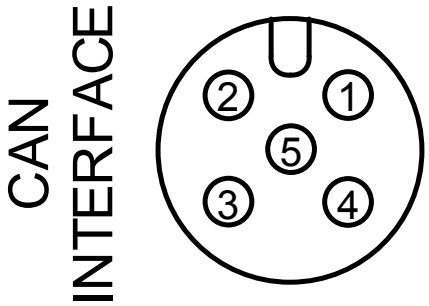
S-Link gateway GW-1 is a device for connecting NMEA2000 CAN bus equipment to the S-Link bus. Connect an S-Link spur cable from the gateway to S-Link backbone, and non S-Link equipment to the CAN Interface M12 male connector or NMEA0183 GPS antenna to the NMEA0183 connector. Power to the gateway is supplied from the S-Link so no external power is required.



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

2.1 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.



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

2.2 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

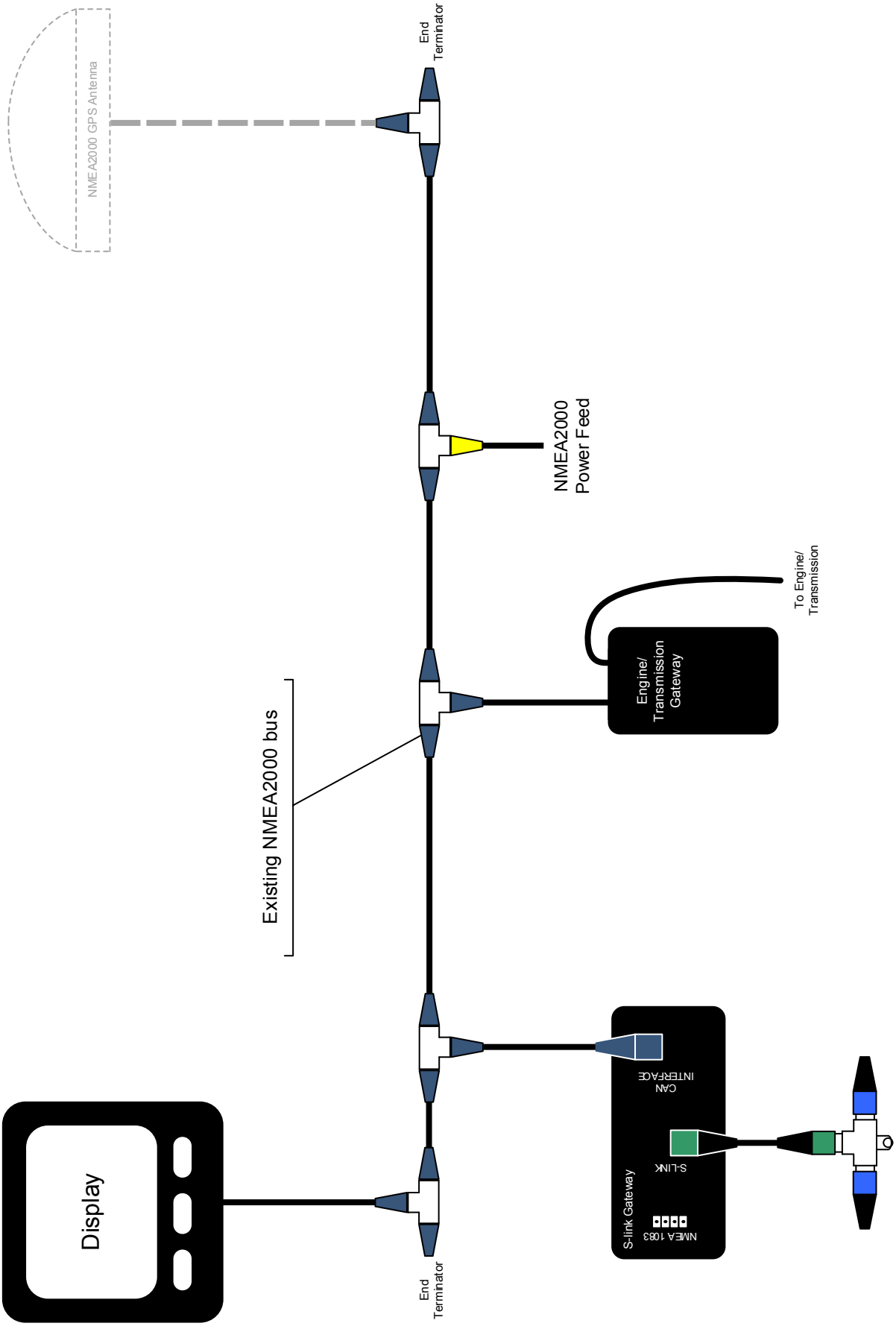
Engine and transmission PGN's:

Engine Parameters, Rapid Update	PGN127488
Transmission Parameters, Dynamic	PGN127493

2.3 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.

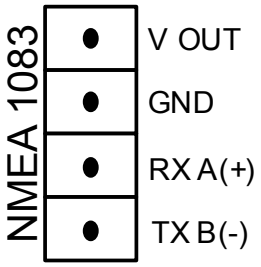
2.4 Typically NMEA2000 connection diagram



3. NMEA0183 interface

3.1 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.



3.2 Baud rate

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

3.3 Supported NMEA0183 sentences

GPS position $GPRMC.
NMEA2000 CAN-bus position signals will be preferred over NMEA0183 $GPRMC sentence, if both antennas is connected. And the NMEA0183 $GPRMC sentence will be neglected.

3.4 LED indication

LED off: No valid GPS antenna message or NMEA2000 antenna is active.
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).

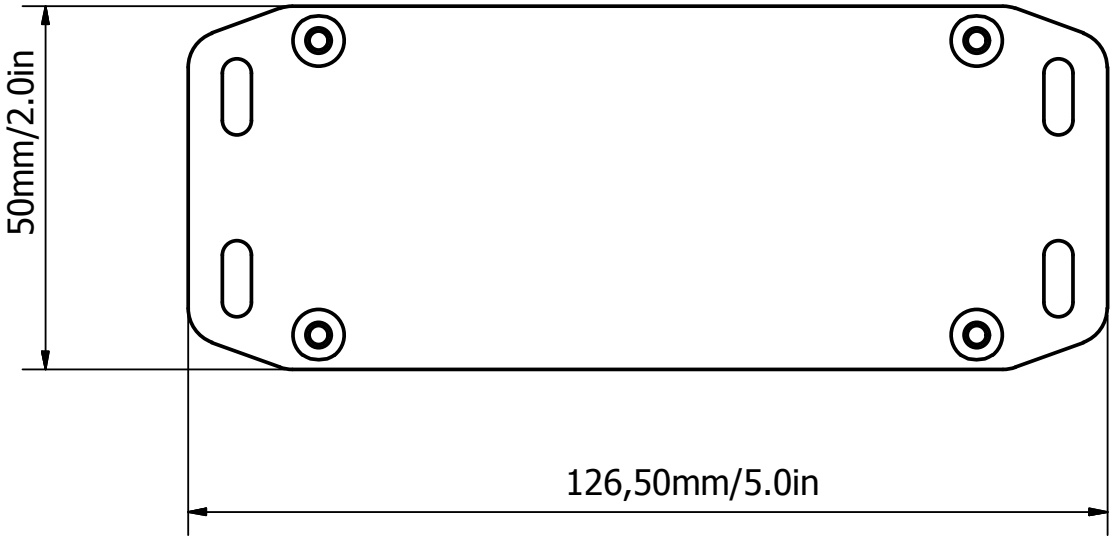
4. Status LED

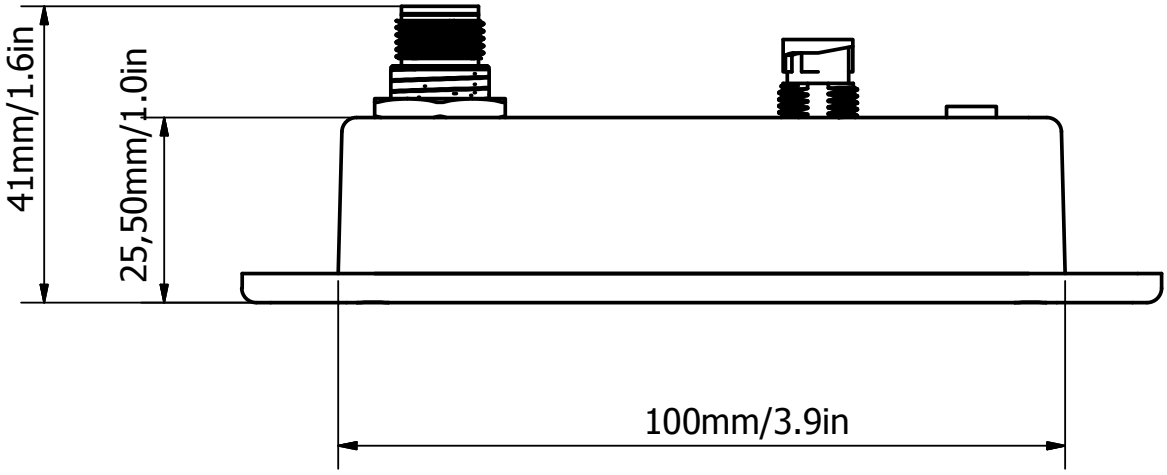
LED off: No power to the device.
LED on: S-Link communication and power OK.
LED flashing (on/off (500ms/500ms)): No S-Link communication but power is OK.

5. Technical specifications

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

6. Measurements





Worldwide sales and service

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