



SN01 N2K GATEWAY

USER MANUAL∑

V1.2⊠

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1. Introduction

Simarine's SN01 SiCOM N2K Gateway module allows your PICO to transmit data.

2. Safety

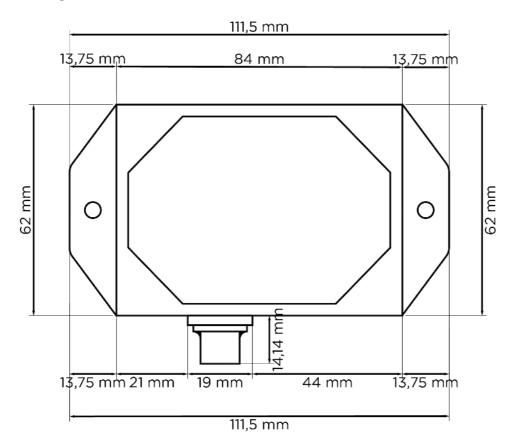
Electrical specialists with proper safety equipment should make installation of Simarine electronics. When working with batteries, you should wear protective clothing and eye protection.

CAUTION: Batteries contain acid, a corrosive, colorless liquid that will burn your eyes, skin, and clothing. Should the acid come in contact with eyes, skin or clothing, wash it immediately under fresh water for at least 15 minutes, and seek medical support immediately.

CAUTION: Do NOT connect anything to a damaged battery. It could heat up, catch fire or explode.

CAUTION: Lead-acid batteries can generate explosive gases during operation. Never smoke, allow flames or sparks near the battery. Make sure to keep sufficient ventilation around the battery.

3. Schematics



4. Overview



A - 1x N2K port B - 2x SiCOM port

5. List of supported N2K PGN

Below is a list of supported N2K PGN's. PICO allows transmitting or receiving of certain PGN's according to the table below.

PGN	PGN Name	receiving	transmitting
59904	ISO Request	Yes	No
60928	ISO Address Claim	Yes	Yes
126996	Product Information	No	Yes
127257	Attitude	No	Yes
127502	Switch Bank Control	No	Yes
127505	Fluid Level	No	Yes
127506	DC Detailed Status	No	Yes
127508	Battery Status	No	Yes
130310	Environmental Parameters	No	Yes
130314	Actual Pressure	No	Yes

6. Installation

6.1 Mounting

CAUTION: install the shunt module in a clean dry place, protected from accidental spilling of liquids.

- 1. You can mount the module with the supplied screws using two holes on both sides of the module.
- 2. Connect all cables.

6.2 Cables

For the SiCOM connection use the supplied cable. If not possible, use the following table to determinate the right cable type.

Cable length	Cable type
< 5m	No limitations
>= 5m	2 x 2 x 0.25 mm2 Twister pair
	(recommended)

Note: Minimum power cable cross-section requirement at maximal temperature of insulation 70 $^{\circ}$ C (160 $^{\circ}$ F).

7. Connecting

For proper function of Simarine's SN01 N2K gateway module it is necessary to take the following steps:

- 1. Connect SN01 to Simarine PICO via the SICOM port
- 2. Connect to N2K backbone via the marked N2K port connector
- PICO manual & other user manuals: https://simarine.net/support/

8. Technical specifications

Operating		
Voltage range	6 - 35 V	
Temperature range	-20°C - 70°C (-4°F - 158°F)	
Power consumption at 12V		
Operating	0,6 mA	
Dimensions		
SN01 N2K Gateway	111.80 x 77.52 x 32.11 mm	
	4.40 x 3.05 x 1.26 in	
N2K backbone	1	
Connectivity	SiCOM	