Smart Gateway RS-485 to N2K Product Specification Sheet

Introduction

The Smart Gateway RS-485 to N2K(hereinafter referred to as the Smart Gateway) is used to monitor the status information of the N-series propulsion systems, including but not limited to motor gear, motor voltage, motor speed, battery temperature, State of Charge (SOC), and Speed Over Ground (SOG), and to send the status information to external devices via the NMEA 2000 network.
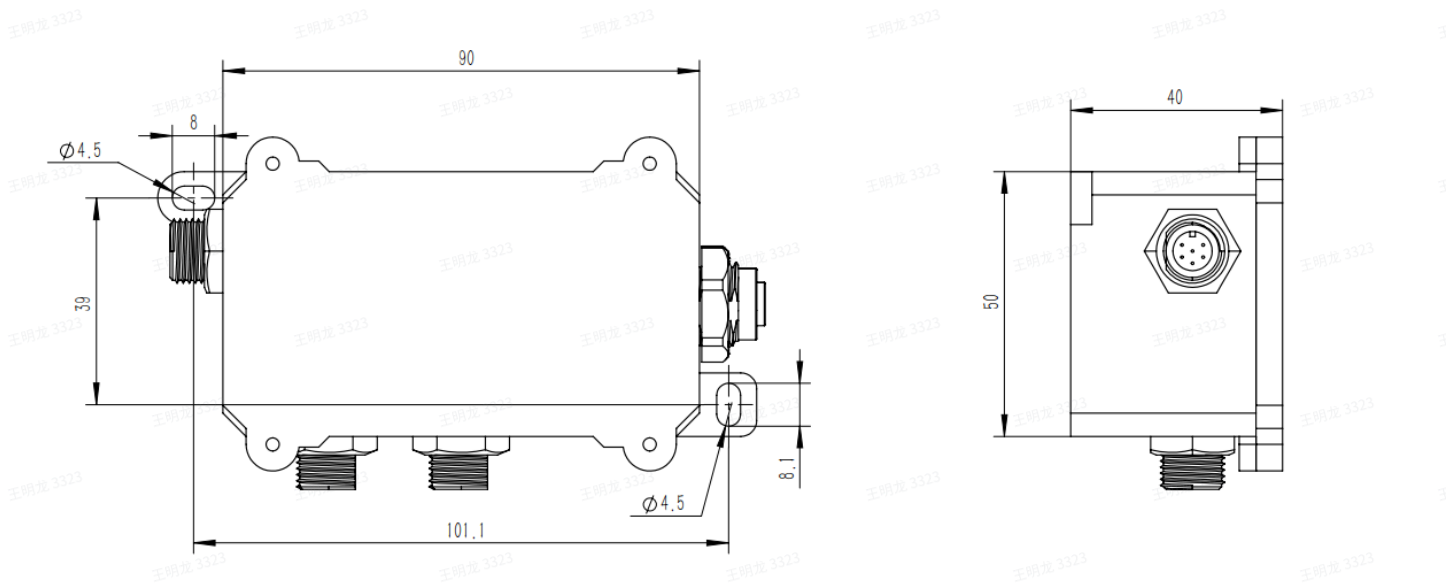
The Smart Gateway features 3 RS485 interfaces and 1 CAN interface, connecting to the propulsion system's 485 network through the RS485 interfaces and to the NMEA 2000 network through the CAN interface.
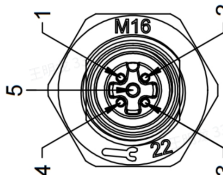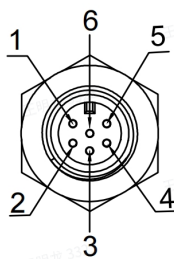

Smart Gateway RS-485 to N2K

Dimension

Unit:mm

Specification

CAN Interface	Standard	NMEA 2000
	Interface quantity	1 x CAN port
	CAN signal	CANH, CANL, GND <table><tr><td>1</td><td>Shield</td></tr><tr><td>2</td><td>+12V</td></tr><tr><td>3</td><td>GND</td></tr><tr><td>4</td><td>CAN_H</td></tr><tr><td>5</td><td>CAN_L</td></tr></table>
	Duplex mode	2-wire Half Duplex Mode
	Baud rate	250kbps
	Load capacity	support concurrent transmitting of 110 nodes
	Transmission distance	40m~10km
	Terminating resistor	optional external 120Ω terminating resistor
	Interface protection	IEC 61000-4-2 (ESD) ±30kV (air), ±30kV (contact)
RS485 interfaces	Standard	EIA RS-485
	Interface quantity	3 x RS-485 port
	RS-485 signal	485_A, 485_B, GND

			1	+5V
			2	485_A
			3	NC
			4	485_B
			5	GND
			6	NC
	Baud rate	38400bps		
Power Requirement	Supply Voltage Range	8～30VDC		
Power Consumption	Full-load	0.4W@12V		
Environmental Limit	Operating temperature	-25～+55℃		
	Storage temperature	-25～+70℃		
Physical Characteristic	Waterproof Rating	IP67		
	Installation	Wall mounting		
	Dimension (W x H x D)	50 mm x 40 mm x 90 mm		
	Weight	150g		