waterworld

NMEA **Connect**

Status NMEA2000
Green   OK
Orange   Not active
Red   No connection

Status   - BUS
Green   OK
Orange   No data
Red   Error

Scan for info

NMEA2000   - BUS

CE

WATERWORLD

NMEA Connect

User manual

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1. NMEA Connect: what does it do?

The WaterWorld NMEA Connect is a compact interface that automatically connects your WaterWorld system (Controllers, BatteryLink and VE-Link) to an onboard NMEA 2000 network. This allows you to display key information from the electric propulsion system and batteries on virtually any NMEA 2000 plotter or display.

1.1 Supplies

✔ **WaterWorld NMEA Connect**
The interface that forms the link between the WaterWorld system and the NMEA 2000 network.

✔ **Connection to the WaterWorld CAN bus**
The module must be connected to the existing WaterWorld CAN bus to receive propulsion and battery data.

✔ **Access to a powered NMEA 2000 backbone**
A correct connection to the onboard NMEA 2000 network, including an active power supply line.

✔ **Optional: mounting and/or extension cables**
Depending on the distance between the module, the WaterWorld system and the NMEA 2000 backbone.

1.2 Applications

• Battery and energy storage information (SoC, voltage, current, charge/discharge power, status).

• Motor data from 1–2 electric motors.

• Clear display of data on a single central screen.

> *The module only transmits data – it is not possible to change WaterWorld system settings via NMEA. This ensures complete safety of the propulsion system.*

2. Installation

2.1 Connecting to the WaterWorld CAN bus

1. Locate a free RJ45 port on the WaterWorld CAN bus.
2. Connect the NMEA Connect using the supplied WaterWorld cable.
   > *The module will now automatically receive power from the WaterWorld system.*

2.2 Connecting to the NMEA 2000 network

1. Install a T-connector in the backbone.
2. Connect the NMEA Connect using a standard NMEA 2000 cable.
3. Check that the backbone:
   - is properly powered,
   - has terminators installed at both ends.

2.3 First startup

1. The NMEA Connect automatically registers itself on the NMEA 2000 network.
2. Supported PGNs are transmitted immediately (see Chapter 3 for PGN specifications).
3. Each detected device appears as an NMEA 2000 device (with its own address) on the NMEA 2000 bus.
   > *Select data source: "WaterWorld Engine" and/or "Battery."*

3. Data communication

Within the NMEA 2000 network, data is exchanged using Parameter Group Numbers (PGNs). Each PGN represents a specific type of information, such as engine or battery data. The NMEA Connect uses this PGN structure to present system data consistently and in accordance with the NMEA standard on connected displays.

Category	PGN	Description
• **Rx**	60928	Address Claim
	59904	Request
• **Tx - General**	60928	Address Claim
	126464	PGN List
	126996	Product Information
	126998	Configuration Information
	130060	Label
	126993	Heartbeat
• **Tx - Engine information**	127490	Engine Parameters
	127494	Electric Drive Information
	128002	Electric Drive Status
• **Tx – Battery & Energy Storage**	127506	DC Detailed Status
	127508	Battery Status
	127513	Battery Configuration Status
	127491	Energy Storage Status (Dynamic)
	127495	Energy Storage Information
	128003	Energy Storage Status (Rapid)