

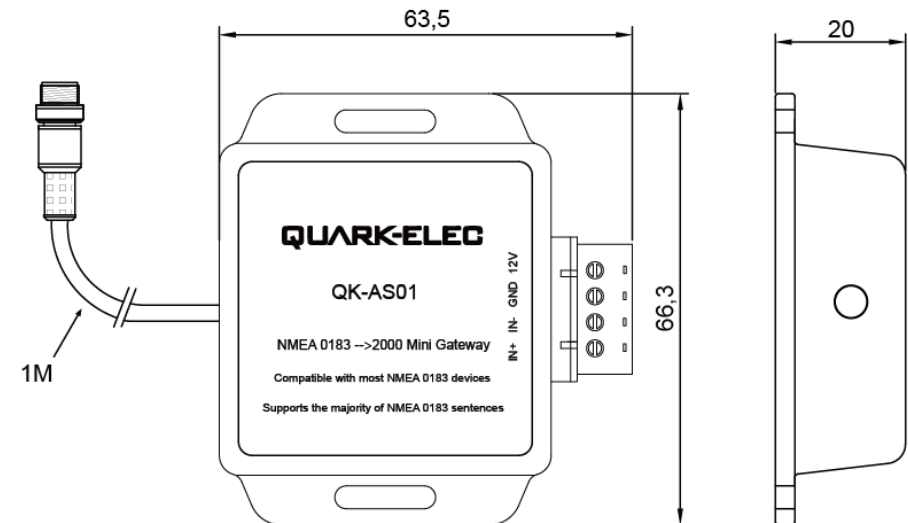
QK-AS01


NMEA 0183 TO NMEA 2000 MINI GATEWAY

COMPATIBLE WITH MOST NMEA 0183 DEVICES

SUPPORTS THE MAJORITY OF NMEA 0183

SENTENCES



Please recycle your packaging 

All products are CE, RoHS certified
More information at www.quark-elec.com



This is an overview only. Please familiarize yourself with the manual and the manuals of any connecting devices before installation. It is always recommended that electronic equipment be installed by an experienced installer.

INSTALLATION

1. Mounting: Consider the location...

- Dry, sturdy location.
- Ensure you have the right length of cable needed. If drilling holes for your cabling, seal around any holes after installation to prevent water ingress and damage to your vessel or equipment.

2. Connect Power

The AS01 requires a stable 12V DC power supply. This can be a battery or other suitable power source, connected to the AS01's power supply terminals labelled as 12V and GND. The AS01 cannot be powered from the NMEA 2000 network.



Ensure your AS01 is connected correctly to its power supply. Connecting the power supply to the wrong terminals will damage your device.

3. Disconnect all your devices from their power supply before connecting/disconnecting devices to/from the AS01.

NMEA 0183: The AS01 uses the differential end NMEA0183 -RS422 interface. Connect the 'IN+' and 'IN-' terminals of the AS01's NMEA input to the '+' and '-' terminals of the talker device's NMEA 0183 output. If there is a communication issue between your devices, you may find swapping data wires might resolve the problem.

The AS01 also supports the single end protocol for NMEA0183-RS232 interface devices.

AS01	RS422 device output	RS232 device output
IN+	NMEA Output-	GND
IN-	NMEA Output+	NMEA Output

*Swap NMEA Out + and NMEA Out - wires / NMEA Output and GND wires if the communication does not work.

If there is still no communication between your devices , a Quark-elec protocol bridge (QK-AS03) will be required.

The NMEA 0183 input does not require additional configuration, as the talker device's baud rate is automatically detected and the AS01's NMEA 0183 input is set based on this.

NMEA 2000 is a plug-and-play communications standard, the AS01's NMEA2000 output does not require additional setup before connecting it to an NMEA 2000 network.

CONVERSION LISTS

The following tables list the supported NMEA 2000 PGN's (parameter group numbers) and NMEA 0183 sentences. It is important to check the table to confirm that the AS01 will convert the NMEA 0183 sentences to the required NMEA 2000 PGNs.

NMEA 0183 sentence	Function	Converted to NMEA 2000 PGNs
DBT	Depth Below Transducer	128267
DPT	Depth	128267
GGA	Global Positioning System Fix Data	126992, 129025, 129029
GLL	Geographic Position Latitude/Longitude	126992, 129025
GSA	GNSS DOP and Active Satellites	129539
GSV	GNSS Satellites in View	129540
HDG	Heading, Deviation & Variation	127250
HDM	Heading, Magnetic	127250
HDT	Heading, True	127250
MTW	Water Temperature	130311
MWD	Wind Direction & Speed	130306
MWV	Wind Speed and Angle (True or relative)	130306
RMB	Recommended Minimum Navigation Information	129283,129284
RMC*	Recommended Minimum Specific GNSS Data	126992, 127258, 129025, 12902
ROT	Rate Of Turn	127251
RPM	Revolutions	127488
RSA	Rudder Sensor Angle	127245
VHW	Water Speed and Heading	127250, 128259
VLW	Dual Ground/Water Distance	128275
VTG*	Course Over Ground and Ground Speed	129026
VWR	Relative (Apparent) Wind Speed and Angle	130306
XTE	Cross Track Error, Measured	129283
ZDA	Time & Date	126992
VDM/VDO	AIS Message 1,2,3	129038
VDM/VDO	AIS Message 4	129793
VDM/VDO	AIS Message 5	129794
VDM/VDO	AIS Message 9	129798
VDM/VDO	AIS Message 14	129802
VDM/VDO	AIS Message 18	129039
VDM/VDO	AIS Message 19	129040
VDM/VDO	AIS Message 21	129041
VDM/VDO	AIS Message 24	129809. 129810

Disclaimer: This product is designed to aid navigation and should be used to augment normal navigational procedures and practices. It is the user's responsibility to use this product prudently. Neither Quark-elec, nor their distributors or dealers accept responsibility or liability either to the product user or their estate for any accident, loss, injury or damage whatsoever arising out of the use or of liability to use this product.

Email: info@quark-elec.com