

The AS07-0183 is designed to be used out of the box.

Alternatively, AS07-0183 can be Connected via USB adaptor (optional) to a Windows PC for:



1. Accessing GPS data on a PC via the USB port.
2. Use of the configuration tool for:
 - a. Filtering of NMEA 0183 output sentences, to eliminate unwanted data
 - b. Adjusting the baud rate
 - c. Adjusting output frequency (data transferred once per second). The frequency of data transfer can be set to 1/2/5/10 per second. 1Hz is the default setting and is generally recommended. Please note: changing the setting to 10Hz may cause data overflow in some devices.

These wires need to be connected to the USB adaptor and Power for successful USB

	QK-AS07-0183 wire	Connection needed on RS422 device
NMEA0183	Green: TX (NMEA OUT)	USB adaptor—RX
	Yellow: RX (NMEA IN)	USB adaptor—TX
	Black (thick): GND shield	USB adaptor—GND
POWER	Black (thin): GND	GND (for Power)
	Red: Power	12v—14.4v Power

TAKE CARE: There are two GND connections.



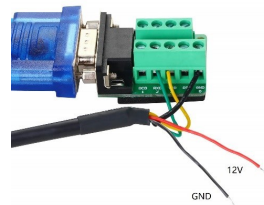
One is GND for the NMEA Connection, and one is GND for Power. Ensure you check the above table and your device's documentation carefully before connection. The device still requires power during USB connection.

BEFORE LEAVING HOME:

We recommend pre-installing any needed Configuration software or drivers if needed, as you might not have a CD reader/internet access on site. Driver and configuration software are for use with the RS232 to USB adaptor, they are only needed for the above USB features.

Configuration software (Windows) required.

Hardware driver may be driver. Driver required for Windows. If using Windows 10, the driver should install automatically, if not, it is included on the Free CD and at Quark-elec.com. Driver not required for Mac.



Configuration software and specific instructions are on the free CD and at Quark-elec.com

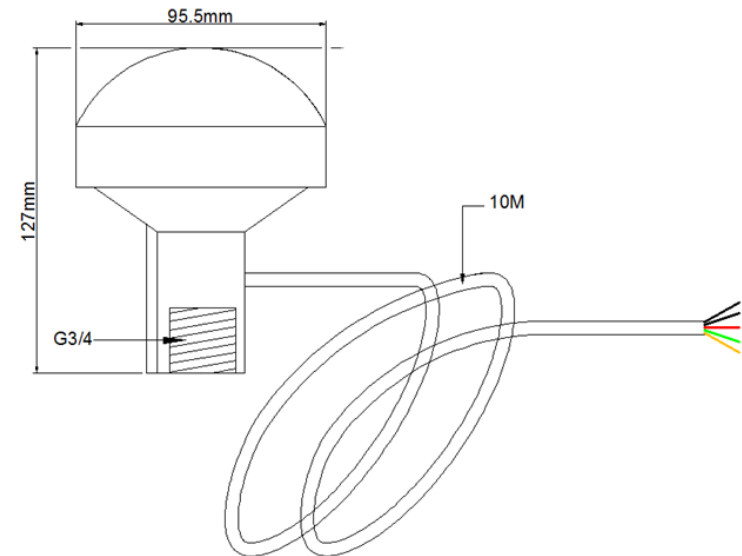
Disclaimer: This product is designed to aid navigation and should be used to augment normal navigational procedures and practices. It is the user's responsibility to use this product prudently. Neither Quark-elec, nor their distributors or dealers accept responsibility or liability either to the product 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

QK-AS07-0183

NMEA 0183 GPS SENSOR

GPS, GLONASS AND GALILEO



Please recycle your packaging

AS07-0183 INSTALLATION



This is an overview only. Always familiarize yourself with the product manual and the manuals of any connecting devices before installation. Designed to be connected by an experienced installer.

The AS07 connects directly to your 12v power and NMEA 0183 device. No other connections or configuration is generally required.

1. Mounting: Consider your locations

- Sturdy outdoor location, with 'line of sight' to the sky.
- The AS07-0183 has a standard G3/4 thread and is supplied with a corresponding base.
- If drilling holes for screws and cabling, seal around any holes to prevent damage to your vessel or equipment.

2. Installation

The AS07-0183 is designed to be used out of the box, for instant positional data to other NMEA 0183 devices. The default baud rate has been set as 4800bps, at 1Hz updating frequency.

2.1 Connections



Ensure power is turned OFF when connecting any wire of your device

The AS07-0183 sensor has the following five wires. Connect the yellow wire (RX) with the Black (thin one, GND) one, if it isn't used.

Wire	Function
Red	12V-24V POWER
Black (thin)	GND
Black (thick)	GND (shield)
Green	NMEA OUT / RS232 TX
Yellow	NMEA IN / RS232 RX



USING THE OPTIONAL USB OUTPUT

2.2 Connecting to NMEA 0183 (RS232) devices

The AS07-0183 sends positional sentences, in the NMEA 0183-RS232 (single-ended) protocol. For RS232 interface devices, these wires need to be connected.

	QK-AS07-0183 wire	Connection needed on RS232 device
NMEA0183	Green: TX (NMEA OUT)	RX (NMEA IN)
	Black (thick): GND shield	GND (sometimes called COM)
POWER	Black (thin): GND	GND (for Power)
	Red: Power	12v—14.4v Power



TAKE CARE: There may be two GND connections on your connecting NMEA 0183-RS232 device. One is GND for the NMEA Connection and one is GND for Power. Ensure you check the above table and your device's documentation carefully before connection.

2.3 Connecting to NMEA 0183 (RS422) devices

Although AS07-0183 sends out NMEA 0183 sentences via single end RS232 interface, it also supports RS422 (differential signal) for RS232 interface devices, these wires need to be connected

	QK-AS07-0183 wire	Connection needed on RS422 device
NMEA0183	Green: TX (NMEA OUT)	NMEA IN- (sometimes called NMEA/B or -Ve)
	Black (thick): GND shield	NMEA IN+ (sometimes called NMEA/A or +Ve)
POWER	Black (thin): GND	GND (for Power)
	Red: Power	12v—14.4v Power

