



PPS2-G4

4 Port PPS & NMEA signal isolated splitter

- ✓ 4 output ports
- ✓ Full galvanic isolation between ports
- ✓ NMEA message splitter
- ✓ Configurable Rs232 or Rs422 per port

- ✓ LED indicators
- ✓ 10-30VDC supply
- ✓ Small sturdy housing



The 4PPS-G1 is a PPS and NMEA signal splitter designed for the most demanding applications. It is configureable to handle almost every PPS source and distribute the signals to multiple pulse consumers.

The PPS input can be configured for your application. Trigger level, rising or falling flank and input impedance can be set by jumpers. Once the input is triggered, the pulse stretch functionality ensures that every output pulse has a minimal length. All outputs are galvanically isolated from each other and from the power supply. The PPS splitter also has toggle functionality on the Rs232 port. With every received puls the output level will toggle. This toggle is only supported in Rs232 mode. The device is designed to reduce both the delay between the input and outputs, and the difference between the channels, to a minimum.

In most applications together with the PPS pulse there is also a NMEA string that needs to be distributed to the receivers. Aside from NMEA, the splitter will handle any protocol with baud rates up to 115200. It also supports all parity, start and stop bit possibilities. Every in or output can be set to Rs232 or Rs485 mode by a simple switch on the backpanel thus eliminating the need for external signal converters. All channels are galvanically isolated from each other and from the power supply. The galvanic isolated eliminates potential ground loops in your system that can not only cause bad communication but even damage equipment.

The front panel has three LED indicators to give you a fast and easy way to check if the device is operating as intended. The splitter is build in a sturdy steel housing.

Communication ports :

- Support both Rs232 and RS485
- Max baud rate 115200 baud
- Supports all protocols parity and bitsettings

PPS pulse input :

- Trigger levels 1V - 2V - 3V - 4V
- Signal impedance 50 Ohm or high impedance
- Rising or falling edge trigger

PPS pulse output :

- Minimal length after stretching 20ms
- Voltage level 5V
- Signal impedance 50 Ohm
- Delay from input
- Delay difference between channels

Back connections

- 4 x BNC (PPS outputs)
- 4 x 9P D-SUB female (NMEA outputs)
- 1 x BNC (PPS input)
- 1 x 9P D-SUB male (NMEA input)
- 1 x 3P male M16 (power)

Mechanical

- 228mm x 126mm x 44mm (without brackets)
- 268mm x 126mm x 44mm (with brackets)
- Weight 960 gram

Environmental

- Operational temperature : -20°C +50°C

Power characteristics

- Wide input : 10-30VDC
- Max power consumption : 5 Watt