



Delta-T Devices



PR2 Profile Probe with SDI-12 Interface

The PR2 SDI-12 is a new **digital** alternative to the well-established analogue PR2 Profile Probe.

It shares the many strengths of the analogue PR2 soil moisture probe, but with the addition of SDI-12 compatibility - allowing integration into new and existing SDI-12 systems.

- Multiple PR2 SDI-12s can be connected to a compatible data logger via a single cable
- Enables the creation of low cost highly flexible sensor networks
- Compatible with existing PR2 access tubes and augering kits
- Conforms to industry standard SDI-12 (v1.3) spec
- Flexible integration with 3rd party SDI-12 hardware
- New low power design; ideal for remote sites

GP2 SDI-12 Data Logger

The PR2 SDI-12 is fully compatible with the new SDI-12 enabled GP2 Data Logger and Controller - with simple point & click configuration.

Up to 50 SDI-12 Profile Probes can be connected to a single GP2 (subject to power requirements).

In addition to SDI-12 input, the GP2 can log 12 analogue channels.



PR2 SDI-12 Profile Probe



Cost saving with SDI-12

- Lower cost cabling – uses standard Delta-T M12 x 5-way cable system
- Lower cost data logging for multi-probe installations
- Same price as analogue PR2 probe

Overview

The PR2 SDI-12 Profile Probe builds on the reputation and field proven technology of the analogue PR2. By adopting the widely used SDI-12 interface (v1.3) the PR2 SDI-12 can be integrated with an even wider range of data loggers, sensors and equipment.

SDI-12 is an established communication standard adopted by many manufacturers of environmental monitoring and control equipment. It is popular because it allows large numbers of sensors (from many vendors) to be connected to a logger via a simple cable network, thereby reducing the cost and complexity of wiring large sensor installations.

Cables and connectors

The PR2 SDI-12 has a high quality, stainless steel IP67 rated connector (M12 x 5-way) – connecting to the standard Delta-T range of M12 x 5-way cables and accessories. The M12 x 5-way cables are also compatible with Delta-T's ML3, SM300, SM150 and EQ3 sensors.

(NB: The M12 x 8-way range of cables used for analogue PR2 connection is not compatible with the SDI-12 version of the PR2. Analogue and SDI-12 sensors cannot be mixed on the same cable system.)

GP2 Data Logger

The SDI-12 enabled GP2 Data Logger and DeltaLINK enable quick and easy creation of sensor networks - without need to resort to the often complex programming methods typically employed by other manufacturers.

The SDI-12 Profile Probe's electronics have been designed to improve power efficiency – reducing the overall power requirement. This is an important advantage for off-grid applications at remote sites.

HH2 Moisture Meter

The HH2 Moisture Meter can display readings from the PR2 SDI-12 Profile Probe*. This is a great advantage for customers who value the freedom to use SDI-12 Profile Probes in both installed and portable applications. Pre-February 2017 HH2s can be upgraded at low cost (via firmware) to enable PR2 SDI-12 readout.

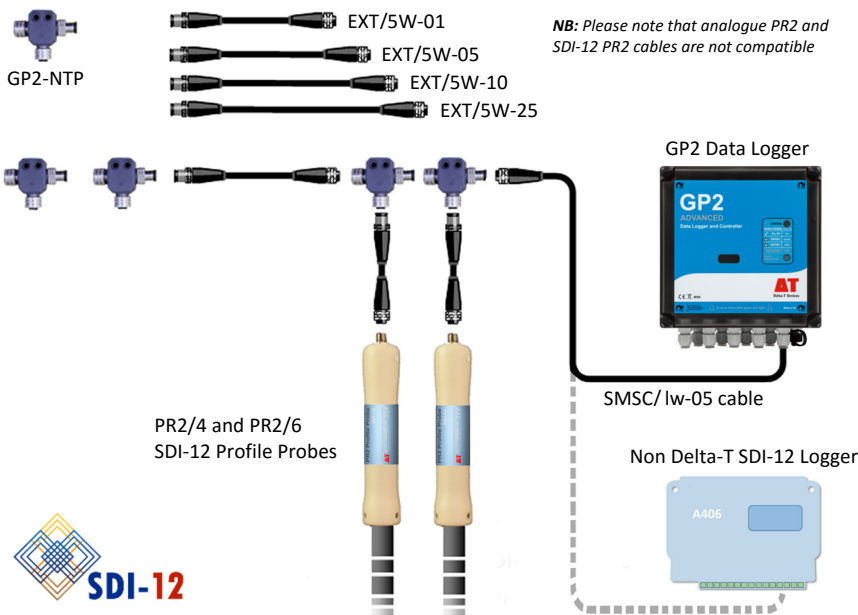
For more information on upgrading firmware please contact our Tech Support department: tech.support@delta-t.co.uk



*Please note that the HH2 only reads SDI-12 digital data from the PR2 SDI-12 Probe – it is not a general purpose SDI-12 meter.

Cabling System

Use of PR2 SDI-12 Sensors with Data Logger



Specification

The PR2 Profile Probe **SDI-12** shares its general specification with the analogue version of the probe, whose specs can be found online at www.delta-t.co.uk and on page 13 of the *Soil Moisture Measurement Catalogue*.

Logger Compatibility:

SDI-12 protocol version 1.3 (www.sdi-12.org)
Power consumption <60 mA at 12 V DC
Sleep current <2 mA at 12 V DC

Ordering Information

| | |
|--------------|---------------------------------------|
| PR2/4-SDI-12 | Profile Probe 40 cm SDI-12 interface |
| PR2/6-SDI-12 | Profile Probe 100 cm SDI-12 interface |

Cables must be ordered separately - see page 2 of the *Soil Moisture Measurement Catalogue* for cable options (SMSC/Iw-05 and EXT/5W range of extension cables).

All Profile Probe accessories, such as augering kits and access tubes, are compatible with the SDI-12 version. Cables are an exception: the analogue PR2 and SDI-12 PR2 cables are not compatible.

See page 10 of the *Soil Moisture Measurement Catalogue* for details of PR2 accessories.

Delta-T Devices Ltd

130 Low Road, Burwell, Cambridge CB25 0EJ, UK
Tel: +44 (0) 1638 742922

sales@delta-t.co.uk www.delta-t.co.uk

