



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 SDI-12 version of the PR2 will soon become compatible with the HH2 Moisture Meter\*. This is a great advantage for customers who value the freedom to use Profile Probes in both installed and portable applications.

The HH2 will only require an inexpensive firmware upgrade to be made fully compatible.

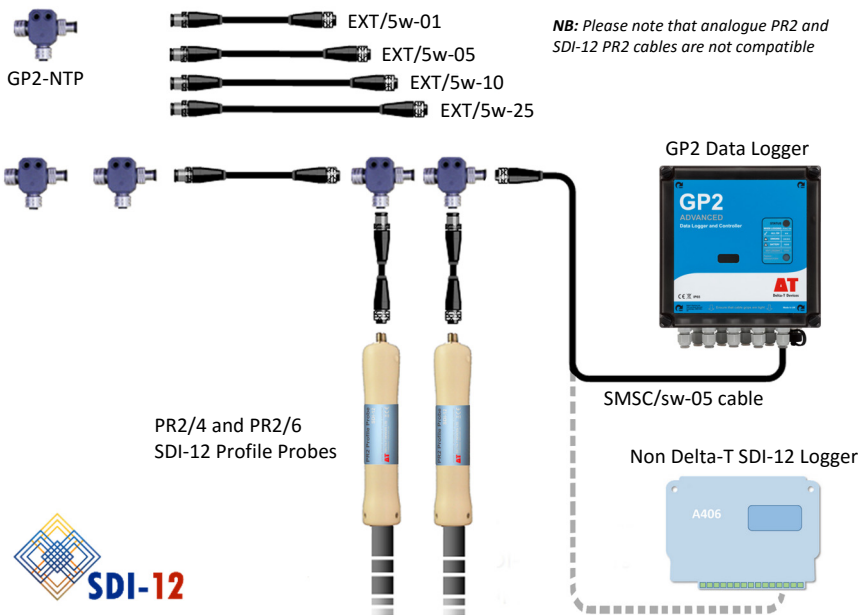
NB: The HH2 is not an SDI-12 meter. The SDI-12 Profile Probe generates a custom output compatible with the HH2 Moisture Meter.



\* Release date to be confirmed soon

## 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](http://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](http://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	Profile Probe 40 cm SDI-12 interface
PR2/6-SDI	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/sw-05, SMSC/lw-05 and EXT/SW 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.