SIGNAL™

SDS Series

Irrigation Controllers

Australian Designed and Manufactured

www.signal.com.au
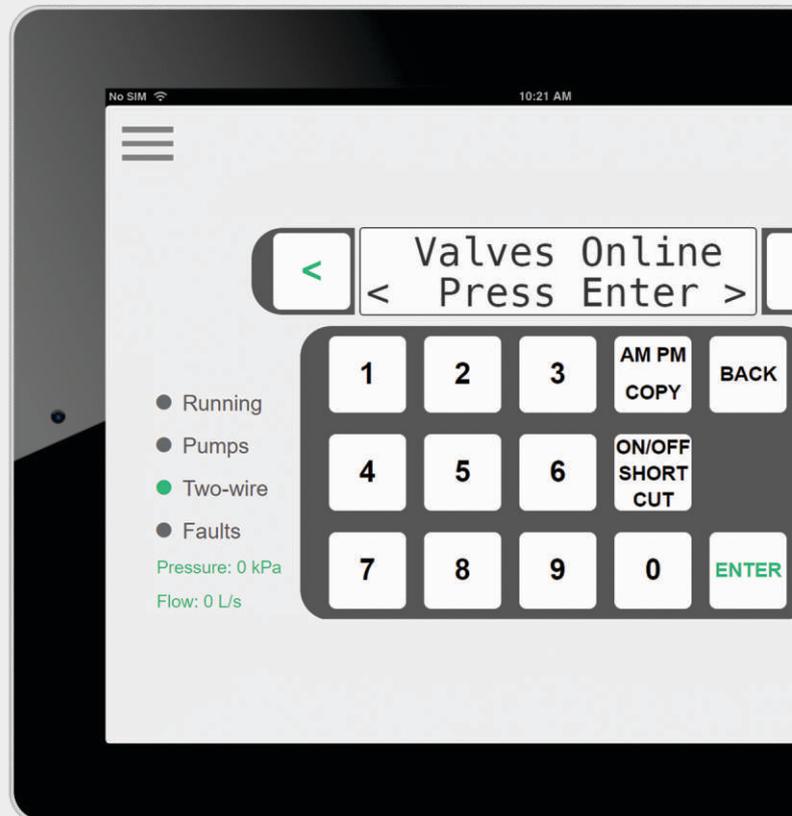
SIGNAL™

Intuitive. Powerful. Affordable.

The SDS Series represents the next generation of irrigation controller:

- Lightning fast online communication over the secure SignalCloud server.

- SignalCloud Mobile App available for iPhone, iPad and Andriod devices.

- Web-based SignalCloud software to control and monitor an unlimited number of sites.

- Weather station integration via SignalCloud

- Connect up to 8 SDS Moisture Sensors along the Two-Wire path (1 per program)

- DataCoils™ connect directly to the Two-Wire cable, eliminating the need for separate decoding devices.

- Patented Two-Wire bi-directional technology ensures constant communication between the controller and all field devices, resulting in a 100% reliable indication of cable integrity.

- DataNodes™ connect various sensors over the Two-Wire path, including rain switches, moisture sensors, water meters, frost sensors, and more.

Specifications

Model: SDS-50 SDS-100

- Two-wire controllers with optional multi-wire (RelayCube™) conversion
- 48 or 96 station capacity
- Runs 4 (SDS-50) or 8 (SDS-100) valves at a time
- 8 independent programs
- 4 start times per program
- 12 sensor inputs along two-wire path
- 7 direct controller sensor inputs
- 2 independent frost programs
- No separate decoders
- Two-way communication every 3 seconds between all devices on two-wire path
- Simultaneous two-wire and multi-wire operation
- Program watering schedules by Time (Hr: Mins: Secs) Volume (litres) and Precipitation (mm)
- 14 day calendar, odd, even and cyclic
- Weather-based ET irrigation
- Moisture Sensor Logging
- Auxiliary pump for chemical / fertigation program
- Individual pumps can be assigned for each program
- Option to assign secondary booster pump
- Display water flow, system pressure and electrical current draw
- Flow monitoring with deviation alerts sent to PC / Smartphone / Tablet
- Various programmable delays to compensate for hydraulic anomalies
- Plug-in repair modules
- WiFi, Ethernet & 3G/4G connectivity
- Supplied complete with power supply, lightning protection and PumpNode™
- Compact dimensions: H 179 x W 199 x D 106 (mm)

Features

Landscape and Agriculture

Designed for both landscape and agricultural applications, the SDS Series comes packed with programs and features tailored to these purposes.

With 48 and 96 station models, running 4 to 8 valves at a time, SIGNAL gives you flexibility to choose the right system for the job.

48

96

Leading Two-Wire Technology

SIGNAL DataCoils™ do away with traditional decoders, resulting in half as many connections out in the field, as well as reduced cost.

DataCoils are available in 2-Way and 3-Way Latching models. The DataCoil's™ patented technology reports its status back to the controller every 3 seconds.

Better Multi-Wire

The SIGNAL RelayCube™ can be connected at any location along the Two-Wire network, with conventional solenoids wired directly into the RelayCube™. The system can then operate both Two-Wire DataCoils™ and conventional solenoid coils. The perfect solution when upgrading existing systems.

Once connected, any changes of valves to station allocation can be done via the controller, PC, Tablet or Smartphone.

SIGNAL™

Internet Connectivity

Utilising 3G/4G, ethernet or a local WiFi network, SDS Series controllers can be connected to the secure SignalCloud server from any location worldwide.

Choose whether to install SDS ethernet or WiFi modules to connect over an existing network, or install a SIGNAL 3G/4G modem for areas outside internet coverage.
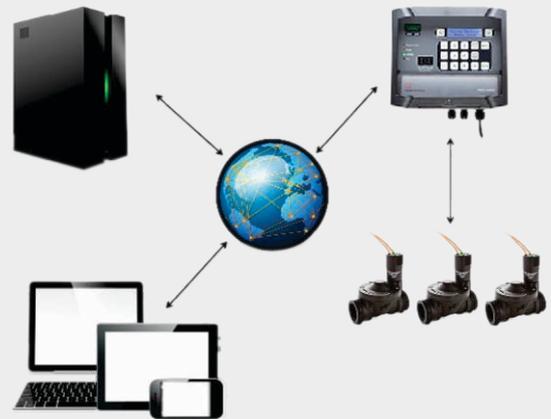
SignalCloud Web-Based Software

Irrigation central control you can take with you. Control, log, graph and export data for easy and complete site reporting.

SignalCloud has been designed for ease of use, whether in control of one, or hundreds of irrigated areas.

Available on PC, Mac, Smartphones and Tablets.

SignalCloud Mobile App for iPhone, iPad & Android

SignalCloud Mobile allows you to connect, control and observe your SDS Irrigation Controllers in real-time, just like being on site.

The App gives users unparalleled portable command over their network - It's like having the entire irrigation network in your pocket.
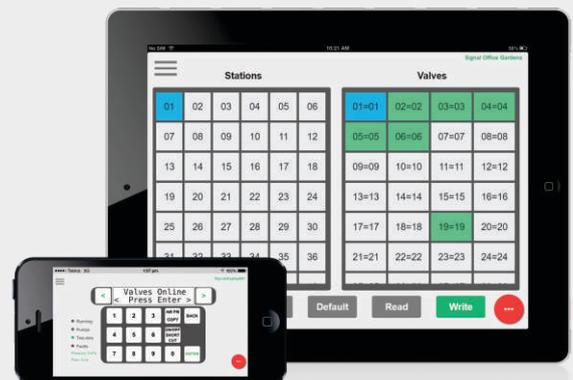
Multiple Sensor Inputs

With 7 direct inputs, and DataNodes allowing an additional 12 along the two-wire path, even the most complex functions are achievable.

Program start/stop, flow meter pulse, rain-switch, tank level pause, frost, pressure and more - SDS Series provide complete technical flexibility.

Weather Station Integration

Automatically retrieve evapotranspiration and rainfall data to SignalCloud and broadcast to selected SDS Series controllers.

Watering schedules are then adjusted to replenish water used by the plants and lost by evaporation.

Moisture Sensor Logging

User defined moisture set-points can be entered into an SDS Series controller. The controller supports 1 sensor per program with a capacity of 8 sensors per controller.

The set-point will override a program start, or simply gather data to make better irrigation decisions.
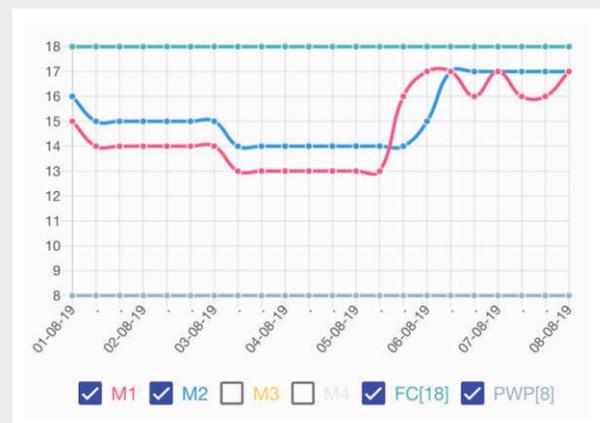
Easy DIY Service

Designed from its inception for easy DIY repair, the SDS Series takes the expense and inconvenience out of fixing a controller.

With LED indicators on each board to pin-point a problem, just remove the faulty part and plug-in the new, then upload program back-ups via central control. It's that simple.
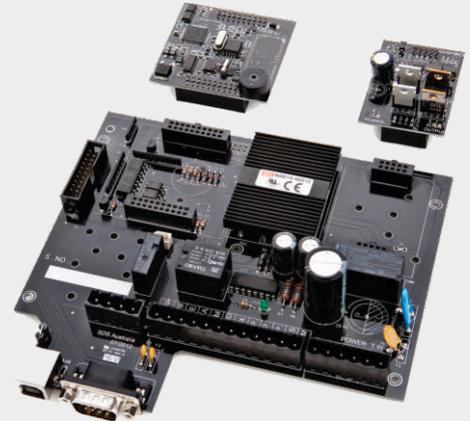
Google Maps Interface

SIGNAL SDS controller can be placed on a Google Maps interface. Users can then locate valves, either manually or via Smartphone GPS.

Once complete, end users manually start stations or individual valves fro the interactive map via PC, Smartphone or Tablet.

Flow Monitoring

The controller will monitor and display flow rates. During operation, the flow is constantly monitored for any deviation, with water volumes stored in the database for retrieval at any time.

Once deviations are identified, notifications are sent directly to your PC, Tablet or Smartphone.

DataValves™

Bermad 100 Series DataValves™ Available in sizes 40, 50, 80, 100, 150 (mm)

- Ultra-high flow
- Wide range of flows
- Industrial grade construction
- Non chattering
- Soft closing
- Easy inline service
- Pressure rating: 10 bar

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●	H100-DV-40-T	40mm Threaded
●	H100-DV-50-T	50mm Threaded
●	H100-DV-50L-T	50mm Threaded
●	H100-DV-80-T	80mm Threaded
●	H100-DV-80-F	80mm Flanged
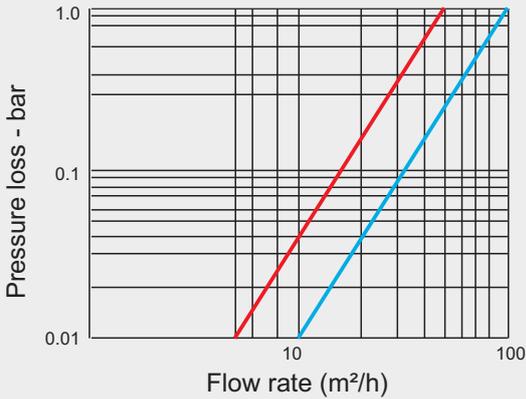
Bermad 200 Series DataValves™ Available in angle and globe pattern sizes 25, 40, 50 (mm)

- Economically priced
- Proven reliability
- Low headloss
- Smooth hydraulic operations
- Glass nylon construction
- Pressure rating: 10 bar

●	D075-DV	20mm Globe
●	D100-DV	25mm Globe
●	D150-DV	40mm Globe
●	D151-DV	40mm Angle
●	D200-DV	50mm Globe
●	D201-DV	50mm Angle
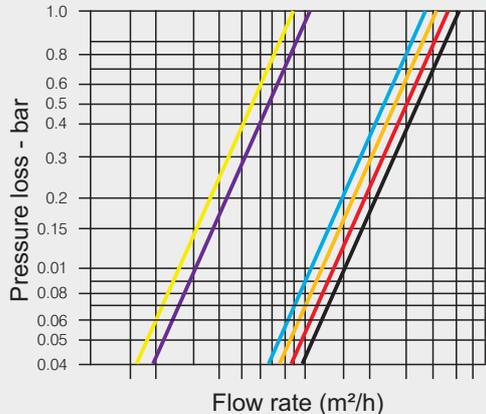
Bermad 400 series DataValves™ Cast iron valves in globe and angle patterns. Available in 50, 80, 100, 150, 200, 300 (mm)

- Cast Iron PN10/PN16 valve
- Single diaphragm can open from 40kPa
- Very reactive under high hydraulic force
- High cavitation resistance
- Plumbed to suit any application
- Pressure rating: 16 bar

BERMAD

Water Meters
(Turbine & Electromagnetic)

Pressure Transducers

Datacoil™ Adaptors
(Rain Bird, Hunter, Toro, Irritrol)

3G/4G Modems
(Requires Data SIM)

WiFi Modules

Frost Protection

Two-Wire Numbering Clips
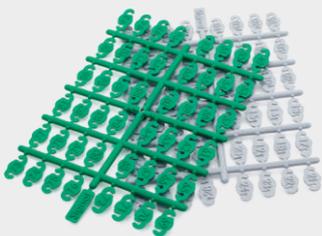
Two-Wire Gel Connectors

Two-Wire Cable
(1mm, 1.5mm, 2.5mm, 4mm)