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iRIS 320 SDI-12 Datalogger



Description

The iRIS 320 is housed in a heavy-duty, milled aluminum case rated to IP65. It also includes an integral 12V battery within the casing making it ideal for remote or exterior installations. The logger can be easily attached to an existing structure using the included mounting plate and powered by a solar panel connected directly to the datalogger. This provides a cost-effective, self-contained solution without the need for separate weatherproof cabinets or boxes. The heavy-duty casing also features a password protected keypad and multi-line LCD for onsite diagnostics, data browsing and configuration.

The iRIS 320 supports nine virtual sensors, the sources of which can be chosen from physical digital or analogue inputs or alternatively, internal measurements (battery voltage etc) or virtual sources (via serial communication or calculations). Each sensor has two associated alarms, each with separate trigger and reset levels. Each alarm also has a duration, which is used to delay the alarm trigger for analogue inputs and to determine the time over which pulse input counters should be totalized (rainfall etc). Data is logged in a four word compressed format which includes full date and time to fractions of a second.

As well as the 2 analog inputs, 2 digital inputs and 2 digital outputs, the iRIS 320 also includes an SDI-12 interface to allow the connection of up to 6 SDI-12 instruments. Use of the SDI-12 bus is optional and if enabled utilizes one digital input and one digital output.

Wireless Internet connectivity is provided via an on-board modem. Through this interface it is possible to perform configuration changes and retrieve logged data. To facilitate GPRS connectivity a suitably activated SIM card must be inserted in the device. It is also necessary to program the unit with appropriate GPRS/CDMA connection settings via a terminal connected to the serial interface.

- Rugged, weather resistant enclosure, IP65
- Battery powered for remote locations
- RS-232 Interface, GPRS data mode, SMS text mode, DSD dial-up Mode
- 2 Alarms per Channel
- Four button keypad for programming and data viewing

Specifications

Resolution: 12-Bit

Processor: 100MHz microcontroller, 4MB flash memory (program and data storage)

Memory: Non-volatile 2MB flash storage of 262,144 time/date stamped data points. Circular buffer mode (overwrites oldest data when memory full), lithium battery backup.

Display: 4 lines x 12 characters LCD

Channels: 4-Analog (0-5V), 2-Digital Inputs (30Vdc Max In), 2-Digital Outputs (1 x Switched 12V out (max 300mA), 1 x Open-drain pull-down (max 300mA @ 30V)), SDI-12 Bus for 6 SDI-12 sensors

SDI-12 Interface: Psuedo SDI-12 interface (master only) available. Uses one digital input and one digital output.

Clock: Real time clock and calendar.

Enclosure: Hard anodized corrosion-resistant aluminum alloy, IP65.

Battery: 12 Volt, 0.8 A/hr, Rechargeable (Gel Cell)

Current Draw: Less than 3mA@12V in standby mode. Actual current draw depends on power management mode and wireless modem state

Temperature:

Operating: 14 to 158°F (-10 to 70°C)

Storage: -4 to 185°F (-20 to 85°C)

Size: 6-3/8"x4-9/16"x2-9/16" (WxHxD)

Weight: 3.5 lbs

Price List

iRIS 320

SDI-12 datalogger.....\$1350

FP0550

Raingauge Datalogger Enclosure Kit W/ Solar Panel...\$595
Includes heavy-duty rugged, lockable enclosure, 5w 300mA Min. solar panel, smart charger, 12V 4.5Ah battery.

FP0600

Wireless Datalogger Antenna Kit.....\$125
NOTE: For GPRS modem wireless Internet telemetry only.



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In the U.S. call toll free
at 1-800-876-1172
International: 916-638-3429
Fax: 916-638-3270
Email: globalw@globalw.com

Visit our online catalog at:
www.globalw.com
Our Address:
11390 Amalgam Way
Gold River, CA 95670