iSICV2 ENVIRONMENTAL DATA LOGGER

Digital and analog sensor inputs

Compatible with external wireless modems

Supports a variety of environmental sensors

Optional web datacenter

Marine anodized aluminum housing



Specifically designed for remote environmental monitoring applications, the iSIC V2 offers superior data acquisition performance in extreme conditions. Building off the reputation of the original iSIC data logger, the iSIC V2 is a drop-in replacement for existing iSIC data logger networks, or it can be a powerful standalone system using external wireless modems. Each data logger simultaneously supports 8 analog inputs & several digital inputs for multi-sensor data logging capability.

The iSIC V2 data logger arrives ready for long-term deployment. All electronics are housed in a rugged enclosure constructed of anodized aluminum, and an optional AVSS stainless steel enclosure kit offers a secondary level of protection with integrated battery, solar regulator, external antenna, and six sensor ports. All sensors are cabled through Sealcon gland fittings to ensure protection from the elements.

The iSIC V2 includes built-in serial and Ethernet ports for hard-wired communications. iChart Software is a Windows-based program for interfacing both locally (direct-connect) and remotely (through telemetry) to an iSIC V2 data logger or network of data loggers. Optional WQData Live web datacenter offers instant access to data on any web browser. Data is presented on a fully-featured and easy-to-use dashboard. Features include automated reports, alarms, push notifications and much more.

iSIC V2

specifications

Ports	(1) UW8 for sensor connection
	(1) UW6 for RS-485 host connection and external power
	(2) PG-11 passthrough port for custom wiring
	(2) 16 position pluggable terminal blocks for sensor, host, and power wiring
	(1) DB9 RS-232 host connection
	(1) RJ45 100BASE-T Ethernet
	(8) 16-bit single-ended or (4) differential; ±1.25V or 0-2.5V selectable
Analog Outputs	(1) 12-bit DAC; 0-2.5V
Digital I/O Ports	(1) Tipping bucket input, max rate: 10 Hz
	(2) Standard generic I/O ports 0-3.3V
Host Interface	(1) RS-485 (half duplex); (1) RS-232 (3-wire full duplex)
Host Protocols	iSIC Protocol; Terminal command interface; Modbus RTU (future)
Sensor Interface	(1) RS-485 (half duplex); (1) SDI-12; (3) RS-232
Sensor Power	(1) Switched 12VDC 1.2A; (1) 1.5A Pass through full time power; (1) 5VDC 200mA
Sensor Protocols	Modbus RTU; NMEA 0183; SDI-12; GSI (via custom script)
Log Interval	1 minute to 24 hours; supports different intervals for different sensors concurrently
Real Time Clock (RTC)	<30sec/month drift; Internal backup battery
Built-In Sensors	$Temperature~(-40~to~85^{\circ}\text{C},~0.1^{\circ}\text{C}~resolution,~\pm0.3^{\circ}\text{C}~accuracy~from~-20~to~85\text{C}); Humidity~(0-100\%,~0.1\%,~0$
	resolution, $\pm 4\%$ accuracy from 5 to 95% RH & -20 to 70°C); Battery voltage; Current draw
Internal Memory	256MB microSD card (expandable up to 32GB)
External Power	5-16 VDC ±5% (Overcurrent and Reverse polarity protection)
Typical Current Draw (@12V)	Sleep: 760uA; Active: 43mA; Analog Active: 85mA
Operating Temperature	-30 to +85°C
Physical	Dimensions: 7.5" L x 6.5"W x 2.9 H"; Weight: 4.2 lbs; Anodized aluminum housing; NEMA 4X (with lid)







parts list

iSIC-V2 iSIC V2 environmental data logger

PM1 iSIC V2 pole and wall mount kit, 1.5" to 2" diameter

SP8 Solar power pack, 8-watt. Includes solar panel, regulator, 6 A-Hr battery & pole mount weather tight enclosure
SP13 Solar power pack, 13-watt. Includes solar panel, regulator, 6 A-Hr battery & pole mount weather tight enclosure

AVSS Stainless steel enclosure kit for V2 data loggers

AVSS-C Stainless steel enclosure kit for V2 data loggers with cellular telemetry

UW6-PW AC power adapter
UW6-USB-485P Direct connect USB PC cable



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