

- **8 analog & 4 digital sensor inputs**
- **Rugged NEMA 4X fiberglass enclosure**
- **Cabled & wireless telemetry options**
- **Internal battery with AC & solar options**
- **Built-in drivers for environmental sensors**

The NexSens **iSIC** (Intelligent Sensor Interface & Control) is the latest in data logging technology. Specifically designed for remote environmental monitoring applications, the **iSIC** offers superior data acquisition performance in extreme conditions. NexSens customers expect reliability, and the **iSIC** data logger delivers unmatched sensor interface and data collection with options for landline phone, cellular, radio, Ethernet, WI-FI, and satellite telemetry. Each **iSIC** data logger simultaneously supports 8 analog inputs & 4 digital inputs for multi-sensor data logging capability.

NexSens **iChart** Software is a Windows-based program for interfacing both locally (direct-connect) and remotely (through telemetry) to an **iSIC** data logger or network of data loggers. The **iChart** Setup Device Wizard includes built-in drivers and a step-by-step interface for setting up and configuring remote monitoring sensors and systems. When connected, the user can quickly configure sample & log intervals, upload data, or troubleshoot communications.

The **iSIC** data logger arrives ready for long-term deployment. All electronics are housed in a rugged, NEMA 4X enclosure constructed of heavy-duty fiberglass. The built-in 8.5 amp-hour sealed lead acid battery provides 12 volt power to the system, and the battery can be continuously charged using AC or solar power. Polymer-coated circuit boards, sealed connectors, corrosion-resistant stainless steel hardware, and built-in lightning protection ensure reliable performance in the harshest conditions. All sensors are cabled through Sealcon gland fittings to ensure protection from the elements.

### specifications

<b>Analog Inputs</b>	(4) differential or (8) single-ended, additional (4) differential or (8) single-ended optional, 0-2.5 V auto range, 12-bit resolution
<b>Analog Outputs</b>	(1) 12-bit channel, (1) 12-bit channel optional, 0-5 V or 0-2.5 V programmable
<b>Power Outputs</b>	(1) 12 V 100 mA configurable switch, (1) 5 V 50 mA analog excitation voltage, (1) 12 V output, fused from battery
<b>Pulse Counters</b>	(1) tipping bucket counter, max rate: 12 Hz
<b>Digital I/O Ports</b>	(2) standard generic I/O ports
<b>1-Wire Interface</b>	(1) 1-wire temperature sensor port
<b>SDI-12 Interface</b>	(1) SDI-12 port
<b>RS-232 Interface</b>	(3) RS-232 sensor ports, (3) additional optional
<b>RS-485 Interface</b>	(1) RS-485 port
<b>Host Interface</b>	(1) RS-232 host port, SDI-12 or RS-485 port can be configured as slave
<b>Supported Serial Comm Protocols</b>	NMEA 0183 or Modbus RTU
<b>Internal Memory</b>	2 MB Flash memory, over 500,000 data points minimum
<b>Power Requirements</b>	Voltage: 5 to 16 VDC
<b>Typical Current Draw</b>	5 mA sleep, 10 mA processing, 36 mA analog measurement
<b>Battery</b>	12 V 8.5 A-Hr battery, internal
<b>Temperature Range</b>	-20 to +60°C
<b>Dimensions</b>	NEMA 4X enclosure: 12" x 8.5" x 6.95"
<b>Compatible Sensors</b>	4-20 mA sensors, 0-2.5 V sensors, SDI-12 sensors, RS-232 sensors, RS-485 sensors, Modbus RTU sensors, NMEA 0183 sensors, 1-Wire temperature sensors, Thermistor sensors, Tipping bucket rain gauges
<b>Contents</b>	<ul style="list-style-type: none"> <li>(1) iSIC data logger</li> <li>(1) NEMA 4x enclosure</li> <li>(1) MS2 connector for battery charging</li> <li>(1) MS8 connector for sensor connection</li> <li>(1) Grounding lug</li> <li>(2) Gland fittings</li> <li>(1) 8.5 Ahr battery</li> <li>(5) Desiccant packs</li> <li>(1) RS-232 direct-connect cable</li> <li>(4) 56 Ohm resistors for 4-20mA sensor connection</li> </ul>



### parts list

Part #	Description
<b>iSIC</b>	iSIC data logger
<b>2100-iSIC</b>	iSIC data logger with phone modem telemetry
<b>3100-iSIC</b>	iSIC data logger with cellular modem telemetry
<b>3200-iSIC</b>	iSIC data logger with radio-to-cellular telemetry
<b>4100-iSIC</b>	iSIC data logger with spread spectrum radio telemetry
<b>4200-iSIC</b>	iSIC data logger with radio-to-phone telemetry
<b>5100-iSIC</b>	iSIC data logger with Ethernet connectivity
<b>5200-iSIC</b>	iSIC data logger with radio-to-Ethernet telemetry
<b>5500-iSIC</b>	iSIC data logger with WI-FI connectivity
<b>6100-iSIC</b>	iSIC data logger with Iridium satellite telemetry
<b>1001</b>	iChart Software for Windows-based computers



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