

## Datalogger Specifications

Dataloggers (DCP) are specialized field computing devices that allow for sensors and telemetry devices to be connected to them, allowing for remote data collection and retrieval by the user. DCP's are able to create data collection intervals, collect raw data from the sensors, and perform calculations to the raw data, store the data, and transmit the data via GOES, Cellular, LOS, Ethernet, and Iridium communications, based on the user set specifications.

- Must have support for SD or USB memory for data download, read/write setups or additional log memory.
- Must be able to retrieve data using any communication interface.
- Must have built-in 32MB internal flash memory and non-volatile memory: 65MB (1 to 3 million readings).
- Datalogger must have 32-bit processor.
- Datalogger must be able to handle 4 simultaneous communications.
- Must have 4 communications serial ports for satellite transmitters, modems, radios and other serial communication devices.
- Must have analog and digital I/O modules that plug into I<sup>2</sup>C port for sensors connect to the system.
- Must have RS232, RS485, and SDI-12 for sensors connect to the system.
- Must have wide operating temperature (-40 to +60°C).
- Datalogger must have built-in Ethernet.
- Datalogger must have built-in display/buttons to view data.
- Must have built-in 10 channel A/D, 8 channel DIO.
- Must have programmable measurement interval of 0.1 seconds to 24 hours.
- Must have unlimited number of measurements supported.
- Datalogger must have 10 analog channels and 8 digital inputs and outputs (6 Bi-Directional, 2 input only).
- Datalogger must have 3 buttons keypad type and LCD display operational to -20°C.
- Datalogger must have weatherproof enclosure.
- Units must come with 2 year warranty.
- Datalogger must have the ability to run Tiny Basic programs to non-standard capabilities.
- Must have the ability to communicate as a Modbus Master and Slave over RS-232 or TCP/IP.