

## MODEL 5096 Real-Time Data Transmitter

### General Description

The Model 5096 Real-Time Data Transmitter collects, processes, and transmits analog and digital sensor data on events and timed intervals. The collection, processing, and transmission of sensor data is controlled by parameters that are easily programmed using a terminal or computer with standard communications software. Communications with the transmitter is through an RS-232 port.

The Model 5096 Data Transmitter features on-board data logging capabilities. Data is stored automatically in memory as backup to radio transmission or as a stand-alone data logger. The 24K memory capacity can store up to 4,000 event data points or more than 12,000 data points at uniform time intervals. Data can be downloaded using a portable computer during onsite visits.

The Model 5096 Data Transmitter is field-programmable, including a full set of commands for sensor setup and data logging. You can set and read sensors, access on-line help, and perform diagnostics at the remote site. Sensor parameters can be individually set, including transmission intervals, sample intervals, and starting values. Sensor data can be calibrated to report in engineering units. For firmware Versions 3.1 and later, no programming is required with default program setup for standard sensors.

The Model 5096 Data Transmitter logic board has up to 4 digital inputs, 7 analog inputs, and 8 digital status lines for a wide variety of sensor configurations. The battery voltage can be set to transmit at selected time intervals. Each sensor's default identification number is based on the setting of the 4 digit ID switch. Each sensor ID number can be programmed to any other unused number between 0 and 8191. The programmable ID feature helps avoid ID overlap when adding additional transmitters to an existing ALERT system.

The Model 5096 Data Transmitter includes a TEST button, LED indicators, and test points for diagnostic testing. The TEST function checks memory, both RAM and ROM, clock functions, and sensor values. Active sensors are read and their values are transmitted.

The Model 5096N is housed in a NEMA-4X fiberglass enclosure and is designed for outdoor mounting onto a panel or a mast as well as indoor wall-mounting. The 5096N can be equipped with a radio and used as part of a telemetry system, or it can be used as a stand alone data logger.



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### Model 5096 Firmware Upgrades

The newest 5096 Data Transmitter 9601-01 firmware release on January 30, 2006 is **Version 4.4.1**. This release contains all the features introduced in previous releases.

Some added firmware features include "Plug and Play" parameter sets for the Package Data Transmitters: 5096-54, 88, 90, 81 & 5096N. The SHOWALL command displays all active sensor parameter sets, current raw and calibrated readings, and station setup parameters. The rain gauge counters can be reset to zero on a programmed day of the year. A "Listen before Talk" radio feature waits for no radio carrier before transmitting data reports. Multiple level tests transmit all sensor data, transmit tone or no tone. The Enhanced IFLOWS protocol data format is supported. A dial-in modem connection allows telephone polling and data transmitter setup.

Contact HydroLynx to request a complete list of enhancements.

