CAS DATALOGGERS

FLEXIBLE RTU FOR ENVIRONMENTAL MONITORING & CONTROL APPLICATIONS

Infinite ADU-500 Solution Offers Versatile Communication Options

For remote data collection applications, Infinite introduces the new ADU-500 Autonomous RTU Data Logger. This innovative product supports periodic data transmission via SDI-12 'smart' sensor connection according to user-defined parameters.

The Infinite ADU-500 is an ultra-low power, wireless RTU (Remote Telemetry Unit) complete with data logging and alarming capabilities. This battery-powered data logger incorporates three digital inputs, two analog inputs, one pulse counter input and multiple excitation options for powering transducer sensors. For alarm applications, the unit can send data via SMS to predefined users or to an internet server via FTP.

Features:

- Operating Temperature: -40 to 65°C
- GSM/GPRS and CDMA2000 versions
- 2 analog inputs, 3 digital inputs and a pulse counter input
- Quick and easy installation
- SDI-12 'smart' sensor data acquisition
- Several excitation options for external sensors
- Maintenance-free operation for over 10 years

Wireless RTU for the Environmental & Water Markets

With the Infinite ADU-500 handling remote data retrieval, users working in Weather and Water monitoring applications save considerable time and travel costs.

A powerful communication processor, switched on/off by the system controller, performs data processing and controls communications through the internal wireless modem. The wireless RTU's Ultra-Low power design gives users up to 50% energy savings compared to competing devices, offering up to 10 years of autonomous operation on a D-size Lithium Thionyl battery.

Your Choice of Communications

The ADU-500 supports acquisition of up to 48 measurement channels, based on the popular SDI-12 (aka 'smart sensor') communication protocol.
The device also supports data acquisition from sensors with RS-485 serial interface, using the popular MODBUS ASCII protocol. Up to ten measurement channels from several sensors are supported.

Alerting & Messaging

The Infinite ADU-500 uses its modem to automatically send data and alerts. The RTU is available for GSM/EGPRS and CDMA2000 network environments.
SMS announcements include alert messages and periodical status messages. The unit supports discrete alerting for several users. Message texts are user-definable. The unit can also send data via SMS to predefined users or to an internet server via FTP.

Applications Include

- Remote Water Resource Management
- Environmental Monitoring and Telemetry
- Remote Weather Conditions Monitoring
- Flood Warning System
- Irrigation Monitoring System
- M2M applications (Fault diagnostics, Condition monitoring)

The Infinite Advantage

The ADU-500 utilizes a dual-processor architecture in order to combine extreme low power consumption with advanced processing and communication capabilities. A system controller (ultra-low power MCU) performs measurement, data logging and alarm condition detection on a periodical basis.

A powerful communication processor switched on and off by the system controller performs data processing and controls communications through the Internal Wireless Modem.

Setup and Remote Configuration

The unit can be programmed locally through the serial port or remotely via SMS by using simple ASCII configuration commands. Users can configure input alarm parameters, scale parameters and alarm limits, and define user groups. Additionally, the ADU-500 can be remotely reconfigured by sending configuration commands to the unit during the periodical status message processing.