

EDAC300 Series

Rugged solutions for real-time wireless monitoring and control

Time and accuracy are critical components of a successful operation. The EDAC300 Controller gives you a rugged wireless solution to help with your real-time monitoring and control needs.

Ideally suited to many industries, the EDAC300 is a communications device that allows wireless remote alarm monitoring and control via GSM or NextG cellular networks. Its applications are almost limitless.

The EDAC300 Controller is used in applications in just about every industry, where traditional fixed line telephone services are unavailable or not feasible.

The EDAC300 can be applied to many different situations. Temperature, humidity, tank levels, flow and pressure are just a few of the real-world situations that can be monitored. The status of devices such as irrigation pumps, process machinery and security systems can also be monitored.

The EDAC300 has eight inputs which can be used to monitor sensors or equipment. Upon the occurrence of an alarm event the EDAC300 will automatically send a pre-programmed SMS (text) message to up to 16 different cell phones. Outputs (such as switching pumps on and off) are used to switch equipment on and off remotely or on the occurrence of an alarm condition.

EDAC300 Controllers provide a cost-effective solution for remote monitoring, controlling and interrogating applications. The EDAC300 communicates via cellular phone networks. If uncertain of the state of a device or sensor, the EDAC300 provides the facility to interrogate system status from a remote location via SMS messaging.

Optional: EDAC Battery Backup Solutions are also available for the EDAC300. An EDAC Battery Backup Solution will guarantee the EDAC300 has an uninterrupted power supply in the event of a power failure.



Case Study EDAC300 Wireless Management Solutions Making Irrigation Control Easy

Background

A Canterbury farmer wanted to monitor the condition of two water pumps and control irrigation remotely through a mobile cellular phone network.

Challenge

Pumping systems to be monitored and irrigators need to be controlled remotely. The farmer needs to be notified immediately of faults in pumping and irrigation equipment, to take the hassle out of travelling large distances to turn pumps and irrigators on and off manually.

Solution

The irrigation system can be controlled remotely via a simple text message from a standard cellular phone. If a fault should occur, the EDAC300 will automatically notify either the farmer or the electrician, depending on the problem. If an electrical fault occurs, the farmer's electrician will be notified first, reducing down time.

Customer Quote

"I purchased and installed the EDAC300 to control an irrigation pump starter remotely via a text message. The EDAC300 was very simple to setup. The configuration tools made this a breeze. Now the farmer can start/stop his pump without leaving his armchair. It will even text him when the pump has stopped and the run is complete! Our customers that have an EDAC300 installed have been very satisfied, saving them time and money."

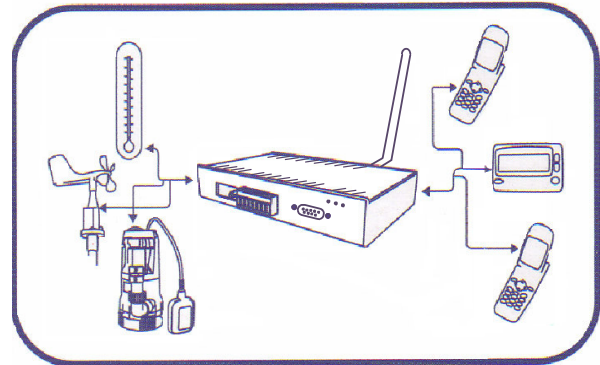
- **Blair Watson, Electraserve Ltd**



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Technical Specifications

Telephone Network Connection	GSM or NextG
Inputs	8 user selectable 10bit Analog or Digital inputs Sensor out of range warnings
Input scan rate	< 1sec
De-bouncing	Configurable
Analog Input type	Individually configurable 0-5V or 4-20mA
Analog Input Units	Engineering units can be specified to match the sensor type
Analog Scaling	Scaling and zero offset parameters for each input
Analog Alarming	Hi-Alarm, Low-Alarm, Hi-Reset and Low-Reset parameters configurable in the specified engineering units for each input
Control	Alarms conditions can be set to activate outputs
Outputs	Normally open relays. 2A max, 50V AC/DC
Other Interfaces	RS-232
Diagnostic interface	Real time diagnostic interface showing condition of all I/O as well as RSSI and Network Status
Power Supply	12-28V AC/DC supply When in idle mode the SMS300 draws less than 80mA (no outputs active) The PSU must be able to supply a peak current of up to 1A
Configuration Interfaces	Hyperterm via RS-232 or using the supplied config application via RS-232 or SMS
Phone number capacity	16 Numbers, each alarm can be sent to any combination of these numbers Numbers are programmed in international format meaning messages can be delivered to any network in the world that is interlinked with the host network
Site Message	20 characters (max) which is attached to every alarm message



Alarm message	20 characters (max) for each alarm The unit can be configured to have separate shorter messages for each alarm, which are used for system queries
Modem Through-mode	The modem can be used in through mode to provide a wireless serial link to an external device (e.g. PLC)
SMS Command Mode	The EDAC300 can forward messages received via the serial port
Physical Dimensions	190mm (w) x 145mm (d) x 45mm (h)
Optional Accessories	PB20: 13.8V DC 1.0A, PSU c/w 12V, 7Ah SLA Battery

Product Matrix

Features	EDAC300	EDAC315	EDAC320
GSM	✓		✓
NextG		✓	
SMS	✓	✓	✓
DATA LOGGING		✓	✓
REMOTE TRANSPARENT RS232*	✓	✓	✓
CONFIGURABLE ANALOG & DIGITAL INPUTS	8	8	8
RELAY OUTPUTS	4	4	4

*Options dependant on network availability and account type