Electronic Sensors, Inc.

9215-EXT   Cellular RTU for Any External 0-5 volt Sensor

DESCRIPTION

To get a handle on a field parameter where travel time is too expensive to check on the parameter's value as often as need be, the 9215-EXT is a low cost, reliable solution. Any zero to 5 volt sensor may be connected to the 9215-EXT with power coming from the RTU. ESI has a large assortment of sensors that are designed to work with the 9215-EXT.

- Multiple Scheduled Auto Reporting
- Multiple High/Low Level Alarm Reporting
- Load Detection Reporting
- Ambient Temperature Reporting
- Magnetic Mounting
- Battery or AC Powered
- Member of the 9215 Product Series

OPERATION

In normal operating mode, the RTU monitors a parameter of user choice and transmits its scaled value through a cellular tower back to the Internet for viewing.

The monitoring of the measured parameter may cause low or high limit notifications, load detection (a sudden change in level either up or down), and a new feature called pseudo real time reporting.

Pseudo real time causes the unit to transmit to the Internet every time the measured parameter changes more than a specified percent from the last time it sent data to the Internet. For example: if the reporting change setting is set to 5% of full scale, then a report will be sent to the Internet each time the level changes more than 5%. Pseudo real time can have multiple reports posted to the Internet several times a day depending on the product usage rate.

Once data is received by the ESI Data Center other notifications may be sent from the data center to: cell phone, faxes, emails, and voice messages.

Standard notification occurs at a low level set point or a high level set point. Many notifications to many people can be generated from one level update from the RTU. The ESI Data Center handles the duplicate reporting to individuals.

Other ESI Data Center capabilities are custom interfaces between the ESI Data Center and a client's server. Message formats such as HTTP, FTP, XML and others may be configured.

9215-EXT SPECIFICATIONS

Parameter	Value
Sensor (sold separate)	Any 0 – 5 volt input.
Sensor excitation voltage	5.0 volts (4.95 v to 5.05 v)
Temperature range	-40F to 140F (does not include sensor specifications)
Tools required for installation	None. Unit has a magnetic mount.
Sensor Interface	Connector located on side of unit
Delay from power to sensor to reading time	Programmable from 10 ms to 3 minutes
Mating connector	16982-7SG-522 SwitchCraft. Connector is weather resistant. One is supplied with unit with 12 inches of jacked wire.

Level Devil®
Bulk Inventory Management Solutions
www.leveldevil.com

9215 SPECIFICATIONS

Parameter	Value
Number of tanks	1
Temperature reporting	Temperature is reported on channel #2
Case Size	4.0 x 3.6 x 1.6 inches
Case Material	Polycarbonate with UV stabilizer
Alarms	10 programmable set points: Low or high limits
Load Detection	Programmable auto send upon a load delivery
Pseudo Real Time Reporting	Programmable. 2% minimum
Sensor Input	Any 0-5 volt sensor
Resolution	4095 counts (12-bits)
Power Source	Internal Lithium battery 2.6 Amp Hours
	Optional external 8 to 14VDC with automatic switch off of internal Lithium batteries
Connector	1 multi-purpose 7-pin circular used to connect to: **External power source** **Local display** **External sensor** **Field tester**
LED	1 red LED used to signal unit and transmission status
Coin Switch	1 coin switch to control the operation of the unit
Modes of operations	2 modes: normal and deep sleep
Cellular carrier	CDMA or GSM
GPS	Communicates with all the US GPS satellites (optional)
Communication mode	Data mode on cellular network (not text)
Display Interface	Interfaces to ESI 9179A Display/Controller
Warranty	1 year (not including battery) See ESI standard warranty statement
Specifications subject to change without notice	

9215 OVERVIEW

The 9215 is a remote transmit unit capable of sending a measured signal (such as a tank liquid level) to the Internet for viewing. The RTU is housed in an unusually small plastic case (see specifications) allowing it to fit in locations where other RTU cannot. Located on its side, see figure, are three standard interfaces: LED, coin switch, and connector.

Back side photo of RTU showing controls located on its side.

HOW TO ORDER

Base part number is 9215-EXT
Include the following options by adding dash numbers to the above base part number.
MUST ORDER SENSOR SEPERATELY.

Part Number	Description
-V	**Verizon as cellular provider (ESI standard on CDMA side)**
-G	**ATT as cellular provider (ESI standard on GSM side)**
-GPS	**Includes Global Positioning System hardware**
9215PC25	**Power cable with AC to DC wall adapter (25 feet of cable) DC output 9v @ 400ma**
9215CS01	**Cable splitter with 1 ft feed**
9179A	**Display/ Tester (sold separately)**

Level Devil®
Bulk Inventory Management Solutions
www.leveldevil.com