

Wireless Analog Transceiver

Overview

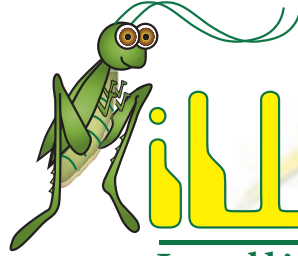
The RT12-4411 is a highly accurate wireless system designed to convert a wired sensor system into a seamless wireless connection between any 4-20ma, 0-5vdc or 0-10vdc sensor and a data logger, controller or SCADA equipment.

The RT12-4411 is equipped with four channels of Bi-Directional, Full Duplex 12-bit analog INPUTS and OUTPUTS allowing for complete control and monitoring.

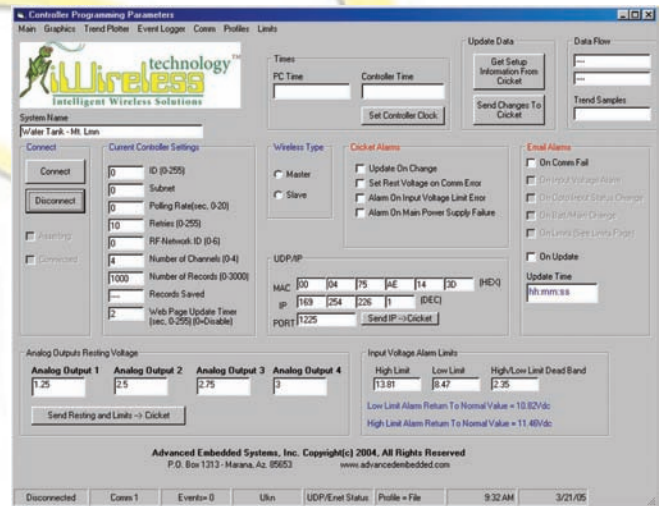
Operation

The RT12-4411 hardware architecture for the MASTER and SLAVE are identical. Both controllers are equipped with four analog inputs and four analog outputs as well as one optically isolated input and one open collector output. This feature allows for full duplex, bi-directional analog signal flow.

The four input voltage signals from the Master and Slave are transmitted to each other and are converted to respective outputs. This means that the four input voltage signals from the Master are transmitted to the Slave. The Slave converts them into a proportional output signal. The same occurs when the Slave sends its input voltage signals to the Master.



iWirelessTM
Intelligent Wireless Solutions



Features and Benefits

- Four channels of Bi-Directional, Full Duplex 12-bit analog INPUTS and OUTPUTS!
- No wiring system to maintain.
- Snaps on industry standard DIN Rail for fast and easy installation.
- Event/Alarm Data Recorder-Time Stamp of all alarms and events.
- Optional Embedded Web page monitor.
- UPD Support allows monitoring software to be used via the internet.
- Flexible Transmission/Polling rates.
- Battery Backup and in-circuit charging system.
- Programmable System alarms.
- Power Supply Monitor and High and Low input voltage alarm limits.
- Communications Detection and failure alarm
- Programmable resting voltages on communication failure.
- Seamless connection between any 0-5vdc type sensor and a PLC or monitoring station.

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Specifications

Specifications for the Master and Slave controllers are identical.

Voltage:	8.5 to 16 vdc, Reverse Polarity Protected.
Current:	110ma, typical
Size:	4.0 in X 2.8 in X 4.5 in
Weight:	11oz, typical
Mounting:	DIN Type, 35mm
Wireless Type:	902-928MHz (2.4 GHz Available), Frequency Hopping, Direct FM
Antenna Connector:	Reverse SMA, Male
Temperature Range:	-40c to + 85c
Analog Inputs & Outputs:	4 channels, 12-bit, 0-5vdc, 0-10vdc and 4-20ma Inputs / 0-5vdc Outputs
LED Indicators:	4 LED, Data Transmit/Receive, LINK and System Heart Beat
Transmission Distance:	Up to 20 miles, with modified antennas, line of sight.

Configuration and Monitoring Software

Programmable and monitoring features may be accessed using the optional configuration, monitoring software.

Your data can be displayed in graphic and numeric form. Data can be formatted using programmable engineering units. Programmable input labels allows you to assign names such as "Voltage", "Current", "Pressure", etc, to each of the INPUTS for the Master and Slave units.

Programmable features such as polling rates, id number, subnets, labels, full scale engineering units, etc, may be easily changed.

UDP/Email Support

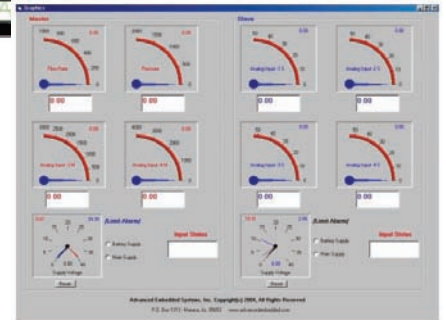
Optional UDP/EMAIL module allows monitoring of a Master/Slave Pair via Ethernet. Email can be generated based on a communication error or a scheduled update.

Event Logger Information:

All events are time-stamped with the event time and date. All event data is stored in the Master and Slave units and may be retrieved using the optional software. An event is a limit error, communications error, etc., and is used to identify and report system problems.

Software Features

- Hi/Low Voltage Alarms
- Trend Plotter
- Optional Email Support
- Graphical Data Display
- Communication Failure Alarms



Factory Defaults

Radio ID:	0
Radio Network:	0
Retries:	10
Polling Rate:	10 sec
Web page Update Rate:	0 sec
Comm Alarm:	Off
Voltage Alarm:	Off
Voltage Limit Alarm:	Off
Number Of Channels:	4

Applications Include

- Tank Level
- Petrochemical
- Pump Control
- Sensor Monitoring
- Irrigation Systems
- SCADA Equipment
- Water well Monitoring and Control
- Waste Water Monitoring and Control
- PLC/RTU Extension, Interface to data loggers, PLC and other recording and controlling equipment.
- Voltage, Current, Power Monitoring and Control
- Interface to data loggers, PLC, SCADA equipment and other recording and controlling equipment.
- Monitoring Oil Wells, Power Plants, Industrial Plants, Cement Processing Plants, Gas Plants
- Monitoring and control of Water Level, Flow Rates, temperature, high and low level pressure, strain, liquid level, gas detection, etc.

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