archer

a member of REDA Hazard Control

SMART SOLUTIONS

Archer's smart solutions improve productivity, safety and lessens environmental impact. Our smart solutions include, industrial internet of things (iIOT), wireless monitoring and control, and portable smart instruments.

360° Fire Protection

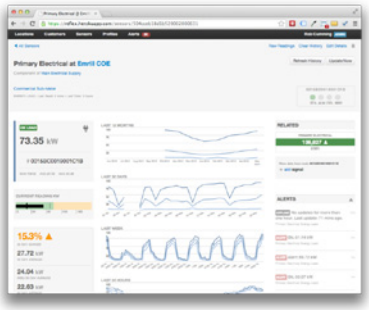
Design. Install. Maintain.

Table of Contents

WIRELESS MONITORING FOR BUILDINGS

Name

Archer IoT Dashboard



Application

Archer's IoT solution gives you the means to monitor a variety of environmental conditions from your internet browser. The software solution provides Datalogging and Alarm Notifications. This solution is ideal for facility managers, building owners, franchise owners and maintenance contractors.

General Specification

Archer IoT Dashboard gives a compact, visual display of all locations
Accessible on Desktop and Mobile Devices
Visual "LCD style" site display designed for sites with hundreds of sensors
Full support for Operator users to add sensors, gateways and configure sites
Battery and Signal now visible without creating additional sensors (on the above mentioned Gateways page)
Datalogging with graphing functionality
Customisable Alarms

Part No.SS01

Name

Gateway

Application

The Gateway allows your sensors to communicate wirelessly to your cloud based Monitoring and Notification System via mobile telephone networks. This is the perfect solution for remote or retrofit locations where traditional networks or cabling is not an option.

General Specification

Cellular Technology : HSPA (36), Frequency Range: 850/ 900/1800 MHz
Antenna : Connector: SMA, Gain (dBi): 1.5
Input Power : 6V DC @ 2.5 A
LEDs : Cellular Status LED, Online Status LED, Sensor Network Status LED
Device Memory: 50,000 sensor messages (Sensor messages will be stored in the event of Internet
outage and transferred when connection is restored)
Enclosure : ABS
Dimensions : 12.7 mm x 97 mm x 38 mm
Weight : 200g
Operating Temperature : -10 to +70 °C
Storage Temperature : -20 to +85 °C"

Part No.SS02

WIRELESS MONITORING FOR BUILDINGS

Name

Wireless Temperature Sensor

Application

The temperature sensor is ideal for measuring ambient temperatures within a room or inside an enclosure when using the 60 cm sensor lead. Typical applications include air conditioned areas, cold stores, refrigerators, warehouses.

General Specification

Supply Voltage : 2.0 - 3.6 VDC
Current Consumption : 0.7 µA (sleep mode)
Average battery life: 1 year
Operating Temperature Range (Board Circuitry & Coin Cell) : -7°C to +60°C
Optimal Battery Temperature Range (Coin Cell) : +10°C to +50°C
Accuracy @ 25°C : +/- 1%
User Calibrated Accuracy : +/- 0.25° C
Time Constant @ 25°C : 30 sec
Certifications : 868 and 433 MHz product tested and found to comply with CE & R-NZ

Part No.SS03-SSxx

For enquiries and orders, select the options below and complete the part number by replacing each 'xx' with the relevant option number.

Sensor Lead:
(SS01) Integrated
(SS02) With 60 cm Sensor Lead

Name

Wireless Relative Humidity Sensor

Application

The Humidity Sensor allows you to accurately monitor the relative humidity of the air within a room or enclosure. Typical applications include air conditioned areas, cold stores, refrigerators, warehouses.

General Specification

Supply Voltage : 2.0 - 3.6 VDC
Current Consumption : 0.7 µA (sleep mode)
Operating Temperature Range (Board Circuitry & Coin Cell): -7°C to +60°C
Optimal Battery Temperature Range (Coin Cell) : +10°C to +50°C
Accuracy : ± 1.8% under normal conditions (10% - 90% RH)
RH Operating Range : 0 – 100% RH
RH Response Time : 8 sec (tau 63%)
Certifications : 868 and 433 MHz product tested and found to comply with CE & R-NZ

Part No.SS04

Name

Wireless Light Sensor

Application

Uses a photoresistor to detect the presence of light around the device. Ideal for building managers for implementation in energy management strategies.

General Specification

Supply Voltage 2.0 - 3.6 VDC
Current Consumption 0.7 µA (sleep mode)
Operating Temperature Range (Board Circuitry and Coin Cell) -7°C to +60°C
Optimal Battery Temperature Range (Coin Cell) +10°C to +50°C
Angle of Half Sensitivity Ø = ± 50°
Max Light Level 0 - 1,000 Lux

Part No.SS05

WIRELESS MONITORING FOR BUILDINGS

Name

Wireless Flood Sensor

Application

The Flood Sensor alerts you of potential property damage that results from flooding or leaks. Place this sensor anywhere flooding or faulty plumbing could cause a problem. This Sensor can also be used to detect a lack of water. Typical applications are inside storage tanks, air-conditional condensation drip trays, flood-prone basements and so on.

General Specification

Supply Voltage : 2.0 - 3.6 VDC
Current Consumption : 0.7 µA (sleep mode)
Operating Temperature Range (Board Circuitry & Coin Cell): -7°C to +60°C
Optimal Battery Temperature Range (Coin Cell) : +10°C to +50°C
Probe Wire Length : 900 mm
Probe End : 2 prong conductive detector
Certifications : 868 and 433 MHz product tested and found to comply with CE & R-NZ

Part No.SS06

Name

Wireless Vibration Sensor

Application

Accumulates vibration activity and gives the user an idea of how much activity has occurred. This is useful for conditional monitoring of compressors, pumps and generators, to understand usage trends and machine health.

General Specification

Supply Voltage 2.0 - 3.6 VDC
Current Consumption 0.7 µA (sleep mode)
Operating Temperature Range (Board Circuitry and Coin Cell) -7°C to +60°C
Optimal Battery Temperature Range (Coin Cell) +10°C to +50°C
Sensitivity 0.05 g
Certifications 868 and 433 MHz product tested and found to comply with

Part No.SS07

Name

Wireless Meter

Application

Meter count sensors are for integration with electronic or mechanical meters that give a 'pulse' output e.g. water flow meters and power meters. This can be used to track water and power usage over time. Useful for facility managers wanting to gather data about utility use.

General Specification

Supply Voltage 2.0 - 3.6 VDC
Current Consumption 0.7 µA (sleep mode)
Operating Temperature Range (Board Circuitry and Coin Cell) -7°C to +60°C
Optimal Battery Temperature Range (Coin Cell) +10°C to +50°C
Maximum Count 4294967296 (32 bit number)
Input Voltage 0 to 15 Volts DC
Counter Operation Positive and / or Negative Edge Pulses
Compatibility Open Collector NPN Switches (Passive) Mechanical Switches (Passive) 0-15V Driven Source (Active)
Certifications 868 and 433 MHz product tested and found to comply with

Part No.SS08

Call for more information.

WIRELESS MONITORING AND CONTROL FOR INDUSTRIAL APPLICATIONS

Name

Industrial Monitoring and Control Software

Application

For industrial applications, you will need a more robust monitoring and control platform. The AMEREX Incident Management System (AIMS) is the heart of Archer's Industial IoT (IIoT) ecosystem, and was built with the emergeny response manager in mind. AIMS delivers spontaneous site condition recognition of remote equipment, which automatically populates at near real-time, a collaboration between incident and/or event staff, including incident commander, staging, dispatch, and emergency operation centers.

General Specification

- Pre plans for normal every day activities and incident response
- Icons and controls are scaled automatically to facilitate easy use
- Multi-HMI windows which facilitate the interactions of resources and other vital information
- Log page to record all events and maintain an auditable trail
- 'Command Page' which acts as the window to virtually interact with the plant or incident
- Provides a tactical accountability board which facilitates a free flow of information
- Single integrated application with a consistent and logical look and feel
- Cear and logical icons
- Selectable drop down interfaces
- Fast and responsive
- Minimal user training required
- Supplied with a comprehensive on-line help tab

Part No.SS09

Call for more information.

Name

Site Controller

Application

The Archer IIoT ecosystem is built on the concept of a mesh wireless network. Mesh networks that are based on the proprietary Amerex SNAP protocol, are robust networks that are secure, low powered, self-healing and built with multiple redundancies. The AMEREX Integrated 30500 Site Controller is a powerful, versatile gateway which connects the mesh network with the AMEREX Integrated Incident Management System (AIMS).

General Specification

Python-based Virtual Machine for scripting applications
ARM Cortex"-A9 architecture, running at 800 MHz
4GB NAND Flash/512MB DDR2 SRAM
SNAP mesh enabled (2.4GHz, IEEE 802.15.4)
Wi-Fi networking (2.4GHz, IEEE 802.11 a/b/g/n - option)
3G Cellular (UMTS/HSPA+ or 1xRTT/ EV-DO versions)
Bluetooth Smart/BLE (2.4GHz, Version 4.0)
10/100 Ethernet port
USB 2.0 Type-A (host), Micro-B (serial)
24v d.c. supply (terminals)
10-28v d.c supply barrel connector
-40°C to +70°C Industrial operating temperature

Part No.SS10-ECxx

For enquiries and orders, select the options below and complete the part number by replacing each 'xx' with the relevant option number.

Enclosures:
(EC01) Standard
(EC02) Weather proof
(EC03) EX rated

WIRELESS MONITORING AND CONTROL FOR INDUSTRIAL APPLICATIONS

Name

Digital/ Analog Input and Output Module

Application

The SNAP modules for digital/ analog monitoring and control, are available in a range of base units that can be connected easily to other items of equipment, such as valve monitoring equipment, meters, switches and many other applications. These modules are intelligent devices with on board PIC able to carry its own programmable logic for monitoring and control functionality.

General Specification

32 GPIO with up to 7 A/D inputs
128k flash, 58.5k free for over-the-air uploaded user apps
Two UART ports for control or transparent data
Low power modes:
Timed Sleep Mode 1: 1.27 µA
Timed Sleep Mode 2: 1.47 µA
Untimed Sleep Mode: < 390 nA
Spread Spectrum (DSSS) technology
Up to 2 Mbps radio data rate
2.4 GHz RF Frequency
AES 128-bit encryption
Integrated on-board compact F antenna or U.FL connecter
Surface Mount, Solder-able
4K internal EEPROM
8 PWM outputs
Supports over the air firmware upgrades.

Part No.SS11-ATxx-ECxx-CFxx

For enquiries and orders, select the options below and complete the part number by replacing each 'xx' with the relevant option number.

Antenna:
(AT01) On-board antenna
(AT02) External antenna

Enclosures:
(EC01) No Enclosure
(EC02) IP 56 Weatherproof
(EC03) Ex-proof
- Customer to specify hazardous zone classification

Configuration:
(CF01) 1 Analogue Input and 3 Digital Input
(CF02) 3 Digital Input and 1 Digital Output
(CF03) 2 Analogue Input, 4 Digital Input, 4 Digital Output

Name

Serial Interface Wireless Module

Application

Serial wireless adapters makes it easy and quick to connect RS-485/422 (model 30300) devices, increasing distance beyond physical wire constraints while reducing installation and on-going maintenance cost and line noise problems.

General Specification

Instant-ON, Self-Healing Mesh Network
RS-485/422 supports two and four wire, half & full duplex
Spread Spectrum (DSSS) technology surmounts noisy environments
Supports wireless ModBus
LEDs show signal strength & data transmission activity
Supports One-to-One and One-to-Many Relationship Configurations
-10° to 70° C Operating Temperature, Industrial Use
No change to existing equipment
RP-SMA antenna connection
Micro-B USB port for easy connection to PCs (no serial-to-USB adapter required)

Part No.SS12-MDxx

For enquiries and orders, select the options below and complete the part number by replacing each 'xx' with the relevant option number.

Model:
(MD01) RS-485/422 supports two and four wire, half and full duplex
(MD02) RS-232 with DB-9 port with full hardware flow control

WIRELESS MONITORING AND CONTROL FOR INDUSTRIAL APPLICATIONS

Name

Fire Alarm Panel Interface Module

Application

Fire Panel Interface (FPI) module is one of a range of base units that can be connected easily to most fire detection systems by using its three output services.

General Specification

3 x Digital outputs (Trouble, Supervision and Buzzer) 35v d.c. max 2Amps
1 x Visual display (2 line 16 character display)
1 x Command keypad
1 x Additional memory
1 x Audible alarm
24v d.c. / 250mAmps from a FM approved power supply or FM Approved FACP.
Transmit Power output up to +20 dBm
SNAP mesh enabled (2.4GHz, IEEE 802.15.4)
RF Data rate up to 2Mbps
Mesh networking (2.4GHz)
-10°C to +49°C operating temperature

Part No.SS13

Name

Valve Monitoring Module

Application

Valve monitoring module is ideal for remote valve monitoring. The simple design makes it suitable for many applications that require the monitoring of simple switch inputs (dry contacts) within the enclosure. This module was developed to prevent the accidental or deliberate incorrect operation of control valves in the fire protection industry.

General Specification

Integrated on-board compact F antenna.
Transmit Power output up to +20dBm
RF Data rate up to 2Mbps
Power requirements 24v d.c 250mA from a FM Approved Fire power supply or a FM Approved FACP
3 x Digital inputs
1 x Relay driver output (rated 100mA)
SNAP mesh enabled (2.4GHz, IEEE 802.15.4)
Indoor, weatherproof and explosion proof enclosures available
Anti-tamper
Internal tamper circuits hermetically sealed
-40°C to +70°C Industrial operating temperature

Part No.SS14-PWxx-ATxx

For enquiries and orders, select the options below and complete the part number by replacing each 'xx' with the relevant option number.

Power:
(PW01) On-board battery
(PW02) DC power

Antenna:
(AT01) On-board antenna
(AT02) External antenna

WIRELESS MONITORING AND CONTROL FOR INDUSTRIAL APPLICATIONS

Name

Extinguisher Monitoring Module

Application

Remote extinguisher module is ideal for the remote monitoring of fire extinguishers for any facility for pressure, obstruction and tampering. The remote extinguisher module saves the operator time and energy spent on mandatory weekly inspections.

General Specification

Monitoring Pressure of the extinguisher
Monitors extinguisher obstructions
Transmit Power output up to +20 dBm
SNAP mesh enabled (2.4GHz, IEEE 802.15.4)
RF Data rate up to 2Mbps
Power requirements 10-32 Vdc or internal battery
Mesh networking (2.4GHz)
Complete with indoor enclosure

Part No.SS15-PWxx

For enquiries and orders, select the options below and complete the part number by replacing each 'xx' with the relevant option number.

Power:
(PW01) On-board battery
(PW02) DC power

PORTABLE INSTRUMENTS

Name

Portalevel Max

Application

The Portalevel MAX is a UL Listed liquid level indicator used to non-intrusively measure the liquid level inside a Halcarbon (e.g. 3M-Novec, FM200) or Carbon Dioxide Cylinder. The Portalevel benefits the operator by improving the safety and efficiency of measuring cylinder liquid levels, which is usually carried out by weighing or checking magnetic gauges.

General Specification

Display: Membrane control operated, LCD back-lit Display measuring 55 x 28 mm
Function: Portable Ultrasonic Liquid Level Indicator
Power Supply: 1 x PP3 9V battery (battery life 10 hours)
Verifiable Liquids/Gases: CO2, FM200, NOVEC, Halon and other Halon replacements amongst a range of others
Sensor: TX/RX sensor 14 mm diameter head, contained within a magnetized sensor applicator; connected by BNC connectors to 1 m length co-ax cable
Weight: 300 g
Unit Dimensions: 160 x 82 x 30 mm
Operating temperature: -20C to +70C
Storage temperature: -10C to 50C

Part No.SS16-SSxx-MBxx

For enquiries and orders, select the options below and complete the part number by replacing each 'xx' with the relevant option number.

Sensor:

(SS01) Standard dry sensor
(SS02) Wet sensor

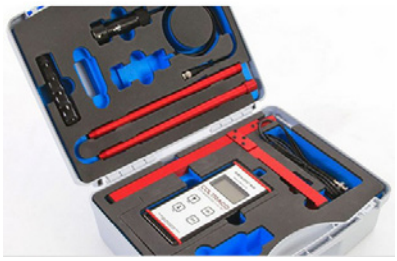
Multi-banked extension rod:

(MB01) Standard rod - 28mm wide, normal build, ideal for vast majority of applications
(MB02) Slim line rod - only 14mm wide and lightweight, ideal for where cylinders are tightly packed

PORTABLE INSTRUMENTS

Name

Portalevel Max Marine



Application

The Portalevel MAX Marine is designed primarily inspection of large fire suppression systems on offshore platforms or vessels. This model allows users to measure stacked rows of cylinders which is a common practice in offshore installations.

General Specification

Dimensions: 160 x 82 x 30 mm
Weight:300 grams (10.58 ounces)
Accuracy: +/-1.5mm (1/8 inch)
Verifiable Agents: CO2, FM-200™, NOVEC™1230, old Halons such as 1301 and 1211, FE-13™, FE-25™, FE-36™, HFC-225 & 2271
Sensor: TX/RX Dry Sensor, 14 mm diameter head, Contained within a magnetized sensor applicator;
Connected by BNC connectors to 1 m length co-ax cable.
Mini Extension Rod Sensor: 1 meter in length, 12mm in diameter,
Connected by bnC connectors to 1 length co-ax cable.
Power Supply: 1 x PP3 9V battery (battery life 10 hours)
Display: Membrane control operated, LCD back-lit Display measuring 55 x 28 mm
Operating Temperature: -20°C to +70°C (68°F to 158°F)
Certificates: UL APPROVED, Classification Society Approved- RINA, CE, ISO 19011 Registered
Classifications: IP Rating 65
Warranty: Main Unit: 3 Years WarrantySensor: 1 Year Warranty
Lifetime Customer Support
Package Contents: 1 Potalevel MAX unit, 1 Wet Sensor, 1 Mini 12mm Extension Rod, 1 Portatherm, Ultrasonic Gel, 1 Hard Wearing Carrying Case, Calibration certificate

Part No.SS17-SSxx-SRxx

For enquiries and orders, select the options below and complete the part number by replacing each 'xx' with the relevant option number.

Sensor:
(SS01) Standard dry sensor
(SS02) Wet sensor

Multi-banked extension rod:
(SR01) Standard rod - 28mm wide, normal build, ideal for vast majority of applications
(SR02) Slim line rod - only 14mm wide and lightweight, ideal for where cylinders are tightly packed

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Name

Portalevel Datalogger

Application

The Portalevel Datalogger is the first unit of its kind worldwide. It is an ultrasonic non-intrusive liquid level indicator capable of recording and storing up to 1,000 cylinders worth of readings.

General Specification

Accuracy : +/- 1.5 mm
Verifiable Liquids/Gases : CO2, FM-200, Novec, Halon, Fe-13, Fe-25, NAF SIII and Halon substitutes are typical amongst many others –please ask for a specific liquid
Dimensions : 200x100x43mm
Weight : 500 g
Power Supply – Battery : 9V PP3 Battery
Interface with PC : Via USB Cable supplied with kit

Part No.SS18-SSxx-MBxx

For enquiries and orders, select the options below and complete the part number by replacing each 'xx' with the relevant option number.

Sensor:
(SS01) Standard dry sensor
(SS02) Wet sensor

Multi-banked extension rod:
(MB01) Standard rod - 28mm wide, normal build, ideal for vast majority of applications
(MB02) Slim line rod - only 14mm wide and lightweight, ideal for where cylinders are tightly packed

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PORTABLE INSTRUMENTS

Name

Portascanner

Application

Portascanner is the portable Ultrasonic Watertight Integrity indicator – for testing watertight and weather-tight seals. It is ideal for checking the hatch-covers, doors, cable transit areas, scuttles, flanges, shell doors, steering gear hatches etc. Designed primarily to enhance the ease and accuracy with which critical watertight, airtight or weather tight seals can be inspected for leak sites or areas of reduced compression in the seal.

General Specification

Dimensions :
- Main Unit
  - Height:215 mm (8.46 inches)
  - Width:82 mm (3.22 inches)
  - Depth:30 mm (1.18 inches)
  - Weight:420 g (14.82 ounces)
- Generator
  - Height:90 mm (3.54 inches)
  - Width:111 mm (4.37 inches)
  - Depth:50 mm (1.97 inches)
  - Weight:430g (15.17 ounces)

Generator :
0.1 Watt/ 100dB unidirectional speakers
Mounting method- permanent magnet

Microphone :
Rod: 310mm Length x 25mm Diameter2
Comprised of three parts that are screwed together
Connected by bnC connectors to 1 m length co-ax cable.

Receiver :
Frequency Response - 20 – 18,000 Hz
Impedance - 32 Ohms +/- 5% Sensitivity - 105dB SPL at 1KHz
Adaptor Plug - 3.5mm to 6.3mm type

Readings :
Audio reading via head-band electrodynamics headphones
Numerical reading - 1 to 31775 - via LCD display

Power Supply :
Generator : 2 x PP3 9V battery (battery life 10 hours)
Receiver unit: 1 x PP3 9V battery (battery life 10 hours)

Display :
Membrane control operated, LCD back-lit Display measuring 55 x 28 mm

Operating Temperature :
-20°C to +70°C (68°F to 158°F)

Package Contents :
1 Portascanner II
1 Generator
1 Receiver
1 Headphones
1 Hard Wearing Carrying Case
Calibration certificate

Part No.SS19-ERxx

For enquiries and orders, select the options below and complete the part number by replacing each 'xx' with the relevant option number.

Extension rod:
(ER01) Base
(ER02) Alternative lengths

PORTABLE INSTRUMENTS

Name

Permalevel Multiplex

Application

Permalevel Multiplex is the first system worldwide that is capable of monitoring the liquid level of critical fire suppression cylinder systems on a constant basis. It provides the real-time status of all their critical fire systems.

General Specification

Power Supply : 95V-260V
Power Supply Status : Main Power Supply and UPS active LED indicators
UPS Lifetime : Up to 24 hours
Analogue Relay Output : 4-20mA
Digital Output : RS232/RS485
Local Display : LCD Screen
Channel Sensitivity Controls : Gain (Power Gain), Trip (Alarm Trigger Level) and SPA (Additional Power) knobs for each channel
Local System Controls : Channel Select, View Settings, Channel Calibration, Special Power Application Toggle, Alarm Cancel
Local Visual Alarms : 4 status LEDs per active channel. 3 green LEDs indicate signal level, 1 red indicates alarm
Operational Perational Temperature Range : -20c - +70c
Operational Humidity Range : 0-80%
Gross Weight : 6kg
External Dimensions : 440mm x 350mm x 13mm
External Case Material : Aluminium
Sensor Dimensions : D35mm X H35mm
Max. Sensor Cable Length : 5m

Part No.SS20

Call for more information.

Name

Permalevel Single Point

Application

Permalevel Single Point is a fixed 24/7 fire suppressant monitoring system. It is designed for up to 5 individual fire suppression cylinder monitoring applications. The Permalevel is easy to retrofit. When coupled together with a SNAP wireless module, you can achieve wireless monitoring of fire suppression cylinders at a fraction of the cost of a wired system.

General Specification

Strong Magnet
Retroffitng Available
LCD Aand LED Display
4 – 20mA Relay Output
Monitors a wide Range of Verifiable Agents
Remote Real-time Monitoring Screen
Compatible With Multiple Cylinder Types

Part No.SS21

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