

PRODUCT LINECARD

TEMPERATURE, HUMIDITY, PRESSURE, CURRENT, GAS, INTERFACE & WIRELESS

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ACI LINECARD PRODUCT CATEGORIES

T	TEMPERATURE SENSORS
Н	HUMIDITY SENSORS
Р	PRESSURE SENSORS
C	CURRENT SENSORS
I	INTERFACE DEVICES
G	GAS SENSORS
W	WIRELESS SENSORS
Α	ACCESSORIES

TEMPERATURE

The first product line ACI manufactured in 1991 was temperature sensors. This line has grown in scope every year since and has become a staple in the industry today. ACI goes the extra mile by double encapsulating and using high-quality etched teflon for probe-based sensors.

ROOM

The ACI R2 offers the most stylish and modern room enclosure appearance in the industry today. ACI's R2 provides great airflow which allows the enclosure to be fitted with numerous options and limits self-heating errors. Options include setpoint, override, and communication jack. This attractive enclosure can be ordered with your custom logo as well.

DUCT

ACI's standard plastic box has a hinged cover with a pressure latch closing mechanism, a mounting flange and a foam pad. Each sensing element is double encapsulated and is offered in numerous probe lengths. Ducts can also be ordered with a galvanized metal box, NEMA 3R, or NEMA 4X enclosure.

OUTSIDE

The ACI Outside Air Mount is based on a European style enclosure that locks out water with a gasketed cover and watertight fitting; and designed to be mounted flush to an exterior wall. A solar radiation/weather shield is offered when applications require additional protection from extreme weather conditions.

IMMERSION

The ACI Immersion configuration incorporates the same high quality standards as the ACI Duct configuration but adds a ½ inch NPSM fitting in place of the mounting flange and a variety of thermowell lengths and materials are available. This product comes standard with a galvanized box and can also be ordered with an optional plastic enclosure, NEMA 3R or NEMA 4X enclosure.

STRAP

The ACI Strap-on comes with a sensor epoxied to the back side of a copper plate and with a foam pad, creates compression when the strap wormdrive is tightened. This creates a good thermal transfer around pipes 2" to 5" in diameter. Strap-ons come standard with a galvanized box and can be ordered with a plastic enclosure or a NEMA 4X enclosure.









COPPER AVERAGING

ACI has several options for getting an average temperature reading. Our most common is the flexible copper tube type, which comes in lengths of 8', 12', and 24'. Copper is known to have an inhibiting effect on the growth of fungi's and bacteria within the typical HVAC duct. Copper also has a thermal conductivity that is approximately 1.75 to 2 times higher than that of aluminum.

RIGID AVERAGING

The stainless steel probe houses sensing elements which are wired in a series/parallel configuration to provide an averaged output. A foam pad is added to dampen vibrations.

FLEXIBLE AVERAGING

The flexible averaging series incorporates sensing elements which are wired in a series/parallel configuration to provide an averaged output inside a flexible cable for ease of installation. Each sensing element is marked by adhesive shrink wrap.

BUTTON

The ACI Button Sensor is designed to be aesthetically pleasing for higher profile applications. Due to the size and appearance of these products, any button sensor is a perfect choice for applications where room sensors want to remain un-noticed. Buttons are available in brass, stainless steel, and plastic for installation flexibility.

HAZARDOUS

ACI's Hazardous Sensor Series is offered with an explosion proof head, which includes an O-ring, gasket, ground screw, (2) 1/2" NPT female openings, and mounting holes in the base of the housing for ease of installation. The condulet enclosure has a UL Listing of 886 and meets the following: CL. I, DIV. 1 & 2, GR. A, B, C, D; CL. II, DIV. 1, GR. E, F, G; CL.II, DIV. 2, GR. F, G; CL. III; NEMA 3, 4, 7ABCD, 9EFG.

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TUC2

TUC2 can indicate room temperature, setpoint, fan speed, and occupied, unoccupied status with corresponding signals sent to your Direct Digital Control System (DDC System). This unit supports single sensor operation for several common sensor types and it provides the flexibility to indicate several options. Additionally, many options are field adjustable via the key-pad menu. The A/TUC2 is highly configurable as a standard offering but can also be engineered to meet special OEM requirements.

STAINLESS PLATE

The ACI Stainless Plate has a sensor epoxied to its backside and is thermally shielded from temperatures inside the wall by an insulated foam pad. Options include an override and RS232 communication port.

HIGH & LOW

ACI High Temperature (HT) and Low Temperature (LT) sensors are air encapsulated. This allows the sensor to have a more stable output since the sensing element isn't subjected to the constant expansion and contraction of the encapsulation materials. Sensors are mounted in a 1/4" diameter stainless steel probe and have nickel plated fiberglass (HT) or teflon (LT) lead wires.

FREEZER

The ACI Freezer Sensor Series is designed to be placed in glycol to buffer freezer fluctuation response times. Available sizes include: 6', 10', 30', 50' and 100' lengths for platinum RTDs and 30' for various thermistor sensor types. Freezer sensors may be purchased with a glycol bottle and mounting bracket if desired.

BULLET PROBE

A stainless steel probe encases a double encapsulated sensing element for durability and ease of installation. The wire leads are etched Teflon and are color coded to identify the sensing element involved. Additional types of wire and cable are available for probe related sensors.











POTTED SENSOR

The raw sensor series is a double encapsulated sensing element for durability. The wire leads are etched Teflon and are color coded to identify the sensing element involved. Additional types of wire and cable are available.

LCD

ACI offers a digital display to be used in conjunction with its full line of temperature sensors. These devices can be configured with a setpoint, override, and communication jack.

INFINITY

The Infinity Enclosure has 4-way airflow and has been ACI's standard enclosure for several years. It can support multiple options such as LCD, setpoint, override, and communication jacks. Recently, ACI introduced a modern update to the Infinity Enclosure, the R2 (Aries Enclosure).

THERMOWELLS

ACI offers a full line of thermowells that cover a wide range of applications. A two-piece welded well comes standard with our thermowell sensor line. A machined well is available for moving water or high pressure applications. Also available are monel wells; which are well suited for marine and salt water applications.

MOUNTING PLATES

The ACI Mounting Plate may be used to mount devices over a larger electrical enclosure or hole in the wall. It is made up of a plastic material and contains numerous mounting holes to match most of the standard electrical boxes used in the industry today. It may be mounted either vertically or horizontally. ACI also offers a slightly larger plate made from 20 Gauge Commercial Steel.











NEMA 4X

Type 4X enclosures are intended for indoor and outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, and hose directed water; and to be undamaged by the formation of ice on the enclosure.

NEMA 3R

Type 3R enclosures are intended for outdoor use primarily to provide a degree of protection against falling rain; and to be undamaged by the formation of ice on the enclosure (Not available with the ACI Strap-on Sensor Series).

GALVANIZED

The ACI galvanized enclosures are intended for indoor use primarily to provide a degree of protection against contact with the enclosed equipment or locations where unusual service conditions do not exist. Galvanized enclosures are typically fitted with mounting flanges and foam pads for duct mounted applications.

EURO, OUTSIDE

The Euro Housing is ACI's standard enclosure for all outdoor resistive temperature sensors. This weather proof enclosure has a gasketed cover and a water tight gland for wiring.

PLASTIC BOX

The innovative plastic box from ACI features a hinged cover with no screws to mess with, only a quick snap latch for ease of installation. This sleek, yet robust, enclosure also features a built-in mounting flange and weighs much less than its metal counterparts.









HUMIDITY

ACI has embraced the challenge of bringing a highly accurate and durable relative humidity sensor to the HVAC Industry for an affordable price. ACI has incrementally enhanced its design over the past decade to mold it into the industry standard it is today.

TUCH2

The TUCH2 can indicate room relative humidity, temperature, setpoint, fan speed, and occupied/unoccupied status with corresponding signals sent back to your DDC System. This unit supports single sensor operation for several common sensor types and it provides the flexibility to indicate several options. Additionally, many options are field adjustable via the key-pad menu.

ENTHALPY

The A/ENT-CTRL and A/ENT-DIFF are enthalpy controllers which measure and convert temperature and humidity into a sourced relay output. The supply voltage to the A/ENT-CTRL or A/DIFF-ENT is common to both the N/O or N/C contacts of the 10A Form 1C Relay. (The A/ENT-CTRL-F1C's output acts as a dry contact rather than sourcing the supply voltage). Typically used in conjunction with the A/DIFF-ENT, the A/ENT converts a capacitive type humidity sensor into a linear 2-wire, 4 to 20 mA output.

RELATIVE HUMIDITY

The ACI RH Series relative humidity transmitters utilize a capacitive sensing element to deliver a proportional analog output. This series features on board DIP switches which allow the user to select the desired output signal and can be powered by AC or DC power sources. Field calibration can be performed by using the on board increment and decrement DIP switches. These enhancements provide increased flexibility and outstanding long-term performance. (Duct model is shown)

RELATIVE HUMIDITY, TEMPERATURE

The ACI RH with Temperature Series combines the feature set listed above with ACI's extensive list of resistive temperature sensors or with ACI's high performance temperature transmitter line. (Outside model is shown).

SUN SHIELD

The ACI Sun Shield is a reliable solution for protecting temperature and humidity sensors. It consists of nine molded plastic plates which provide maximum airflow around the sensor while at the same time minimizing direct exposure to sunlight. The passive shield is shaped to allow natural air convection around the sensor so that the air temperature inside the shield is a good representation of the outside air. The shield also provides protection from rain and snow.











REMOTE PROBES

The ACI RH Remote Series option gives mounting flexibility for your remote sensing applications. They utilize a capacitive sensing element to deliver a proportional relative humidity analog output and are also offered in conjunction with a temperature output (analog or resistive). The remote probe wiring harness comes in lengths of 3, 6, 10, or 20 feet. Single point RH field calibration can be done by using the increment and decrement dip switches.

RELATIVE HUMIDITY TT

The A/RH Series relative humidity transmitters (with temperature transmitter output) utilize a capacitive sensing element to deliver a proportional analog output. This series features on board DIP switches which allow the user to select the desired output signal. In addition, field calibration can be performed by using the on board increment and decrement DIP switches. Duct and Outside Air configurations feature conformally coated RH circuit boards for moisture resistance.

RELATIVE HUMIDITY RESISTIVE

The A/RH Series relative humidity transmitters (with resistive temperature output) utilize a capacitive sensing element to deliver a proportional analog output. This series features on board DIP switches which allow the user to select the desired output signal. In addition, field calibration can be performed by using the on board increment and decrement DIP switches. These enhancements provide increased flexibility and outstanding long-term performance.

RELATIVE HUMIDITY LCD

The A/RH with LCD Series features excellent performance and an attractive enclosure with a large, backlit display. This series utilizes a capacitive sensing element to deliver a proportional analog output. Standard outputs supported are 4 to 20 mA, 0 to 5 VDC, or 0 to 10 VDC. (Please indicate specific output at time of order). See the A/TUCH2 data sheet for additional options such as temperature, setpoint, and override.









PRESSURE

Pressure accuracy and reliability is critical in the HVAC industry. ACI has refused to comprise in terms of design or calibration methods. Every ACI product is designed to exceed it's listed specifications. This is evident in our pressure products.

LP2-LCD

The A/LP2-LCD Series pressure transmitters incorporate a durable piezoresistive sensing element to enable low pressure measurements. Integrated temperature compensation with offset and span calibration extends the performance of these devices to provide excellent long term reliability. This series has the option for a LCD which provides an initial set up reference, trouble shooting assistance, and performance monitoring. All units are calibrated using NIST certified references.

LP2

The A/LP2 Series pressure transmitters incorporate a durable piezoresistive sensing element to enable low pressure measurements. Integrated temperature compensation with offset and span calibration extends the performance of these devices to provide excellent long term reliability. All units are calibrated using NIST certified references.

DP2

The A/DP2 Series is a line of low differential pressure transmitters that are capable of sensing full scale ranges down to 0.1" of water column. Each ACI pressure transmitter utilizes a high quality ceramic capacitive sensor to provide long term stability and performance. Accuracy is +/- 0.3% of full scale over the compensated temperature range for most ranges (see specification chart) and this is critical for optimizing building pressure. In addition to the requested span, most units are capable of being field adjusted to a maximum of three additional spans by resetting the internal jumpers.

MLP

The A/MLP Series Pressure Transmitters incorporate a durable piezoresistive, silicon micro-machined sensing element to enable very low-pressure measurements. Pushbutton zero and span features provide easy adjustability and the condensed sized of the A/MLP lends itself to panel mount or tight installations. In addition, the wiring terminal block is removable for the ease of installation. The MLP is offered with Uni & Bi-Directional ranges.

WPR2 LCD

The A/WPR Series Remote Wet to Wet Differential Pressure Sensors are designed to reduce installation time and provide plumbing flexibility. The A/WPR accurately measures wet media pressures in a variety of applications. Commonly used for monitoring pumps, these devices are also idea for measuring pressure across filters, heat exchangers and compressors. This product's enclosure opens conveniently to allow three additional ranges (see order grid) and outputs of 4 to 20 mA (default), 0 to 5 VDC, or 0 to 10 VDC. The WPR Series can measure pressure ranges from 15 to 300 psi and the 304L stainless fittings are compatible with a wide range of gases and liquids. The WPR is offered with Uni & Bi-Directional ranges.









WP

The A/WP Series is a two-wire Wet to Wet Differential Pressure Transducer. The A/WP is ideally suited for use with any harsh media, wet or dry, that is compatible with 17-4 PH and 300 series stainless steel. The A/WP may be powered with a 9 to 30 VDC supply voltage and outputs a linear 4 to 20 mA, 0 to 5, or 0 to 10 VDC output signal. To ensure an accurate linear analog output, the WP contains circuitry to provide signal conditioning, reverse polarity protection, and temperature compensation as an integral part of the device.



The A/GP Series has been designed to provide excellent accuracy and reliability in commercial, industrial, and process control applications. All units are accurate to +/- 0.5% or +/- 1% of full scale. The A/GP pressure transmitter offers a combined repeatability, hysteresis, and non-linear factor that is typically below +/- 0.15% of full scale. The A/GP pressure transducers are both EMC compliant, reverse polarity protected and can be ordered in an optional NEMA 4 rated enclosure.

AFS SWITCH

The AFS Series Differential Pressure Switches are general purpose switches designed for both HVAC and Energy Management applications. These pressure switches can be used to sense positive, negative, or differential air pressures. All units contain a diaphragm, calibration spring, and a snap acting SPDT switch. The AFS-460's SPST output is configured for a normally closed action with a manual reset. The enclosure cover guards against accidental contact with the live switch terminal screws and the setpoint adjustment scew.

DBL SWITCH

The DBL Series Differential Pressure Switches are adjustable vacuum, pressure and differential pressure switches designed for both HVAC and Energy Management Applications. Due to the ease of calibration and adjustment procedures, these units will save you both installation time and money. The units have field adjustable setpoints and switching differentials. They will reset automatically. Each unit contains (1) SPDT contact rated for 1.5 amps @ 250 VAC. All wiring connections are to be made with spade connectors and a maximum wire size of 16 AWG.

PICK-UP-PORT [R2]

The ACI pickup port series is used in conjunction with a differentional pressure transmitter to sense additional reference pressures. The A/R2-PUP unit is mounted in ABS plastic room enclosures. When used in conjunction with an ACI pressure transmitter, the ACI pickup port provides excellent accuracy and reliability.









Pressure

PICK-UP-PORT [ROOM]

The ACI pickup port series is used in conjunction with a differentional pressure transmitter to sense additional reference pressures. The A/R-PUP unit is mounted in ABS plastic room enclosures. When used in conjunction with an ACI pressure transmitter, the ACI pickup port provides excellent accuracy and reliability.

PICK-UP-PORT [STAINLESS PLATE]

The ACI pickup port series is used in conjunction with a differentional pressure transmitter to sense additional reference pressures. The A/SP-PUP unit is a brushed stainless steel plate. When used in conjunction with an ACI pressure transmitter, the ACI pickup port provides excellent accuracy and reliability.

PICK-UP-PORT OUTSIDE [VERTICAL]

The ACI pickup port series is used in conjunction with a differentional pressure transmitter to sense additional reference pressures. The A/O-PUP-V is designed to measure pressure outside vertically. When used in conjunction with an ACI pressure transmitter, the ACI pickup port provides excellent accuracy and reliability.

PICK-UP-PORT OUTSIDE [HORIZONTAL]

The ACI pickup port series is used in conjunction with a differentional pressure transmitter to sense additional reference pressures. The A/O-PUP-H is designed to measure pressure outside horizontally. When used in conjunction with an ACI pressure transmitter, the ACI pickup port provides excellent accuracy and reliability.

MEDICAL GRADE TUBING

ACI offers tubing to be used in conjunction with the A/LP2, A/MLP, and A/DP2 Pressure Series.











PITOT TUBE [3"]

The 3" PT is designed to sense the differential inlet pressure in the inlet section of VAV and Fan Terminal Boxes. Pitot Tubes can also be used to measure the differential pressure at any other location in the main or branch duct system.

PITOT TUBE [5.2"]

The 5.2'' PT is designed to sense the differential inlet pressure in the inlet section of VAV and Fan Terminal Boxes. Pitot Tubes can also be used to measure the differential pressure at any other location in the main or branch duct system.

PITOT TUBE [7.5"]

The 7.5" PT is designed to sense the differential inlet pressure in the inlet section of VAV and Fan Terminal Boxes. Pitot Tubes can also be used to measure the differential pressure at any other location in the main or branch duct system.

PITOT TUBE [9.7"]

The 9.7" PT is designed to sense the differential inlet pressure in the inlet section of VAV and Fan Terminal Boxes. Pitot Tubes can also be used to measure the differential pressure at any other location in the main or branch duct system.

STATIC PITOT TUBE [3.5"]

The 3.5'' SPT is an aluminum pitot tube that may be used to measure the static or velocity pressure in ducts. The SPT has a 4" long insertion length and can be used to measure the static pressure in the duct.









STATIC PITOT TUBE [8"]

The 8" SPT is an aluminum pitot tube that may be used to measure the static or velocity pressure in ducts. The SPT has a 8" long insertion length and can be used to measure the static pressure in the duct.



VELOCITY PITOT TUBE

The VPT has a 4" insertion length and a pointed tube that can be used to measure the velocity pressure when mounted facing into the air stream.



CURRENT

ACI designed a comprehensive line of current sensors and switches to combine numerous positive attributes into one package. In addition, ACI has the perfect complement, the Command Relay Series.

SOLID-CORE

ACI's Solid-Core Current Switch and Sensor Line covers offerings that sense a current and either provide a fixed or adjustable trip point, or send a corresponding analog output. Analog outputs include 0 to 5 VDC, 0 to 10 VDC, and 4 to 20 mA. Features include status LEDs and a patented Din-rail mounting system. Pat. No. US 7,416,421

SPLIT-CORE

ACI's Split-Core Current Switch and Sensor Line covers offerings that sense a current and either provide a fixed or adjustable trip point, or send a corresponding analog output. Analog outputs include 0 to 5 VDC, 0 to 10 VDC, and 4 to 20 mA. Features include status LEDs and a patented Din-rail mounting system. The Split-Core design offers retrofit installation flexibility. Pat. No. US 7,416,421

MINI-SOLID CORE

ACI's Mini-Current Switches provide a fixed or adjustable trip point in a compact enclosure. Adjustable trip point devices feature LEDs for trip status. These devices are rated to 150 amps and will cover a wide range of applications.

MINI-SPLIT CORE

ACI's Mini-Current Switches provide a fixed or adjustable trip point in a compact enclosure. Adjustable trip point devices feature LEDs for trip status. Split-Core design offers retrofit installation flexibility. These devices are rated to 150 amps and will cover a wide range of applications.

COMMAND RELAY

The A/CR (Command Relay) Series brings control (start/stop) functionality to your fan/pump/motor status monitoring applications. Each unit has a Form 1C-SPDT relay which means you have both a N/O and a N/C contact in the same unit. The patented 35mm Din-Rail Mounting System will allow you to use the A/CR Series with any ACI analog current sensor or switch. The stacking feature will also allow you to reduce the required panel space, since up to two A/CR Series Command Relays may be stacked together during installation. Pat. No. US 7,416,421









POWERSCOUT

The PowerScout[™] 3037 is an intuitive, networked power meter designed to monitor and provide consumption data. The PowerScout[™] monitors voltage, current, power, energy, and many other electrical parameters on single and three phase circuit installations. Data updates occur once every second to ensure timely and accurate results. Convenient size and versatility make it the ideal device for monitoring and diagnosing consumption data in commercial, industrial, government, and retail environments.

CURRENT TRANSFORMER

The PowerScout[™] 3037 power meters can be equipped with a wide selection of current transformers. Choose from compact and economical Split-Core CTs or flexible Rogowski Flex CTs. Both types offer particular advantages depending on application. These CTs are interchangeable to meet various project requirements.

MEDIUM SPLIT-CORE

The PowerScout[™] 3037 power meters can be equipped with a wide selection of current transformers. Choose from compact and economical Split-Core CTs or flexible Rogowski Flex CTs. Both types offer particular advantages depending on application. These CTs are interchangeable to meet various project requirements.

ROCOIL

The PowerScout[™] 3037 power meters can be equipped with a wide selection of current transformers. Choose from compact and economical Split-Core CTs or flexible Rogowski Flex CTs. Both types offer particular advantages depending on application. These CTs are interchangeable to meet various project requirements.









GAS

wo major driving forces behind gas sensor selection are Demand Control entilation Systems and concerns over air quality. ACI has been supplying Carbon Dioxide sensors for years and is well versed in their application and technical support. ACI also carries a comprehensive line of CO, NO2, Toxic, Combustible, and Refrigerant Sensors.

CO2 SERIES [ROOM]

The A/CO2 ROOM enclosure monitors the carbon dioxide (CO2) levels in industrial, school, and office-type environments. The A/CO2 Series is based on a single beam, non-dispersive infrared technology and is a cost-efficient solution for measuring CO2 levels for building climate control. In addition, ABC software eliminates the need for manual calibration. The factory default output is 4-20 mA, whereas 0-5 VDC and 0-10 VDC outputs are able to be field selected via integral dip switches. A thermistor temperature option is also available in conjunction with setpoint and override features.

CO2 SERIES [DUCT]

The A/CO2 DUCT monitors the carbon dioxide (CO2) levels in industrial, school, and office-type environments. The concentration of CO2 is a strong indication of the overall indoor air quality. The factory default output is 4-20 mA, whereas 0-5 VDC and 0-10 VDC outputs are able to be field selected via integral dip switches. Thermistor temperature outputs, along with setpoint and override, are available as options for room configurations. The A/CO2 Series provides data which can be used in conjunction with a Building Automation System or Demand Control Ventilation to decrease energy consumption while creating a healthier indoor climate.

CO & NO2

The CO transmitter monitors carbon monoxide (CO) levels in industrial environments, as well as, the continuous monitoring of vehicle exhaust in non-hazardous areas. The NO2 transmitters are intended to be used for the continuous monitoring of exhaust in non-hazardous locations. They incorporate a wide spectrum, long life electrochemical sensor to measure the amount of Nitrogen Dioxide in the environment with a standard range of 0 to 6 ppm, and an adjustable range of up to 10 ppm.

DUCT

The CO/NO2 with duct transmitters are intended to be used for the continuous monitoring of exhaust in non-hazardous locations. They incorporate a wide spectrum, long life electrochemical sensor to measure the amount of Nitrogen Dioxide in the environment with a standard range of 0 to 6 ppm, and an adjustable range of up to 10 ppm.

NEMA 4X

The CO/NO2 NEMA 4X transmitter monitors carbon monoxide (CO) levels in industrial environments, as well as, the continuous monitoring of vehicle exhaust in non-hazardous areas. The NO2 transmitters are intended to be used for the continuous monitoring of exhaust in non-hazardous locations. They incorporate a wide spectrum, long life electrochemical sensor to measure the amount of Nitrogen Dioxide in the environment with a standard range of 0 to 6 ppm, and an adjustable range of up to 10 ppm.









Q5

The Q5 Series is a microprocessor based "smart" gas transmitter that is paired with either an electrochemical gas sensor for toxic gases, or a catalytic bead sensor for combustible gases in an IP66/NEMA 4X enclosure. A digital display (LCD), push-button programming and on-board meter jacks are all standard. The transmitter provides an analog output of 4-20 mA or 2-10 VDC, proportional to the measured gas range, for transmission to the control system.

B5

The B5 Series is a BACnet[™] enabled, microprocessor based "smart" gas transmitter that is paired with either an electrochemical gas sensor for toxic gases, or a catalytic bead sensor for combustible gases in an IP66/NEMA 4X enclosure. The units can be installed as stand-alone, or networked digitally with a BACnet[™] enabled controllers. The B5 supports BACnet[™] MS/TP protocol and can be networked to form a BACnet[™] MS/TP network. The B5 can be set to be a Master Node or a Slave Node in the field.

QTS-1710

The QTS-1710 Series measures combustible gases and is resistant to poisoning substances such as silicones, sulfur compounds, and chlorinated compounds. The transmitter provides a 4-20 mA DC output linear to the 0-100% LEL (Lower Explosive Limit) concentration of the calibrated combustible gas. Test jacks are provided to monitor the transmitter signal without interrupting the output. Zero and span adjustments are provided to calibrate the transmitter for a specific combustible gas.

QTS-8000

The QTS-8000 series is a digitally controlled, microprocessor based "Smart Sensor" for detection and data transmission of toxic or combustible gases. When configured with the extended feature option it acts as a controller with 2 relays, adjustable setpoints and RS-485 communication.

QIRF

The QIRF Freon gas detectors are configured to meet the international Mechanical Code, ASHRAE 15, and B52 requirements. Infrared technology facilitates specific gas type Freon detection without any cross-sensitive interference. This series has the option of being connected to either the M-Controller or Q4C controller via RS-485 digital communication for a cost effective installation method.











M-CONTROLLER

The M-Controller is a multi-channel controller and alarm unit that utilizes both digital and analog communications to interface with a maximum of 32 remote digital transmitter/sensors, and 8 analog transmitter/sensors. Range and alarm setpoints are set through the front keypad or through software that is downloaded to the controller from a PC or laptop computer. Common relay configurations include voting, averaging, delay on actuation and deactuation, normally/not-normally energized and latching.

Q4C

The Q4C is a multi-channel controller display and alarm unit that utilizes digital communications to interface with a maximum of 4 remote digital transmitter, sensors. They are used to measure a wide variety of toxic gases such as CO, NO2, NH3, H2S, SO2, Refrigerants, and Combustibles. The RS-485 communication is connected via a 4-wire multi-drop daisy chain configuration to reduce the overall installation costs of the system.

ESENSE ROOM

The ESENSE room monitors the carbon dioxide (CO2) levels in industrial, school, and office type environments. The ESENSE Series is based on a single beam non-dispersive infrared technology and is a cost-optimized solution for the climate control of buildings and other processes. Units come with combined outputs of 0-5 VDC and 4 to 20 mA or 0-10 VDC and 4 to 20 mA. The LCD is optional.

ESENSE ROOM EU

The ESENSE room (EUROPEAN) monitors the carbon dioxide (CO2) levels in industrial, school, and office type environments. The ESENSE Series is based on a single beam non-dispersive infrared technology and is a cost-optimized solution for the climate control of buildings and other processes. In addition, ABC software eliminates the need for manual calibration. They measure the CO2 concentration in the ambient air up to 2,000 ppm and convert the data into an analog output.

ESENSE DUCT MOUNT

The ESENSE duct monitors the carbon dioxide (CO2) levels in industrial, school, and office type environments. The ESENSE Series is based on a single beam non-dispersive infrared technology and is a cost-optimized solution for the climate control of buildings and other processes. In addition, ABC software eliminates the need for manual calibration. They measure the CO2 concentration in the ambient air up to 2,000 ppm and convert the data into an analog output.









ESENSE INDUSTRIAL WALL MOUNT

The ESENSE monitors the carbon dioxide (CO2) levels in industrial, school, and office type environments. The ESENSE Series is based on a single beam non-dispersive infrared technology and is a cost-optimized solution for the climate control of buildings and other processes.

ESENSE IN DUCT/WALL MOUNT

The ESENSE-IP50 is used to measure indoor air carbon dioxide concentration. This product is an ultra-compact transmitter intended for factory mounting for both wall and duct applications with the protection class IP50. A 300mm long cable connected to the PCB makes it possible to place the sensor where mounting is difficult.

ASENSE ROOM

The ASENSE carbon monoxide room series has an upgraded room enclosure to the ESENSE Series and adds a standard 0 to 10 VDC temperature output. It also has LCD and relay options. It also features ABC software, which eliminates the need for manual calibration. One important difference is the ability to select a relay option with this series. Also similar to the ESENSE Series, this series features ABC software which eliminates the need for manual calibration.

ASENSE DUCT MOUNT

The ASENSE carbon monoxide duct series has an IP65 rated enclosure (same as the ESENSE Series and adds a standard 0 to 10 VDC temperature output). One important difference is the ability to select a relay option with this series. Also similar to the ESENSE Series, this series features ABC software which eliminates the need for manual calibration.

ASENSE INDUSTRIAL WALL MOUNT

The ASENSE carbon monoxide series has an IP65 rated enclosure (same as the ESENSE Series and adds a standard 0 to 10 VDC temperature output). One important difference is the ability to select a relay option with this series. Also similar to the ESENSE Series, this series features ABC software which eliminates the need for manual calibration.











TSENSE

TSENSE is an advanced and versatile 3 in 1 transmitter. Designed for installation in the air conditioned zone, it measures CO2 concentration, temperature and humidity in the ambient air. The data is transmitted to a BMS system or stand-alone controller using industry standard output signals and communications protocols, including BACnet[™]. TSENSE combines all the necessary elements for effective climate control in commercial office buildings, hospitals, hotels, schools and other facilities, allowing for a comfortable and healthy environment for the occupants.



CO2 DUCT

The CO2-010 duct transmitters monitor the carbon dioxide (CO2) levels in industrial and office type environments. The concentration of CO2 is a good indication of the overall indoor air quality (IAQ). All units come with a 0-10 VDC analog output as well as the patented ABC Logic[™] self-calibration system (Automatic Background Calibration). The concentration of CO2 is measured using a Single Beam Absorption Infrared Diffusion or Flow Through sampling method depending on the mounting configuration.



INTERFACE

Interface Devices help Building Automation System managers address the need to improve energy efficiency, regardless of the software, firmware or hardware involved. They offer greater flexibility in several areas, potentially saving time, money, and energy.

6N1-ISO

Six Analog or Digital Inputs (Binary) to One Analog Output Input ranges and impedance: 0-5V @ $1M\Omega$, 0-10V @ $20K\Omega$, 0-20V @ $10K\Omega$, 0-20 mA @ 249Ω , and digital inputs of 15, 24 VDC or 24 VAC. Output ranges: 0-5, 0-10, 0-20 VDC or 0-20 mA. Power: 24 VAC @ 255 mA max. Input: Analog Output: Analog (average, high, or lowest of 6, difference of 2 signals).

AAR

Analog to Two Relay Outputs

Input ranges and impedance: 0-12 VDC @ $1M\Omega$, 0-24 VDC @ $20K\Omega$, 0-20 mA @ 499 Ω . Output: Two (2) Form C relays, rated 10 Amps @ 120 VAC. Power: 24 VAC or 24 VDC @ 45 mA max. Input: Analog Output: Two Relays (high and low trip level & adjustable deadband).

AFP

Analog to Floating Point

Selectable inputs: 0-5, 1-5, 0-10, 2-10, 0-15, 3-15 VDC, 0-20 & 4-20 mA. Output: Floating Point (digital UP/DOWN). Selectable rates of change: Standard: 30, 60 or 90 sec., Version 2: 120, 150 or 180 sec., Version 3: 14, 16.5, or 19 sec., Version 4: Same as Standard Version but relays do not turn off at min. and max. Power: 24 VAC/24 VDC @ 190 mA max. Input: Analog Output: Floating point (isolated).

AIM1

Analog Input to Optically Isolatied Analog Output

(1:1 Ratio) Input ranges and impedance: 0-5, 0-10 VDC @ $20K\Omega$, and 0-20 mA @ 250Ω . Output ranges and impedance: 0-5, 0-10 VDC @ $5K\Omega$, and 0-20 mA (source or sink) @ 500Ω . Power: 24 VAC @ 100 mA max. Input: Analog Output: Analog (optically isolated).

AIM2

Analog Input to Optically Isolated Analog Output

(Rescales & Limits Output). Input ranges and impedance: 0-1, 0-5, 1-5, 0-10, and 2-10 VDC @ $9.5K\Omega$, 0-1, 0-20 & 4-20 mA @ 250Ω . Output: Same except for 0-1 VDC @ $5K\Omega$, & 0-1 mA @ 250Ω . Power: 24 VAC @ 200 mA max. Source or sink inputs & outputs. Input: Analog Output: Analog (isolated, rescale, & limit).









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AIM3

Analog Input to Optically Isolated Analog Output Input ranges and impedance: 0-5, 1-5 @ 5M Ω or greater, 0-10 and 2-10 VDC @ 20 K Ω , 0-20 and 4-20 mA @ 249 Ω . Output: Same with impedances of 500, 1K and 750 Ω respectively. Power: 120 VAC @ 50 mA max. Accuracy: </= 1% output. Input: Analog Output: Analog (isolated, rescale, & limit).

ARM

Analog Current or Voltage Rescaling Module

Re-scales/reverses analog signal. Input: 0-35 VDC @ $1M\Omega$, 0-44 mA @ 250Ω . Output: 0-20 VDC @ $5K\Omega$, 0-44 mA @ 750Ω . Power: 24 VDC or 22-26 VAC @ 200 mA. Input: Analog Output: Analog (rescale & reverse).

ARM2

Analog Current or Voltage Rescaling Signal Splitter

Re-scales/reverses analog signal. Input: 0-35 VDC @ $1M\Omega$, 0-44 mA @ 249 Ω Output: 0-20 mA @ 750 Ω , Gain: 1-20 times, Attenuation: 0-100%, Offset: +/-0.25-20 volts. Power: 22.8 to 30 VDC or 21.6-26.4 VAC @ 100 mA. Accuracy: </= 1% output range. Input: Analog Output: Dual 4-20 mA (rescale & reverse).

ASA

Analog Signal Amplifier

Boosts analog output current (2 Amps or 30 Watts max. output). Input: 0-20 VDC @ $200K\Omega$, 0-20 mA @ 250Ω . Output: 0-20 VDC @ 10Ω min, Gain: 1-20 times. Offset: Zero, Positive, or Negative. Power: 24 VDC or 24 VAC @ 205 mA. Accuracy: +/-2% full scale. Input: Analog Output: Analog (boosts current).

ATL

Analog Current or Voltage to Four Adjustable SPDT Relays Input ranges and impedance: 0-12 VDC @ $10M\Omega$, 0-24 VDC @ $20K\Omega$ and 0-20 mA @ 500Ω . Output: Four (4) form C relays. Fixed deadband 3% standard (1% and 10% optional). Power: 24 VAC or 24 VDC @ 180 mA max. Input: Analog Output: Four relays (trip level adjustable & fixed deadband).







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ATP

Analog Current or Voltage to Pulse Width Modulation (PWM) Output Input: 0-15 VDC @ $1M\Omega$ or 0-20 mA @ 250Ω . Output: 0.1-25, 0.02-5, 0.023-6, or 0.59-2.93 sec. ATP-Y DIP switch selectable for 1-11 & 0-21 sec. range (YorkTM chiller). Custom PWM ranges available. Power: 24 VDC or 24 VAC @ 50 mA. Input: Analog Output: PWM (pulse width modulated).

DRN3

Pulse Width Modulation/Analog/Floating Point to Resistance Output Input: 0.1-10,0-10 sec. duty cycle, 0.023-6, 0.02-5, 0.59-2.93, and 0.1-25.5 sec. Rates of change: 30-240 sec., Analog: 0-5, 1-5, 0-10, 2-10, 0-15, 3-15 VDC, 0-20 and 4-20 mA. Output: 12 ranges, 0-135 Ω to 0-40K Ω and Custom. Power: 24 VDC/VAC @ 250 mA. Input: Analog, PWM, Floating Point Output: Resistance (0-135 Ω to 0-40K Ω & custom ranges).

DRN4

Pulse Width Modulation/Analog/Floating Point to Resistance Output Actuator mounted. Inputs-Pulse: 0.02-5, 0.59-2.93, .023-6 and 0.1-25.5 sec. Digital Floating Point: 55 sec. rate of change, Analog: 0-5, 1-5,0-10, 2-10 VDC, & 0-20 mA, 4-20 mA. Output: $0-135\Omega$, 32 step resolution. Power: 24 VDC or 24 VAC @ 130 mA. Input: Analog, PWM, Floating Point, Output: Resistance (0-135 Ω).

EPC

Analog to Pneumatic Output Input: 0-5 VDC, 0-10 VDC, and 0-15 VDC @ Infinity Ω or 0-20 mA @ 250 Ω Output: 0-20 psig. Feedback: 0-5 VDC = selected output. Power: 24 VDC or 24 VAC (50/60 Hz) @ 180 mA. Valved exhaust (EPC2), Fail-Safe model (EPC2FS), and bleed-type 41 scim (EPC). Anodized Aluminum manifold. Input: Analog Output: Pneumatic (0-10 psig, 0-15 psig, 0-20 psig, & field adjustable).

MAO

Manual Analog Override Switch with Alarm

Input: 0-24 VDC. Analog Selectable Inputs (Auto): 0-5 VDC, 0-10 VDC, 0-15 VDC, or 0-20 mA. Manual Override Alarm Output contact made (or broken optional) indicates override in effect: 0-24 VDC @ 2A max. Power: 24 VAC or 24 VDC. Input: Analog Output: Analog (override, voltage & alarm contact adjustable).









PHOTON4.1

Lighting Interface has 4 outputs capable of controlling G.E.[™] RR7 or RR9 relay types (up to 10 per output), Schlage Electronics[™] or TOUCH-PLATES[™] 3000-PL relay type lighting contactors. It provides the necessary latch and unlatch pulses required by these contactors. Input: Digital Output: Contractor Output, Voltage, 24 Volts (half-wave to contractor).

PXP3

Analog to Pneumatic Output

Input: 0-5, 0-10, or 0-15 VDC. Output: 0-15 psig. 1% accuracy @ room temperature. Feedback: 0-5 VDC = 0-15 psig. Power: 24 VAC or 24 VDC @ 200 mA. Valved exhaust or bleed-type in 14, 41 & 73 scim, and dual valve Fail-Safe model (FS). Input: Analog Output: Neumatic (0-15 psig).

PTP

Pressure to Analog Voltage or Current Output

Input: 3-15, 3-30 or 0 to -7.5 psig air pressure. Jumper Selectable Output: 1-5 VDC @ 250Ω , 2-10 VDC @ 500Ω , 3-15 VDC @ 750Ω , or 4-20 mA @ 500Ω load impedance. Aluminum manifold. 2% accuracy. Power: 24 VAC or 24 VDC @ 50 mA max. Input: Pressure Output: Analog, Voltage or Current.

EPW

Pulse Width Modulation (PWM) to Pneumatic Output

Input: 0.1-10, 0.02-5, 0.1-25, 0.59 to 2.93, 0.023-6, or 0-10 sec. duty cycle, or 0-20V phase cut. Trigger: 9-24 VAC/VDC. Output: 0-10, 0-15, 0-20 psig. Manual override. Feedback: 0-5 VDC = Output. Power: 24 VDC or 24 VAC @ 200 mA. Valved exhaust & Fail-Safe model, or bleed type of 14, 41, or 73 scim. Input: Analog Output: Pneumatic (0-10 psig, 0-15 psig, 0-20 psig, & field adjustable).

MDO2FS

Two Channel Digital Manual Override (Maintained/Fail Safe) Override Input: Same as power supply @ 4A maximum. Override provides alarm when engaged. Command reverts to the controller's signal if power fails to the MDO2FS. Power: 24 VAC +/-10% 50/60 Hz, 24 VDC +/-10%. Input: Digital Output: Digital Override with Fail Safe.









DMUX

Pulse Width Modulation (PWM) to 4 or 8 Addressable Relays Inputs: PWM Relay, transistor, or triac. Pulse resolution: 0.5 or 1 sec. Trigger Level: 5-24 VAC or VDC, 20 mA max. Output: 4 or 8-2 Amp Form C relays w/ Hand/Off/Auto jumpers. Power: 24 VAC or 24 VDC @260 mA max. Novar/Solidyne[™] versions also. Input: PWM Output: Relays (4 or 8 addressable).

ΡΤΑ

Pulse Width Modulation (PWM) to Analog Current or Voltage Output Input: PWM (relay, transistor, or triac): 0.02-5, 0.023-6, 0.1-10, 0.1-25.5, or 0.59-2.93, 0-10 sec. 0-10 sec. duty cycle pulse, and 0-20V Staefa[™] Phase Cut. Flexible Output (Adjustable or Fixed): 0-20 VDC or 0-20 mA. Power: 24-35 VDC or 21.6 to 26.4 VAC 50/60 Hz @ 250 mA. Input: PWM Output: Analog (voltage or current).

PTA2

Pulse Width Modulation (PWM) to Voltage Output

Input: PWM (relay, transistor, or triac) Version 1: 0.02-5.0, 0.59-2.93, 0.1-10, or 0.1-25.5 sec. Version 2: 0-10 sec. (continuous pulse sampled in 10 sec. window), 0.23-6, or 0-25.2 sec. Output range: 0-10 VDC. Power: 24 VDC or 24 VAC @ 135 mA. Input: PWM Output: Analog (0-10 VDC).

RTI

Resistance to Current

Output (4 to 20 mA). Two wire current loop powered, 24 VDC (+/- 10%), 25 mA max. Reverse polarity protected. Linear tracking of resistance input to 5000 Ω against output of 4-20 mA (source). Seven jumper selectable input ranges with adjustment, 2%. Input: Resistive (3-wire) Output: Analog (4-20 mA).

AUD

Floating Point to Analog Output

Two Digital Inputs: Contact closure, transistor, or Triac. Trigger Level: 5-26.4 VDC or 24-26.4 VAC (50/60Hz). Output: 10 presets from 0-1 VDC to 0-20 VDC and 0-20 mA. Rates of Change: 5 to 360 sec. Power: 24-35 VDC or 24 VAC (50/60Hz) @ 208 mA. Input: Floating Point Output: Analog (voltage or current).













EFP

Floating Point to Pneumatic Output

Input: Two Digital (relay, triac, or transistor) 9-24 VAC/VDC. Output: Jumper selectable 0-10, 0-15, or 0-20 psig air pressure. Rate of Change: 45 sec., 90 sec., 1min., and 2 min. Manual Override. Power: 24 VDC or 24 VAC @ 180 mA. Input: Floating PointOutput: Pneumatic (0-10 psig, 0-15 psig, 0-20 psig, & field adjustable).

PTS4.1

Floating Point to Pneumatic Output

Input: Two Digital (relay, triac, or transistor). Output: Jumper selectable 0-10, 5-15, or 0-15 psig air pressure. Rate of Change: 90 sec. 2% Accuracy at room temperature. Power: 24 VDC or 24 VAC (50/60Hz) @ 150 mA. Input: Floating Point Output: Pneumatic (0-10 psig, 5-15 psig, & 0-15 psig).

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Dual Triac Output Booster

Accepts AC (TRIAC): >20 to 26 VAC, DC: >20 to 35 VDC, AC (NON-TRIAC): >20 to 28 VAC, AC (TRIAC) 12 to 20 VAC, DC: 5 to 20 VDC, AC (NON-TRIAC): 12 to 20 VAC. Output: Triac (two channels) 24 to 120 VAC, 2.5A load maximum at 24 VAC. Input to output signal isolation. Input: TRIAC Output: Amplified Triac (24 to 120 VAC).

Three-way pneumatic solenoid valve, activated by a 24 VDC/VAC electric signal. Jumper allows local override. Accepts 5/32" OD Polyethylene or PVC

SW1

tubing. Supply & Output Pressure: 35 psig maximum, Air Flow Rate: 1200 scim @ 20 psig. Input: Low Voltage Output: Pneumatic Fail Safe (24V Control).

Electric to Pneumatic Fail-Safe









SIGNAL REQUIRED



MATRIX

Select your controller's signal output in the column on the left (Your Signal). Then, select the output required by the actuator, or other device, in the row across the top of the matrix (Signal Required). Some scenarios require two devices to reach the desired output and include a "+" between them. Refer to the detailed product specifications in the Interface Device section of the ACI Binder Catalog or visit www.workaci.com.

WIRELESS

ACI's wireless product line is based on MESHNET 900[™] MHz Spread Spectrum Mesh Network Technology. It provides the HVAC Industry a much needed option for a proven, reliable, and cost effective solution. They can easily integrate with any Building Automation System.

WT2630

Battery powered spread-spectrum wireless wall temperature sensor. The override button (B & C models only) can be assigned to a digital output in the 2000 Series 2000 family of receivers for occupancy override or similar applications. The setpoint adjustment (B Model only) can be assigned to an analog output in the Series 2000 receiver. Sensing Range (Accuracy): Temperature: 32 to $104^{\circ}F(+/-1^{\circ}F)$

DT2630

Battery powered spread-spectrum wireless duct temperature sensor. The sensor is encapsulated in a 0.25" O.D. 304 stainless steel probe with various probe length (4", 6", 8" 12" & 18") for single point duct temperature monitoring. Sensing Ranges (Accuracy): 14 to 140°F (+/- 1°F, 12 Bit Resolution).

DT2650

Battery powered spread-spectrum wireless flexible averaging temperature sensor. The DT2650 incorporates four (4) temperature sensors encapsulated at equal distance across the length of the probe for average duct temperature monitoring. Sensing Range (Accuracy): 0 to 150°F (+/- 1°F, 12 Bit Resolution).

FT2630

Battery powered spread-spectrum wireless immersion temperature sensor. This sensor is for fluid temperature applications. The sensor is encapsulated in a 0.25" O.D. 304 stainless steel probe. The sensor assembly has a 1/2" NPT fitting to be threaded into the thermowell. Thermowells with brass or 304 stainless steel materials are available for different fluid applications. Sensing Range (Accuracy): 14 to 140°F (+/- 1°F, 12 Bit Resolution).

OST2630

Battery operated compact wireless outside air temperature sensor. The sensor is housed in a NEMA 4X enclosure and can be mounted anywhere in the shaded area outside of a building. If needed, the distance from the sensor to the receivers can be extended using the RR2552 repeater.







OA2630

Battery powered spread-spectrum outdoor air temperature & humidity sensor with a naturally ventilated 8-Plate Solar Radiation Shield to protect the sensor from precipitation and solar radiation. Sensing Ranges (Accuracy): Temperature: 14 to 140°F (+/- 1°F) Humidity: 5 to 95% RH: (+/- 3% RH from 10 to 90% RH).

DH2630

Battery powered spread-spectrum wireless duct humidity & temperature sensor. The sensor is encapsulated in a 9.7" long plastic probe and is available with humidity only (DH2630A & D) models and humidity and temperature (DH2630B & C) models. Sensing Ranges (Accuracy): Temperture: 14 to 140°F (+/- 1°F), Humidity: 5 to 95% RH Models A, B, C: (+/- 3% from 10 to 90% RH) (+/- 2% from 20 to 80% RH).

WH2630

Battery powered spread-spectrum wireless wall humidity & temperature sensor. Sensing Ranges (Accuracy): Temperature: 32 to $104^{\circ}F$ (+/- $1^{\circ}F$), Humidity: 5 to 95% RH Models A & B: (+/- 3° from 10 to 90% RH). Model A is RH only and B is a RH/Temperature combination.

SST2630

Battery operated spread spectrum wireless remote/strap-on temperature sensor. The sensor is encapsulated in a 0.25″ O.D. 304 stainless steel probe (2″ probe length) for single point pipe temperature monitoring. The Meshnet900[™] sensor Data-Link LED confirms the data transmission was received by the receiver for fast and reliable positioning of the sensor during installation.

SST5630

Battery operated spread spectrum wireless remote/strap-on temperature sensor. The sensor is encapsulated in a 0.25″ O.D. 304 stainless steel probe (2″ probe length) for single point pipe temperature monitoring. The Meshnet900™ sensor Data-Link LED confirms the data transmission was received by the receiver for fast and reliable positioning of the sensor during installation.







RT2602

Battery powered wireless remote Digital Sensor Input Concentrator. Accepts a variety of digital sensor/control inputs and transmits wirelessly to the receiver. It can be used for remote alarm/status indications and wireless on/off control (wireless relay) applications. Digital Inputs (2): Contact Closure.

RT2620

Battery powered wireless remote Digital Sensor Input Concentrator. Accepts a variety of digital sensor/control inputs and transmits wirelessly to the receiver. It can be used for remote alarm/status indications and wireless on/off control (wireless relay) applications. Digital Inputs (4): Contact Closure.

RT2630

Battery powered wireless remote Digital Sensor Input Concentrator. Accepts a variety of digital sensor/control inputs and transmits wirelessly to the receiver. It can be used for remote alarm/status indications and wireless on/off control (wireless relay) applications. 4 Digital and 4 Analog (0 to 10 or 4 to 20 mA) Inputs.

RR2552

Mesh network Series 2000 RR2552 signal repeater. This repeater utilizes reliable Spread Spectrum Radio technology. It can be installed easily in minutes to increase the transmission distance between wireless sensors and the receivers. The maximum radio transmission distance is dependent on building type. Operate on 24 VAC 60 Hz supply power.

RM2402D

Together with other ACI wireless sensors and controls, this output receiver can receive remote sensor readings, status/alarm indications and control signals wirelessly. It receives signals wirelessly and is then hardwired to your controller or end device though two Pilot Duty Relay Contact Closures with a contact rating of 1A at 24 VAC Max. It can be used for remote alarm/status indications and wireless on/off control (wireless relay) applications. 24 VAC supply power.











RM2432D

Together with other ACI wireless sensors and controls, this output receiver can receive remote sensor readings, status/alarm indications and control signals wirelessly. It receives signals wirelessly and is then hardwired to your controller or end device though four Pilot Duty Relay Contact Closures and/or four analog outputs of 0 to 5/0 to 10 VDC (8 wireless inputs max). It can be used for wireless on/off control (wireless relay), after hours override, or wireless analog applications.

RD2402D

Together with other wireless transceivers listed on the next page, this output device can be used to transmit remote control signals wirelessly. Has two (2) digital outputs (relay contacts). Contact Rating: 1A at 24 VAC Max.

RD2432D

Together with other wireless transceivers listed on the next page, this output device can be used to transmit remote control signals wirelessly. Four (4) analog output (0-5 VDC or 0-10 VDC selectable) and four (4) digital outputs (relay contacts) Contact Rating: 1A at 24 VAC Max.

MOD9200BNT

Together with other wireless devices listed, this network transceiver can be used to transmit remote sensor readings, status/alarm indications, control signals and outputs wirelessly. It is compatible with any control systems or Programmable Logic Controller (PLC) panels that utilize BACnet[™] MSTP (Master Slave Token Passing) communication protocol or interface. Up to 50 separate physical wireless sensor transmitters and/or wireless remote output (analog & digital) modules can be used with one MOD9200BNT Transceiver and up to 100 data points and 100 outputs can be monitored and controlled with it as well.

MOD9200D

Together with other wireless devices listed, this network transceiver can be used to transmit remote sensor readings, status/alarm indications, control signals and outputs wirelessly. It is compatible with any control systems or Programmable Logic Controller (PLC) panels that utilize TCP/IP/ MODBUS communication protocol or interface. Up to 50 separate physical wireless sensor transmitters and/or wireless remote output (analog & digital) modules can be used with one MOD9200D Transceiver and up to 100 data points and 100 outputs can be monitored and controlled with it as well.









MOD9200LON

Together with other wireless devices listed, this network transceiver can be used to transmit remote sensor readings, status/alarm indications and control signals wirelessly. It is compatible with any control systems or Programmable Logic Controller (PLC) panels that utilize LonWorks® communication protocol or interface. Up to 50 separate wireless sensor transmitters and/or wireless remote output (analog & digital) modules can be used with one MOD9200LON Transceiver and up to 100 data points and 100 outputs can be monitored and controlled with it as well.



RC2100

The RC2100 series wireless heating system controller utilizes reliable MESHNET900TM technology. Together with the ACI WT2630A wireless space sensors and OST2630 wireless outside air temperature (OSA) sensors, the RC2100 controller will control the boiler system based on the average space temperature (up to 12 zones) and wireless outside air temperature.



ACCESSORIES

ACI offers additional product solutions for smoke detection, freeze stats, light level sensors, mounting plates, power supplies, transformers and more. Our support staff is well versed in product selection and application support for these lines.

COMMAND RELAY

The A/CR Series brings control (start/stop) functionality to your load trending and fan/pump/motor status monitoring applications. Each unit has a Form 1C-SPDT relay, which provides both a N/O and a N/C contact in the same device. The patented 35mm Din-Rail mounting flange (Pat. no. US 7,416,421) allows you to use the A/CR Series with any ACI Current Sensor or Switch for application flexibility. The stacking feature allows for reduced panel space, as up to two devices may be stacked together during installation.



TRANSFORMER

The LE Series Control Transformers are designed to provide a stable, clean, and reliable 24 VAC power source. This series features a variety of styles and VA output ranges. Mounting configurations are available with $\frac{1}{2}$ " conduit hubs and mounting feet. Single and multiple primary input transformers are available in ranges from 40 to 150 VA.

PSG

The PSG is a hand held programmable signal generator designed to simulate analog or pulse signals from controllers, sensors, and other building automation system components. It can be used to speed up the process of system setup and calibration. The analog signal can be within the ranges of 0 to 10 VDC or 0 to 20 mA and the analog output can be programmed to deliver an absolute value or a minimum/maximum toggle output. The pulse output is capable of delivering an absolute, looping, or duty-cycle type pulse.



FREEZE STAT

The FS Series controllers are low limit controllers, also known as "Freeze Stats". These devices were designed for use on HVAC equipment that requires low-temperature cutout protection to prevent cooling coils from freezing. They should be mounted between the heating and cooling coils on the supply side of the fan unit.



DBZ MOUNTING CLIP

Capillary Mounting Clips for Freeze Stat. Clips come in sets of 6.



SM-501 SMOKE DETECTOR

The SM-501 series is a duct smoke detector that provides early detection of smoke and products of combustion present in the ducts of any commercial, industrial, or residential application. The SM-501 is designed for the prevention of smoke re-circulation by the air handling systems, fans, and blowers. The SM-501 meets all local requirements, as well as the NFPA regulations regarding duct smoke detectors. Output terminals are provided for remote accessories such as horns, strobes, remote status indicators, and test/reset key switches or push buttons. The green pilot and red alarm indicators provided on the front of the SM-501 signal the operating status of the device. The green pilot LED will be extinguished when the detector head is removed.

SL-2000 SMOKE DETECTOR

The SL-2000 series is a duct smoke detector that provides early detection of smoke and products of combustion present in the ducts of any commercial, industrial, or residential application. The SL-2000 is designed for the prevention of smoke re-circulation by the air handling systems, fans, and blowers. The SM-501 meets all local requirements, as well as the NFPA regulations regarding duct smoke detectors. Output terminals are provided for remote accessories such as horns, strobes, remote status indicators, and test/reset key switches or push buttons.

THERMOWELLS

The ACI Thermowell Series comes in various lengths and materials. The standard material is 304 stainless steel which ensures long lasting reliability and stability. They are also offered in Monel which is ideal for marine, or salt water, applications. The entire series is milled to high tolerances, so there is a negligible gap between the thermowell sheath and the probe. This provides maximum heat transfer when used with a corresponding ACI sensor.

PS1.5 POWER SUPPLY

The A/PS1.5 adjustable power supply is a low cost, dependable external power supply. This unit will accept an input of up to 28 VAC or 35 VDC, and provides an adjustable 1.2 to 27 VDC output. The A/PS1.5 will supply 1.5A continuous when (Vin- Vout <15V). The maximum power dissipation is internally limited to 20W.

LPR POWER SUPPLY

The LPR is an adjustable regulated power supply with a maximum output current of 1 amp. It accepts up to a 28 VAC or 40 VDC input voltage and outputs 2 to 25 VDC by adjusting a multi-turn potentiometer. Half wave rectification makes it possible to power the LPR from either AC or DC sources. These sources can be either grounded or floating without damage to the LPR.











PAM-1

The PAM-1 Relay provides 10.0 A form "C" contacts. The relay may be energized by one of three input voltages: 24 VDC, 24 VAC, or 120 VAC. The input voltages are polarity-sensitive and diode-protected. PAM-1 Relays contain a red LED which indicates when the relay coil is energized.

PAM-2

The PAM-2 Relay provides 7.0 A form "C" contacts. The relay may be energized by one of two input voltages: 12 VDC or 24 VDC. The input voltages are polarity sensitive and diode-protected. PAM-2 Relays contain a red LED which indicates when the relay coil is energized.

PAM-4

The PAM-4 Relay provides 10.0 A form "C" contacts. The relay may be energized across a wide voltage range from 9 VDC to 40 VDC, making it ideal for 12 VDC and 24 VDC EOL circuits. The 15mA operating current is constant across the operating range. The input voltages are polarity-sensitive and diode-protected.

PAM-SD

The PAM-SD Relay provides 7.0 A form "C" contacts. The relay may be energized by an input voltage between 20 VDC to 32 VDC, making it ideal for 24 VDC NAC circuits. The input voltages are polarity-sensitive and diode-protected. The PAM-SD provides an additional set of wires for redundant input voltage (circuit supervision pass through).

RIC-1

The RIC-Series Relays are multi-voltage devices providing form ``C'' contacts rated up to 10 amps. The RIC-1 is a Multi-Voltage Relay Module.







RIC-2

The RIC-Series Relays are multi-voltage devices providing form "C" contacts rated up to 10 amps. The RIC-2 is a Multi-Voltage Relay Module.

RIC-3

The RIC-Series Relays are multi-voltage devices providing form "C" contacts rated up to 10 amps. The RIC-3 Series relays can withstand a momentary interruption of control voltage for 2 to 3 seconds without dropping their contacts. The RIC-3 is perfect for applications where pulsed or sequenced input voltage is employed, or where momentary control voltage interruption is expected. The RIC-3 is non-polarized on the DC control input.

RIC-4

The RIC-Series Relays are multi-voltage devices providing form "C" contacts rated up to 10 amps. The RIC-4 Series relays can withstand a momentary interruption of control voltage for 2 to 3 seconds without dropping their contacts. The RIC-4 is perfect for applications where pulsed or sequenced input voltage is employed, or where momentary control voltage interruption is expected. The RIC-4 is DC input polarized, making the RIC-4 an excellent choice for supervised pulsing circuits which require a "steady" contact output.

MOUNTING PLATE

The A/MOUNTING PLATE may be used to mount devices over a larger electrical enclosure or hole in the wall. It is made of a plastic material and contains numerous mounting holes to match most standard electrical boxes used in the industry today. Mounting Plates may be mounted vertically or horizontally.

MOUNTING PLATE [WHITE]

The A/MOUNTING PLATE may be used to mount devices over a larger electrical enclosure or hole in the wall. It is made of a plastic material and contains numerous mounting holes to match most standard electrical boxes used in the industry today. Mounting plates may be mounted vertically or horizontally. This Mounting Plate option comes in a bright white plastic finish.









MOUNTING PLATE [METAL]

The MOUNTING PLATE-10 is slightly larger than the standard A/MOUNTING PLATE and is made from 20 Gauge Commercial Steel.

LOCKING COVER

The LOCKING COVER can be used to protect a room mounted enclosure from physical damage or tampering. The Locking Cover includes a clear vented cover and two keys.

LIGHT LEVEL

The A/LLS and A/LLS-T light level sensors and transmitters are used for applications such as turning on or off indoor or outdoor lighting based upon the amount of available light. The sensor can be mounted in a NEMA 3R rated enclosure. In darkness, the sensor has a resistance in excess of 1M ohms, versus a resistance of less than 1.5K ohms in bright light.

GLYCOL BOTTLE

The ACI Glycol Bottle Series is available for freezer and cryogenic applications down to -13°F (-25°C). The bottle is used as a thermal buffer to prevent constant alarming from doors opening. It may be filled with glass beads or glycol solutions and should be used in conjunction with ACI's Freezer Sensor Series.

3PT GLYCOL BOTTLE

The 3PT-KIT option offers three sensor wells for consistency and ease of validation.











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