



# ROOM

## Wall Mount Enclosure, Platinum RTD

The ACI Platinum Room Series combines flexibility with attractive styling in our “-R2” or “-R” style enclosures which include four-way air flow design too minimize self-heating to the sensor. These enclosures are offered in a White “-R2” or Beige “-R” color depending on enclosure style and designed to be mounted over a single gang junction box or hole in the wall using drywall anchors. An optional LCD Display is available in the Beige “-R” style enclosure. Screw terminal blocks are provided for making connections to your building management system. An optional 1/8” Black foam pad with pressure sensitive adhesive is available to insulate the sensor from thermal drafts within the wall or wall surface temperature. A 1/16” Hex driver can be used to secure the cover from being easily removed. The “LCD” option uses two temperature sensors to monitor the ambient air temperature in the space and is factory calibrated at a single point.

**Applications:** Space Temperature Sensing, Office Buildings, Schools, Colleges, Commercial Buildings, OEM Opportunities

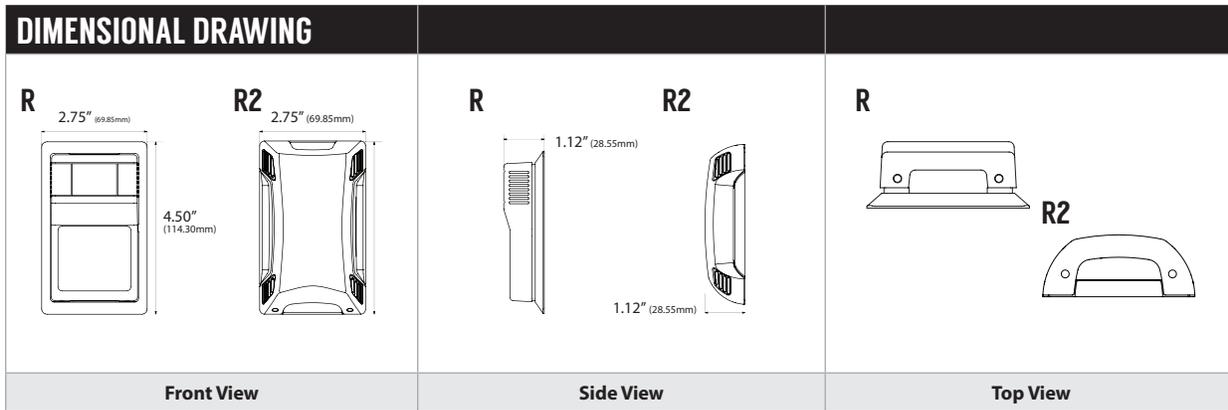
**The ACI Platinum Room Series is covered by ACI’s Five (5) Year Limited Warranty. The warranty can be found in the front of ACI’s Sensors & Transmitters catalog, as well as on ACI’s web site, [workaci.com](http://workaci.com).**

### PRODUCT SPECIFICATIONS

<b>Sensor Type   Sensor Curve:</b>	Platinum RTD   PTC (Positive Temperature Coefficient)
<b>Number Sensing Points:</b>	One
<b>Number Sensor Terminals:</b>	<b>A/100-2W Series and A/1K-2W Series:</b> Two (Non-Polarity Sensitive) <b>A/100-3W Series and A/1K-3W Series:</b> Three (Polarity Sensitive)
<b>Sensor Output @ 32°F (0°C):</b>	<b>A-100-xW Series:</b> 100 Ohms   <b>A/1K-xW Series:</b> 1000 Ohms Nominal +/- 0.06% Class A ( <b>Tolerance Formula:</b> +/- °C = (0.15°C + (0.002 *  t ))) where  t  is the absolute value of Temperature above or below 0°C in °C
<b>Sensor Accuracy @ 32°F (0°C):</b>	<b>0°C (32°F):</b> +/- 0.15°C (+/- 0.27°F)   <b>50°C (122°F):</b> +/- 0.25°C (+/- 0.45°F)
<b>Din Standard   Temperature Coefficient:</b>	DIN EN 60751 (IEC 751)   3850 ppm/°C
<b>Sensor Stability:</b>	+/- 0.03% after 1000 Hours @ 300°C (572°F)
<b>Response Time (63% Step Change):</b>	8 Seconds Nominal
<b>Self-Heating   Maximum Operating Current:</b>	<b>100 Ohm RTD:</b> 7 mW/°C (Still Air)   5 mA   <b>1K Ohm RTD:</b> 4 mW/°C (Still Air)   3 mA
<b>LCD Display Supply Voltage:</b>	+9 to 35 VDC / 24 VAC (50/60 Hz)
<b>LCD Display Supply Current/VA:</b>	<4 mA / 0.12VA
<b>LCD Display Accuracy:</b>	+/- 2°F or +/- 2°C @ 71°F (21.5°C) Typical
<b>LCD Display Descriptor   Number of Digits:</b>	°F (Fahrenheit) or °C (Celsius)   3 1/2 Segment Display
<b>LCD Display Life Expectancy:</b>	50,000 Hours Minimum
<b>Set Point Specifications   Set Point Indication:</b>	See Ordering Grid Options on back of Product Data Sheet
<b>Set Point Tolerance:</b>	+/- 10% of Range
<b>Override Options:</b>	Short Thermistor (Default); Field (Jumper) Selectable “Dry Contact” Closure (Separate Input); Short Set Point available upon request
<b>Operating   Storage Temperature Range:</b>	1.5 to 50°C (35 to 122°F)   <b>Non-LCD:</b> -40 to 65°C (-40 to 149°F)   <b>LCD Display:</b> -10 to 65°C (14 to 149°F)
<b>Operating Humidity Range:</b>	10 to 95% RH, non-condensing
<b>Connections   Wire Size:</b>	Screw Terminal Blocks (Non-Polarity Sensitive)   16 AWG (1.31 mm <sup>2</sup> ) to 26 AWG (0.129 mm <sup>2</sup> )
<b>Terminal Block Torque Rating:</b>	0.5 Nm (Minimum)   0.6 Nm (Maximum)
<b>Enclosure Material   Flammability Rating   Color:</b>	<b>“-R2” Enclosure:</b> ABS Plastic, UL94-HB, White   <b>“-R” Enclosure:</b> ABS Plastic, UL94-HB, Beige
<b>Product Dimensions:</b>	See Drawing on back of Product Data Sheet
<b>Product Weight:</b>	<b>A/1K-2W/3W-R/RS/RO Series:</b> 0.14 lbs. (63.5g)   <b>A/1K-2W/3W-RSO Series:</b> 0.18 lbs. (81.6g)   <b>A/1K-2W/3W-R2/R25/R20 Series:</b> 0.16 lbs. (72.6g)   <b>A/1K-2W/3W-R2SO Series:</b> 0.20 lbs. (90.7g)   <b>A/1K-2W/3W-RSO-RJ6-LCD Series:</b> 0.18 lbs. (81.6g)   <b>All LCD Display Units:</b> 0.18 lbs. (81.6g)
<b>Agency Approvals:</b>	CE**, RoHS2, WEEE

Note\*\*: All LCD Display Units are not CE Compliant, but they are RoHS2 Compliant





STANDARD ORDERING		
Model #	Item #	Description
A/100-2W-R	144136	100 Platinum RTD (2 Wire), "R" Version, Beige, No Options
A/100-2W-R2	144138	100 Platinum RTD (2 Wire), "R2" Version, White, No Options
A/100-3W-R	144137	100 Platinum RTD (3 Wire), "R" Version, Beige, No Options
A/100-3W-R2	144139	100 Platinum RDT (3 Wire), "R2" Version, White, No Options
A/1K-2W-R	144154	1K Platinum RTD (2 Wire), "R" Version, Beige, No Options
A/1K-2W-R2	144156	1K Platinum RTD (2 Wire), "R2" Version, White, No Options
A/1K-3W-R	144155	1K Platinum RTD (3 Wire), "R" Version, Beige, No Options
A/1K-3W-R2	144157	1K Platinum RTD (3 Wire), "R2" Version, White, No Options

CUSTOM ORDERING		MODEL #
<b>A. Sensor Series<sup>1</sup> No Selection Required</b>	A/	A/
<b>B. Model Series Select One (1)</b>	<b>100</b> = 100 Ohm Platinum RTD   <b>1K</b> = 1K Ohm Platinum RTD	
<b>C. Configuration Select One (1)</b>	<b>R</b> = Room   <b>RO</b> = Room with Override   <b>RS</b> = Room with Set Point   <b>RSO</b> = Room with Setpoint and Override   <b>R2</b> = Room   <b>R2O</b> = Room with Override   <b>R2S</b> = Room with Set Point   <b>R2SO</b> = Room with Set Point and Override	
<b>D. Communication Jack Select One (1)</b>	---- = No Jack <b>RJ4</b> = 4 Pin 4 Conductor RJ9, RJ10 or RJ22 Style Head Set Modular Connector <b>RJ6</b> = 6 Pin 6 Conductor RJ12 Modular Phone Connector <b>232</b> = 3.5mm (1/8") Stereo Jack	
<b>E. LCD Display<sup>2</sup> Select One (1)</b>	---- = No LCD Display   <b>LCD<sup>2</sup></b> = With LCD Display (Only Available with "R" Style Enclosure)	
<b>F. LCD Display Descriptor Select One (1)</b>	<b>F</b> = °F (Fahrenheit)   <b>C</b> = °C (Celsius)	
<b>G. NIST<sup>3</sup> Select One (1)</b>	---- = No NIST Certificate   <b>NIST</b> = NIST Certificate (3 Points)	
<b>Setpoint Configuration Options Select Options below if RS, RSO, R2S or R2SO was selected as a Configuration (C)</b>		
<b>1. Slidepots<sup>4</sup> Select One (1)</b>	<b>Direct Acting (Range in Ohms)</b> <b>A01</b> = 0 to 100K   <b>A02</b> = 0 to 20K   <b>A03</b> = 0 to 10K   <b>A08</b> = 1K to 11K   <b>A09</b> = 0 to 2K   <b>A10</b> = 0 to 1K   <b>A12</b> = 0 to 400   <b>A16</b> = 0 to 5K   <b>A28</b> = 806 to 1206   <b>A32</b> = 900 to 1300 <b>Reverse Acting (Range in Ohms)</b> <b>A14</b> = 10K to 0	
<b>2. Setpoint Indication Select One (1)</b>	<b>A3</b> = 18-28 DEG C   <b>A4</b> = 20-30 DEG C   <b>B4</b> = 55-85 DEG F   <b>B7</b> = 60-90 DEG F   <b>C5</b> = COOL/WARM   <b>C6</b> = COOLER/WARMER   <b>D3</b> = WARM/COOL   <b>G5</b> = BLUE/RED (R2 Enclosure)	

**Note<sup>1</sup>:** A/ part numbers come without logo. For custom logo, replace A/ with Company abbreviation. Please contact ACI | **Note<sup>2</sup>:** LCD Display is not compatible with NIST | **Note<sup>3</sup>:** NIST is available in "R" and "R2" only configurations | **Note<sup>4</sup>:** Other Setpoint configurations are available. Please contact ACI | **Note<sup>5</sup>:** Short Sensor is factory default, but the Dry Contact option is field selectable with jumper shunts included





### ACCESSORIES ORDERING

Model #	Item #	Description
A/MOUNTING PLATE BEIGE R	106821	Wall Mounting Back Plate, Plastic, Beige ("R")
A/MOUNTING PLATE WHITE R	126386	Wall Mounting Back Plate, Plastic, White ("R")
A/MOUNTING PLATE WHITE R2	143369	Wall Mounting Back Plate, Plastic, White ("R2")
LOCKING COVER	107370	Clear Thermostat Guard, Locking Cover, Low Profile
A/ROOM-FOAM-PAD	125690	1/8" Foam Insulation Pad with Adhesive (3" x 2", Black)



