

Thermal Imaging Occupancy Counter for Single Width Interior Doors

**OVERVIEW**



- Thermal Imaging Technology
- Bi-directional Counting
- Designed for 42" or Less Openings
- 5% or Better Typical Counting Accuracy
- RS-485 Network Connection
- Analog Output Connection
- Install Over Door Opening
- Door Jamb or Stand-off Mounting
- Operates on 24 VAC Power
- 3-year Warranty

The CENSus-C100 is a unique solution for reliable and cost effective occupancy counting. Ideal for Demand Control Ventilation (DCV) applications. Designed for single width interior doors or openings. Multiple counters can be installed on rooms with more than one entry.

Typical Applications	Benefits	Product Highlights
<ul style="list-style-type: none"> <li>◆ Classrooms</li> <li>◆ Lecture Halls</li> <li>◆ Conference Rooms</li> <li>◆ Waiting Rooms</li> <li>◆ Libraries</li> <li>◆ Retail Spaces</li> <li>◆ Arenas or Exhibition Spaces with Channeled Entry Paths</li> </ul>	<ul style="list-style-type: none"> <li>◆ Provide Only the Outdoor Air Required for the Actual Population</li> <li>◆ Save Energy</li> <li>◆ Reduce IAQ Liability</li> <li>◆ Satisfy ASHRAE 62.1 DCV Requirements on Single and Multi-zone Spaces</li> <li>◆ Satisfy DCV Requirements of ASHRAE 90.1</li> </ul>	<ul style="list-style-type: none"> <li>◆ Easy to Install</li> <li>◆ Real-time Counting</li> <li>◆ Advanced Algorithm Reduces False Counts</li> <li>◆ No Sensor/Receptor Alignment Required</li> <li>◆ Compatible with BRG-N100 when no B.A.S. Network is Available</li> </ul>



# SPECIFICATIONS: CENSUS-C100

## General

**Counting Technology:** Dual sensor differential thermal imaging

**Accuracy:** Typically better than  $\pm 5\%$  of actual population or 3 people, whichever is greater

### Listings and Compliance

**FCC:** This device complies with Part 15 of the FCC rules

**RoHS:** This device is RoHS2 compliant

### Environmental Limits

**Temperature (recommended limits):** 65 to 85 °F [18.3 to 29.4 °C]

**Humidity:** 5 to 95%

## Sensor Assembly

**Sensors:** Two thermopile sensors

### Mounting Options:

**Standard:** Install on overhead door jamb

**Optional:** Install above door opening with optional stand-off bracket

**Maximum Recommended Opening Size:** 42 in. [1.07 m]

**Maximum Recommended Mounting Height:** 96 in. [2.43 m]

## Integral Transmitter

**Power Requirement:** 24 VAC (22.8 to 26.4 under load) @1.5V-A

### B.A.S. Connectivity Options

**CENSUS-C100:** One 0-10 VDC, scalable and protected analog output signal (AO1=occupancy count) and one field selectable (BACnet MS/TP or Modbus RTU) and non-isolated RS-485 network connection (provide individual 24 VAC transformers for each CENSUS-C100 device for applications requiring isolated RS-485)

## Enclosure

**Enclosure:** White powder coated formed aluminum