Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!
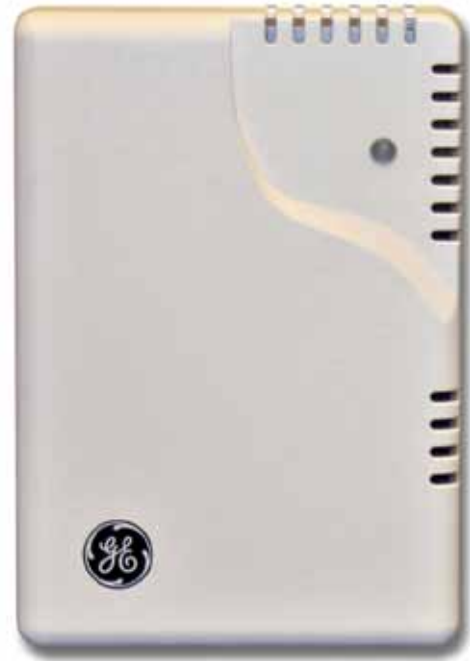

Contact us

T5000 Series

Telaire® Airestat™ CO_2/ Temperature Transmitter

Features:

- Low-cost

- Reliable (15 years of low-cost infrared sensor manufacturing)

- Lifetime calibration guarantee (ABC Logic™ on)

- Pre-calibrated

- Maintenance free (calibration maintained with patented ABC Logic)

- Flexible configurations (see matrix, page 2)

- Intuitive VLI display

- Three available outputs: analog 0 to 10V, 0 to 5V, passive temperature (20K thermistor), and digital UIP interface (RS-232 TTL level)

- User-definable thresholds

- RoHS and WEEE compliant

GE Measurement & Control Solutions offers high-volume manufacturing capabilities for its Telaire products, a global sales force, and additional engineering resources to support your sensing application needs.

Telaire® Technology
The technology is based on the absorption of light in a gold-plated, reflective light pipe or waveguide diffusion gas chamber. A gas permeable polytetrafluoroethylene (PTFE) filter prevents particulate and water contamination of the sensor. Light is absorbed in proportion to the CO_2 concentration and the remaining light is measured and converted into an analog signal.

ABC Logic™ (Automatic Background Calibration)
The Telaire product line offers patented ABC Logic-software for self-correction of drift to better than ±20 ppm per year. The system is virtually free of maintenance and typically has a lifetime of more than 10 years.

The Product

The Telaire T5000 Series Airestat CO_2 and temperature transmitter is a low-cost wall-mounted sensing solution for demand-controlled ventilation. The Airestat provides an intuitive VLI (Visual Limit Indicator) display for CO_2 thresholds, a passive temperature output (20kΩ thermistor), and a standard analog 0 to 10 volt or 0 to 5 volt signal to maintain air quality in enclosed spaces (such as school classrooms, offices, gymnasiums and theaters.)
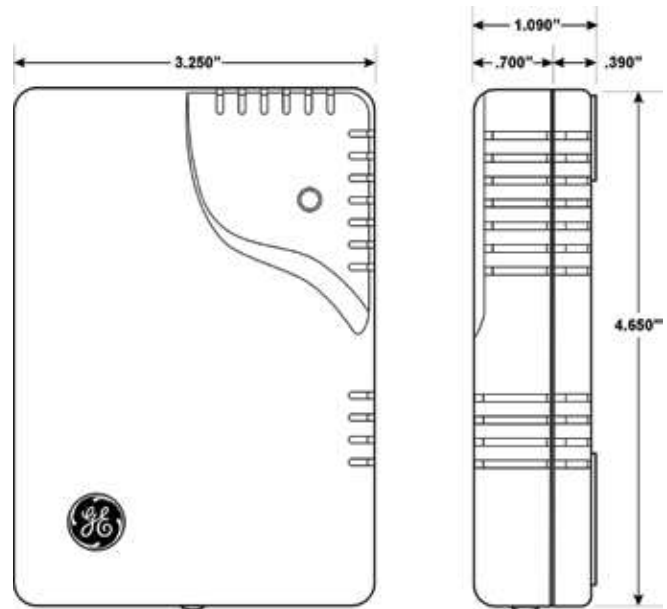
Product Features:

Telaire Model No.	CO2	Temp	LED	GE Logo
T5001	✓	✓		
T5003	✓	✓		✓
T5005	✓	✓	✓	
T5007	✓	✓	✓	✓

Please note that the models above are 0-10V output. For 0-5V output, the part number requires -5V (i.e., T5005-5V).

VLI (Visual Limit Indicator)

GE—Telaire Products introduces an exciting new alternative to traditional scientific LCD display of the CO_2 value. Our new T5000 Series transmitter with VLI (Visual Level Indicator) communicates intuitively to the average end-user. The correlation between a CO_2 PPM reading and adequate ventilation may not be fully understood. Instead of offering the user a reading in ppm (parts per million), we provide a simple LED that communicates increased CO_2 concentrations based on definable or predetermined thresholds. The LED smoothly transitions between green, yellow and red as the CO_2 threshold is exceeded. Unlike scientific displays, training to understand ppm values is not a prerequisite with this innovative product.

T5000 Series Specifications

Product

Sampling Method
Non-dispersive infrared (NDIR), gold plated optics, (with Telaire's patented ABC Logic self calibration algorithm). Diffusion sampling.

Measurement Range
0 to 2,000 ppm factory calibrated.

Accuracy
± 75 ppm @ 72°F (22°C) when compared with a factory reference or 10% of reading, whichever is greater*

Temperature Dependence
0.2% FS per °F (°C)

Stability
<2% of FS over life of sensor (15 years typical)

Non-Linearity
<1% of FS

Pressure Dependence
0.13% of reading per mm Hg

Calibration Interval
Not required*

Response Time
3 to 5 minutes for 90% step change.

Warm up Time
- <2 minutes (operational)
- 10 minutes (maximum accuracy)

Operating Conditions
- 32°F to 122°F (0°C to 50°C)
- 0 to 95% RH, non condensing

Storage Conditions
- -4°F to 158°F (-20°C to 70°C)
- 0 to 95% RH, non condensing

Temperature
NTC 20k thermistor

Output
- Analog: 0 to 10V or 0 to 5V

Connections
Screw terminals for 18 to 28 AWG

Power Supply Requirements
18 to 30 VAC RMS, 50/60Hz or 18 to 42 VDC, polarity protected

Power Consumption
1.75 VA average, 2.75 VA peak

Agency/Certifications
FCC Part 15 Class B, CE, RoHS, WEEE

Warranty Term
18 months

Note: Automatic Background Calibration, or ABC Logic, is a patented self-calibration technique designed to be utilized in applications where concentrations will drop to outside ambient conditions (approximately 400 ppm) at least four times in a 14-day period, typically during unoccupied periods.

Full accuracy is achieved after two weeks of operation.

www.ge-mcs.com

920-420D