MONITOR

Analog to Digital Converter

Part Number: CCAT-City Power   CCAT-Door
                         CCAT-Current   CCAT-Smoke Alarm
                         CCAT-Digital   CCAT-Water

A digital sensor that translates the signal from an analog sensor into a digital value, expanding the Geist Climate Monitor's analog input capacity.

- Bridges an analog sensor to the digital-sensor bus
- Add up to 16 additional analog inputs using Analog to Digital Converters
- Factory programmed to match sensor type

Does your application need more analog sensors than your Geist Climate Monitor has available inputs? Connect extra analog sensors using Analog to Digital Converters. Attach an analog sensor to the screw terminals on the Analog to Digital Converter, then plug the modular jack end of the cable to a digital-sensor port. The interface converts the signal from the analog sensor into a digital value. This allows the Geist Climate Monitor to monitor more analog sensors than the built-in Analog Inputs support.
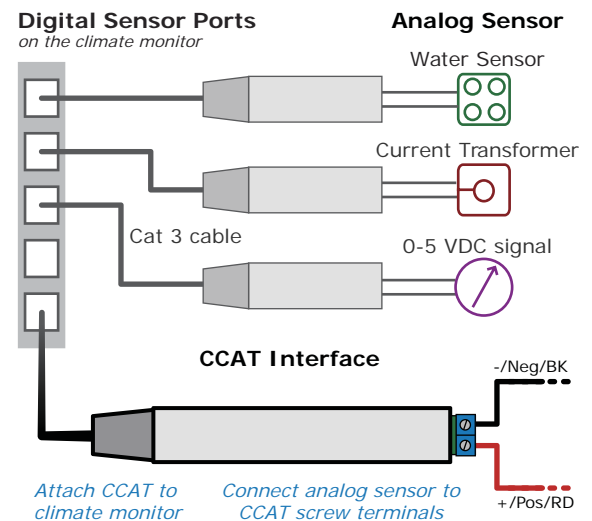
Programming/Types

Each Analog to Digital Converter is programmed at the factory according to what type of analog sensor will be attached. The climate monitor uses this information to interpret the sensor values and display them in the proper measurement scale. Examples of Analog to Digital Converter types include Water sensor, door position, digital (for dry-contact sensors), and Analog (0 to 5VDC signal).

Digital Sensors

The climate monitor uses a serial protocol to communicate with sensors connected to the digital-sensor bus. When a digital sensor is plugged in, the monitor automatically detects and identifies the sensor. Each sensor can be given a "friendly" name to make it easier to identify. The Geist Climate Monitor cycles through the digital sensors to collect and log new readings. If a value exceeds a user-defined thresholds, the unit sends alerts through email or SNMP.

A Geist Climate Monitor can support up to 16 digital sensors. The combined cable length for these sensors can be up to 600' depending on environment. To prevent electronic interference, avoid running sensor cable near high-power decides and minimize cable length.

A plastic tube houses the electronics that convert an analog sensor to digital.

Digital Sensor Ports *on the climate monitor*   **Analog Sensor**

Water Sensor

Current Transformer

Cat 3 cable   0-5 VDC signal

CCAT Interface   -/Neg/BK

Attach CCAT to climate monitor   *Connect analog sensor to CCAT screw terminals*   +/Pos/RD

The Analog to Digital Converter takes readings from the sensor and transmits them digitally to the Geist Climate Monitor.

Sensor Details

Specifications
   Amperage range: 30, 60, 120 amps, AC
   Output: 0 to 5 VDC, proportional to current
   Accuracy: +/- 2% from 10% to 100% full scale
   Connections: 2-position screw-terminal block
   Size: 2.9" L x 2.58" W x 1.04" H
   Warranty: 1 year

Compatibility
   Works with all climate/power monitors with analog ports
   Compatible with Analog-to-Digital Converter
   Not supported with isolated voltage sensor