GAI-TRONICS®
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Addendum—HUBBCOM™ Temperature Sensor Configuration and Operation

Confidentiality Notice

General Information

This addendum covers the configuration and operation of the temperature sensor option in HUBBCOM™ smart controller Models GSC1100TS, GSC2100TS, GSC3100TS, and GSC4100TS. The temperature sensor option uses an NCIT (non-contact infra-red thermometer) to enable contactless EST (elevated skin temperature) scanning. This provides an additional layer of contactless access control. Personnel entering a secured area must also pass the temperature screening function on the HUBBCOM smart controller before entry.

Configuration

Configure the temperature sensor feature using the GUDA (GAI-Tronics Universal Device Application) software. Refer to Pub. 42004-531 for instructions on downloading, installing, and using the GUDA software. Configure the smart controller using the instructions in Pub. 42004-551, HUBBCOM Device Configuration Guide before configuring the temperature sensor using these instructions.

Figure 1. Temperature Sensor Parameter Location

The TEMPERATURE SENSOR settings are under the ACCESS CONTROL node of the currently connected HUBBCOM device's configuration tree (see Figure 1).

NOTE: This branch of the configuration tree only appears when connected to a HUBBCOM device with the temperature sensor option.

Configure the temperature sensor parameters to enable the temperature sensing feature on a HUBBCOM smart controller (see Figure 2 and Table 1). Default settings are in bold font in the table.

The temperature sensing feature operates in conjunction with the *access control* and *auxiliary door control* features of HUBBCOM smart controllers. Configure the HUBBCOM smart controller to recognize NFC cards on the FEATURE AVAILABILITY screen and/or RFID cards on the ACCESS CONTROL screen. When using the NFC reader, configure the NFC facility ID code on the FEATURE AVAILABILITY screen when the facility has multiple buildings or areas.

Use the auxiliary door control feature with the temperature sensing feature to scan personnel before entry after an operator activates the entry station's output. Configure the smart controller with the temperature sensor as the *Activator* and configure the multicast address, port, and TTL (see Pub. 42004-551) (see the Reference Material section).

Configure an entry point's availability when using a local output to activate a door control by enabling the output's *enabled time*. Refer to the output contacts section of Pub. 42004-551 (see the Reference Material section).

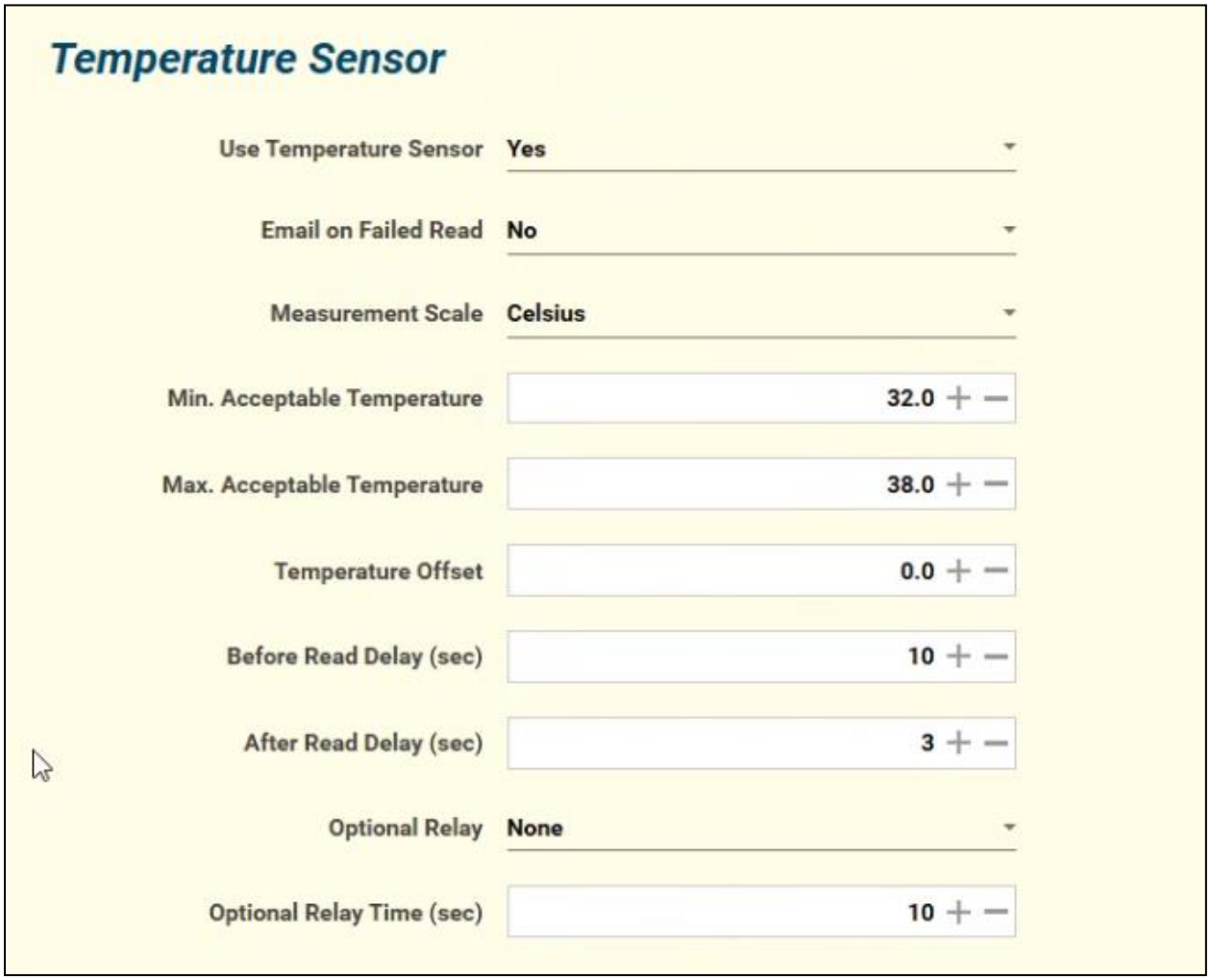

Figure 2. Temperature Sensor Configuration

Table 1. Temperature Sensor Parameters

Parameter	Description	Valid Settings
Use Temperature Sensor	Enables/disables the temperature sensor to scan personnel before entry to a restricted area.	Yes | **No**
Email on Failed Read	Enables/disables sending an email to the SMTP address in the *notification email* parameter on the ACCESS CONTROL tab. Email notifications require configuration of the SMTP settings on the NOTIFICATION screen (see Pub. 42004-551).	Yes | **No**
Measurement Scale	Sets the temperature scale to Celsius or Fahrenheit.	**Celsius** | Fahrenheit
Min. Acceptable Temperature	Set the minimum acceptable temperature that permits entry. Update this parameter to a meaningful value when changing the units between Celsius and Fahrenheit. Enter a numeric value or use the ± buttons to change the value.	0.0–125.0, **32** °C
Max. Acceptable Temperature	Set the maximum acceptable temperature before access denial occurs. Update this parameter to a meaningful value when changing the units between Celsius and Fahrenheit.	0.0–125.0, **38** °C
Temperature Offset	Enter the number of degrees to add to or subtract from the measured temperature to account for any variation present from the HUBBCOM's environment. Use this setting to calibrate the smart controller.	−10 to +10, **0** degrees
Before Read Delay (sec)	Enter the time in seconds that the smart controller waits before signaling the temperature scan. The HUBBCOM emits four beeps and a bop tone before scanning the subject's temperature. This delay allows the person to align their eyes with the template displayed on screen.	1–10, **10** seconds
After Read Delay (sec)	Enter the time in seconds that the smart controller waits after scanning an individual before taking any action.	1–10, **3** seconds
Optional Relay	Select one of four available outputs that activates when the subject's measured temperature is outside of the acceptable temperature range. **NOTE:** Local outputs one and two are solid state relay contacts capable of switching 0.4A at 60 V max. Outputs are on the rear panel of the smart controller. **NOTE:** USB 1 and 2 require connection to an external I/O board via the USB port on the rear panel of the smart controller.	• **None** • Local Out 1 • Local Out 2 • USB Out 1 • USB Out 2
Optional Relay Time (sec)	Set the period of relay activation for temperature scans that are outside of the acceptable range.	0–60, **10** seconds

Operation

Environment

Environmental considerations for the smart controller's NCIT (non-contact infra-red thermometer) performance:

- Use the temperature scanning feature of the smart controller in a draft-free space that is out of direct sunlight and away from radiant heat sources.
- The optimal environment for the smart controller temperature sensor is between 60.8–104 ºF (16–40 ºC) with the relative humidity below 85 percent.
- Allow the smart controller to operate in the testing environment for 10–30 minutes to adjust to its environment before scanning personnel.

Subject Preparation

To obtain accurate skin temperatures, ensure that:

- The person's forehead is clean, dry, and not blocked during measurement.
- The person was not wearing a hat or underwent recent physical exertion, just entered from a much lower temperature environment, recently used facial cleaning products, or other act that affects the skin temperature of the subject.

Scan Personnel

When temperature scanning is on and a person scans their access badge:

1. The HUBBCOM smart controller waits the *before-read delay* period, emits four beeps and a bop tone, then scans the person's temperature.

   The smart controller displays two ovals in the lower left corner of the screen. The *before read delay period* gives the person time to align their eyes with the two ovals on screen.
2. The subject aligns their eyes with the two ovals on the screen with their forehead six inches from the screen.
3. The HUBBCOM displays the temperate scanned on screen for the *after-read delay* period.
4. The HUBBCOM compares the scanned temperature to the minimum and maximum acceptable temperatures in the smart controller's configuration and:
   - (pass) activates the *wiring interface* configured on the ACCESS CONTROL screen.
   - (failure) sends a notification email to the *notification email* address configured on the ACCESS CONTROL screen (see the *email on failed read* parameter in Table 1) and activates the *optional relay* for the *optional relay time* (in seconds).

Reference Material

GAI-Tronics' product documentation is on the GAI-Tronics website under the Resources tab at https://www.hubbell.com/gai-tronics/en/manuals.

Title	Publication
GUDA (GAI-Tronics Universal Device Application)	42004-531
HUBBCOM Device Configuration Guide	42004-551

Warranty

Equipment. GAI-Tronics warrants for a period of one (1) year from the date of shipment, that any GAI-Tronics equipment supplied hereunder shall be free of defects in material and workmanship, shall comply with the then-current product specifications and product literature, and if applicable, shall be fit for the purpose specified in the agreed-upon quotation or proposal document. If (a) Seller's goods prove to be defective in workmanship and/or material under normal and proper usage, or unfit for the purpose specified and agreed upon, and (b) Buyer's claim is made within the warranty period set forth above, Buyer may return such goods to GAI-Tronics' nearest depot repair facility, freight prepaid, at which time they will be repaired or replaced, at Seller's option, without charge to Buyer. Repair or replacement shall be Buyer's sole and exclusive remedy. The warranty period on any repaired or replacement equipment shall be the greater of the ninety (90) day repair warranty or one (1) year from the date the original equipment was shipped. In no event shall GAI-Tronics warranty obligations with respect to equipment exceed 100% of the total cost of the equipment supplied hereunder. Buyer may also be entitled to the manufacturer's warranty on any third-party goods supplied by GAI-Tronics hereunder. The applicability of any such third-party warranty will be determined by GAI-Tronics.

Services. Any services GAI-Tronics provides hereunder, whether directly or through subcontractors, shall be performed in accordance with the standard of care with which such services are normally provided in the industry. If the services fail to meet the applicable industry standard, GAI-Tronics will re-perform such services at no cost to buyer to correct said deficiency to Company's satisfaction provided any and all issues are identified prior to the demobilization of the Contractor's personnel from the work site. Re-performance of services shall be Buyer's sole and exclusive remedy, and in no event shall GAI-Tronics warranty obligations with respect to services exceed 100% of the total cost of the services provided hereunder.

Warranty Periods. Every claim by Buyer alleging a defect in the goods and/or services provided hereunder shall be deemed waived unless such claim is made in writing within the applicable warranty periods as set forth above. Provided, however, that if the defect complained of is latent and not discoverable within the above warranty periods, every claim arising on account of such latent defect shall be deemed waived unless it is made in writing within a reasonable time after such latent defect is or should have been discovered by Buyer.

Limitations / Exclusions. The warranties herein shall not apply to, and GAI-Tronics shall not be responsible for, any damage to the goods or failure of the services supplied hereunder, to the extent caused by Buyer's neglect, failure to follow operational and maintenance procedures provided with the equipment, or the use of technicians not specifically authorized by GAI-Tronics to maintain or service the equipment. THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE IN LIEU OF AND EXCLUDE ALL OTHER WARRANTIES AND REMEDIES, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Return Policy

If the equipment requires service, contact your Regional Service Center for a return authorization number (RA#). Equipment should be shipped prepaid to GAI-Tronics with a return authorization number and a purchase order number. If the equipment is under warranty, repairs or a replacement will be made in accordance with the warranty policy set forth above. Please include a written explanation of all defects to assist our technicians in their troubleshooting efforts.

Call 800-492-1212 (inside the USA) or 610-777-1374 (outside the USA) for help identifying the Regional Service Center closest to you.