DIGITALLY ADJUSTABLE DISPLAY SENSOR

FOR UNITS WITH A MICROTECH® CONTROLLER

- USED WITH UNITS WITH MICROTECH III AND MT2300 CONTROLS

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Safety Information

Hazard Identification

⚠ DANGER
Danger indicates a hazardous situation, which will result in death or serious injury if not avoided.

⚠ WARNING
Warning indicates a potentially hazardous situations, which can result in property damage, personal injury, or death if not avoided.

⚠ CAUTION
Caution indicates a potentially hazardous situations, which can result in minor injury or equipment damage if not avoided.

NOTICE
Notice indicates practices not related to physical injury.

NOTE: Indicates important details or clarifying statements for information presented in Figures or Tables.

This manual provides installation and maintenance information for a Daikin Applied DIGITALLY ADJUSTABLE DISPLAY SENSOR for units with a MicroTech® controller.
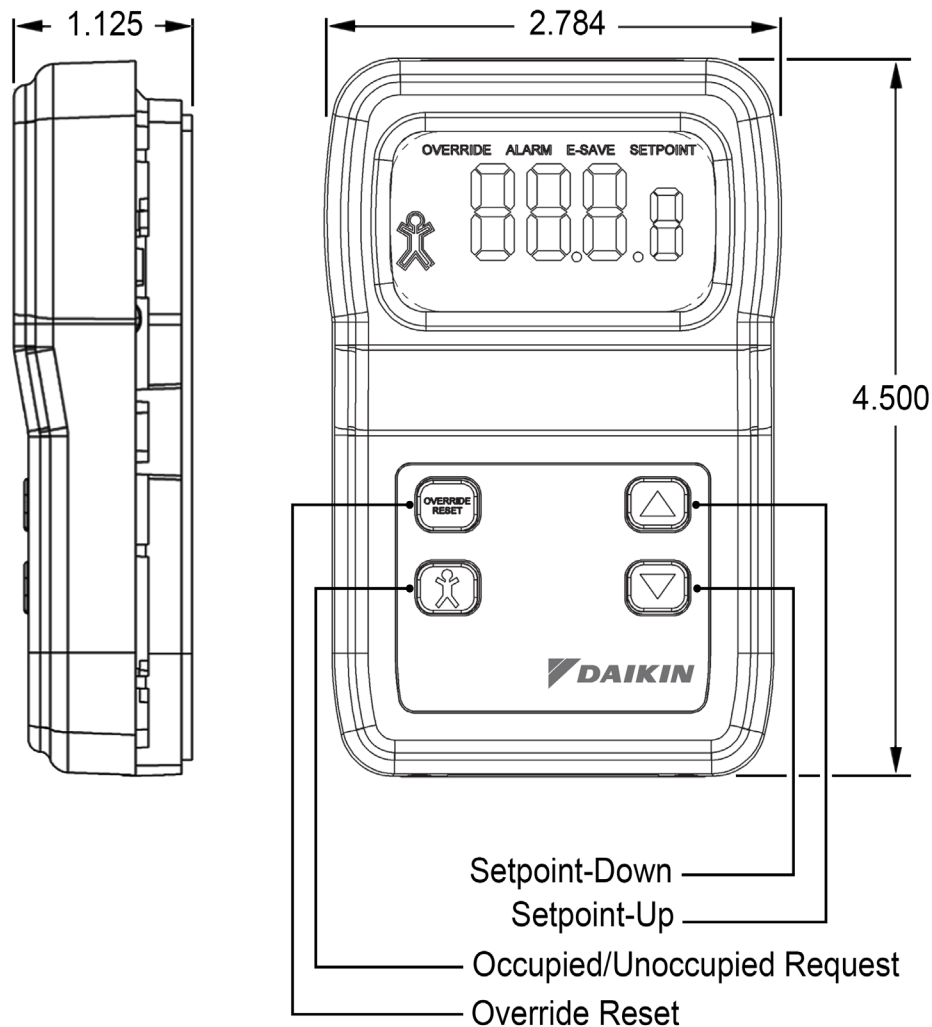
Introduction

The display sensor is used in conjunction with the MicroTech III or MT2300 equipped units as described in "Applications" on page 3. The sensor has a digital display for Temperature, Occupancy, Alarm, Setpoint, and Status indication. Controls include four buttons for Setpoint (Up and Down), Occupied/Unoccupied Request, and Override Reset (Figure 1).

Sensor Buttons and Dimensions

Figure 1: Digital Display Sensor

Setpoint-Down
Setpoint-Up
Occupied/Unoccupied Request
Override Reset

NOTE 1: Water Source Heat Pump P/N 910152147

Applications

Sensor Functions

Water Source Heat Pump Model: 910152147

- Display sensor to show room Temperature, ALARM, Override, and occupancy.

Product Usage

The display sensor can be used on the products shown in Table 1. The water source heat pump applications for the display sensor are shown in Table 2.

Table 1: Product Usage Guide

Units	Product		Models	Controls
Water Source Heat Pumps	Enfinity™ (R-410A)	Horizontal	WCCH, WCCW	MicroTech III Unit Controller
		Vertical	WLVC, WLVW, WVFC, WVFW	
		Vertical Stacked	WVHC	
		Console	WMHC, WMHW	
	SmartSource 1-Stage (R-410A)	Horizontal & Vertical	WGSH, WGSV, WGCH	MicroTech III Unit Controller
	SmartSource 2-Stage (R-410A)		WGTH, WGTV, WGDH	
	SmartSource (R-32)	Small Capacity Horizontal & Vertical	WSCH, WSDH, WSMH, WSNH, WSSH, WSTH, WSCV, WSDV, WSMV, WSNV, WSSV, WSTV	MT2300 Unit Controller
		Large Capacity Horizontal & Vertical	WSLH, WSLV	
		Vertical Stack	WSVF, WSVC	
		Console	WSRC	

Table 2: Water Source Heat Pump Application Guide

WSHP Product		Models	Applications					
			Cooling	Heating	Electric Heat			Waterside Economizer
			Stages		Boilerless	Supplemental	Primary	3-Way Valve Control
Enfinity (R-410A)	Horizontal	WCCH, WCCW	1	1	No	No	No	No
	Vertical	WVFC, WVFW	1	1	Yes[1]	Yes[1]	No	No
		WLVC, WLVW	3	2	Yes[1]	No	No	Yes
	Vertical Stacked	WVHC	1	1	No	No	No	No
	Console	WMHC, WMHW	1	1	Yes[1]	No	No	No
SmartSource 1-Stage (R-410A)	Horizontal & Vertical	WGCH, WGSH, WGSV	3	4	Yes	Yes	Yes	Yes
SmartSource 2-Stage (R-410A)	Horizontal & Vertical	WGDH, WGTH, WGTV	3	4	Yes	Yes	Yes	Yes
SmartSource (R-32)	Small Capacity Horizontal & Vertical	WSCH, WSDH, WSMH, WSNH, WSSH, WSTH, WSCV, WSDV, WSMV, WSNV, WSSV, WSTV	3	4	Yes	Yes	Yes	Yes
	Large Capacity Horizontal & Vertical	WSLH, WSLV	3	2	Yes[1]	No	No	Yes
	Vertical Stack	WSVF, WSVC	1	1	No	No	No	No
	Console	WSRC	1	1	Yes[1]	No	No	No

[1]   With optional Boilerless controls

Installation

Mounting Location

Avoid mounting on outside walls or in direct sunlight.

Junction Box, (J-Box)

1. Pull the wire through the wall and out of the junction box, leaving about six inches free.

2. Pull the wire through the hole in the base plate.

3. Secure the back plate to the box using the #6-32 × 1/2 inch mounting screws provided.

4. Screw the plate firmly to the wall so the foam plate backing is compressed about 50%.

5. Terminate the unit according to the guidelines in the Termination section.

6. Attach cover by latching it to the top of the base, rotating it down, and snapping into place.

7. Secure the cover by backing out the lock-down screws using a 1/16″ Allen wrench until it is flush with the bottom of the cover.

Figure 2: Junction Box Mounting
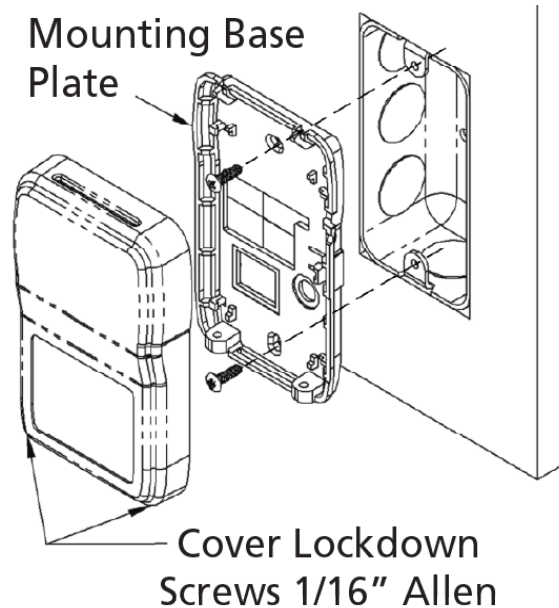
NOTE: Hardware is provided for both junction box and drywall installation.

Drywall Mounting

1. Place the base plate against the wall where you want to mount the sensor.

2. Mark out the two mounting holes where the unit will be attached to the wall. Drill a 3/16″ hole in the center of each mounting hole, and insert a drywall anchor into the holes.

3. Drill one 1/2″ hole in the middle of the marked wiring through hole area.

4. Pull the wire through the wall and out the 1/2″ hole, leaving about six inches free.

5. Pull the wire through the hole in the base plate.

6. Secure the base to the drywall anchors using the #6 × 1″ mounting screws provided.

7. Screw the plate firmly to the wall so the foam plate backing is compressed about 50%.

8. Terminate the unit according to the guidelines in the "Terminations" section.

9. Attach cover by latching it to the top of the base, rotating it down, and snapping it into place.

10. Secure the cover by backing out the lock-down screws using a 1/16″ Allen wrench until it is flush with the sides of the cover.

NOTICE
In any wall-mount application, the wall temperature and the temperature of the air within the wall cavity can cause erroneous readings.
The mixing of room air and air from within the wall cavity can lead to condensation, erroneous readings, and sensor failure. To prevent these conditions, Daikin Applied recommends sealing the conduit leading to the junction box with fiberglass.

Terminations

Daikin Applied recommends using a twisted shielded pair of at least 22 AWG for the power wire connections. The shield should be earth grounded only at the power source. Larger gauge wire may be required for runs greater than 250′.

⚠ CAUTION
Combination of power wiring (R, 5) and analog (1, 3, 4) wiring in a common cable may cause signal interference and must be avoided.

All wiring must comply with the National Electric Code (NEC) and local codes. Do NOT run any of this device's wiring in the same conduit as other AC power wiring. Tests show that fluctuating and inaccurate signal levels are possible when AC power wiring is present in the same conduit as the signal lines. If you are experiencing any of these difficulties, please contact your Daikin Applied representative.

Terminal Descriptions

Refer to Figure 3 for terminal locations. Refer to Table 3 on page 6 for terminal descriptions.

Figure 3: Sensor Circuit Board
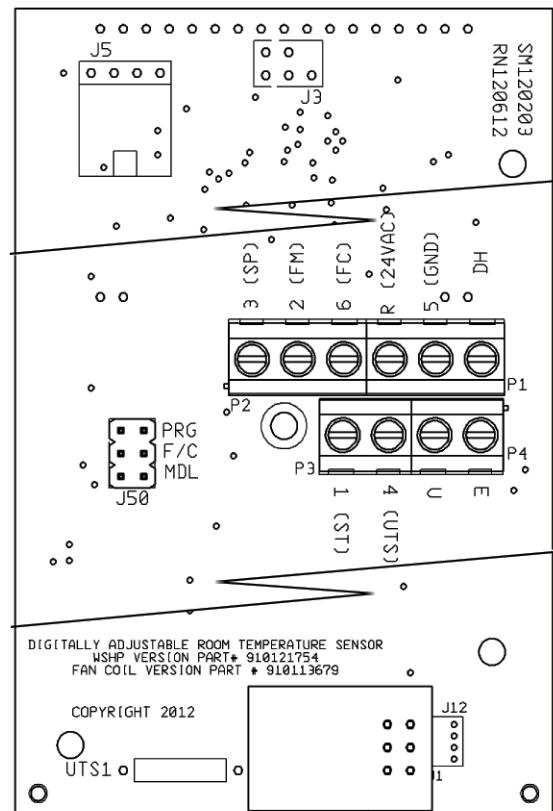
Table 3: Terminal Description

Terminal Description	
R	15 to 28VAC* (AC requires separate shielded wire). (Shield terminated at power source only.)
U	Unoccupied Contact (Terminal grounded when in Unoccupied, VDC only).
1	Status Indicator Input from the MicroTech III or MT2300 Unit Controller (5VDC).
3	Output Signal, Setpoint Adjust from 55º to 95˚F (default) or ±5º Configurable (0 to 5VDC). See Table 4.
4	Output Signal, Room Temp Thermistor Sensor (10K ATP Z curve, 10K-2).
5	Ground or Neutral* (AC requires separate shielded wire). Common reference for all signal terminals.

NOTE 1: * The AC power wiring at terminals [R] & [5] should be run in a separate twisted shielded pair to avoid possible fluctuating and inaccurate signal levels induced into the other sensor signal wires.

NOTE 2: Resistance measurements between Terminals 4 & 5 can be compared to those in Table 5.

Table 4: Setpoint Analog Range Tolerance

Setpoint Analog Tolerance			
55˚ to 95˚F Scale	-3˚ to +3˚F Scale	-5˚ to +5˚F Scale	Terminal 3 Analog Output
@ 55˚F (min.)	@-3˚F (min.)	@ -5˚F (min.)	0.0 to 0.10 VDC
@65˚F	@-1.5˚F	@-2.5˚F	1.3 to 1.42 VDC
@75˚F	@0˚F	@0˚F	2.12 to 2.2 VDC
@85˚F	@+1.5˚F	@+2.5˚F	2.58 to 2.63 VDC
@95˚F (max.)	@+3˚F (max.)	@+5˚F (max.)	3.0 to 4.0 VDC

Table 5: Resistance Measurement Comparison Table - Between Terminals 4 and 5

Resistance					
°F	°C	Ohm	°F	°C	Ohm
42.8	6	22,431.44	71.6	22	11,297.24
46.4	8	20,518.43	75.2	24	10,412.64
50	10	18,787.38	82.4	28	8,869.27
53.6	12	17,219.35	86	30	8,196.25
57.2	14	15,797.53	89.6	32	7,580.73
60.8	16	14,506.99	93.2	34	7,017.29
64.4	18	13,334.43	96.8	36	6,501.09
68	20	12,268.03	100.4	38	6,027.74

Figure 4: SmartSource MicroTech III Board to Digital Room Temperature Sensor Wiring

SmartSource Board	MicroTech III Board					
Terminal Block Label	TB2-1	TB1-1	TB1-3	TB1-4	TB1-5	TB3-2
Description	24VAC	Unit Status Output	Setpoint Adjust	Room Temp Sensor & Tenant Override	DC Signal Common	Unoccupied Input
Terminal Label	R	1	3	4	5	U
Typical Wiring	↕	↕	↕	↕	↕	↕
Terminal Label	R (24VAC)	1 (ST)	3 (SP)	4 (UTS)	5 (GND)	U
Description	24VAC	Unit Status Output	Setpoint Adjust	Room Temp Sensor & Tenant Override	DC Signal Common	Unoccupied
Sensor	Digitally Adjustable Room Temperature Sensor (Part No. 910152147)					

Figure 5: SmartSource MT2300 Board to Digital Room Temperature Sensor Wiring

SmartSource Board	MT2300 Board					
Terminal Block Label	TB1-1	TB2-1	TB2-3	TB2-4	TB2-5	TB3-2
Description	24VAC	Unit Status Output	Setpoint Adjust	Room Temp Sensor & Tenant Override	DC Signal Common	Unoccupied
Terminal Label	R	LED	SP	RM	GND	U
Typical Wiring	↕	↕	↕	↕	↕	↕
Terminal Label	R (24VAC)	1 (ST)	3 (SP)	4 (UTS)	5 (GND)	U
Description	24VAC	Unit Status Output	Setpoint Adjust	Room Temp Sensor & Tenant Override	DC Signal Common	Unoccupied
Sensor	Digitally Adjustable Room Temperature Sensor (Part No. 910152147)					

Operation

Initial Start-Up Sequences

Initial Start-Up Occupied Sequence

On initial installation power-up, the sensor is in "Occupied" mode with a solid occupied icon and DC voltage at terminal "U". If the "STATUS/Dot" input on Terminal 1 from the controller indicates occupied ("ON" continuous), then the unit continues to stay "Occupied". If the "STATUS/Dot" input on Terminal 1 from the controller indicates unoccupied (5 seconds "ON" then 5.5 seconds "OFF"), then the occupied icon will flash the desired occupancy state every 8 seconds, indicating to the user a mismatch of the desired occupied status and system occupied status at the controller.

Power Fail Start-Up Occupied Sequence

On a power failure, the sensor retains its last known desired occupancy status in non-volatile memory. On restoration of power, the sensor restores its last known desired occupancy state from memory. The occupied icon will reflect this with a solid (occupied) or hollow (unoccupied) indication and terminal "U" will have voltage applied (occupied) or grounded (unoccupied). If the "STATUS/Dot" input on Terminal 1 from the controller matches this occupancy state, then the occupied status icon will continue to be solid or hollow depending on the last known state. If the "STATUS/Dot" input on Terminal 1 from the controller is different from the sensor occupied state, then the occupied icon will flash the desired occupancy state every 8 seconds indicating to the user a mismatch of the desired occupied status and system occupied status at the controller.

Display Descriptions

Numerical Display

The factory setting default numerical display (Figure 6) shows current temperature (°F or °C).

Figure 6: Sensor Numerical Display
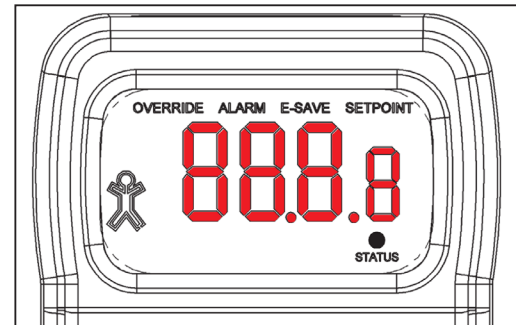
Adjusting the Setpoint

Temperature

- Push the △ or ▽ button, the displayed setpoint can be adjusted up or down.
- After an adjustment, the setpoint is displayed for 5 seconds.

The unit can also be programmed in the field to "Setpoint Only" display or Setpoint Lockout. See "Program Mode Menu Pages" on page 9.

Indicators

Occupied Icon Indicator

The Occupied Icon on the left side of the display indicates whether the room sensor is in the Occupied or Unoccupied Mode, (Figure 7).

Solid is Occupied and Hollow is Unoccupied.

- A blinking icon every 8 seconds indicates an override request that has not been fulfilled.

Figure 7: Occupied & Unoccupied Icons

 = "Occupied"   = "Unoccupied"

"OVERRIDE" on the Display

The "OVERRIDE" word indicator in the top left corner illuminates when the sensor is signaled by the "Status" input (Terminal 1).

This is initiated from the Override/Reset Button at first and then confirmed from the "Status" input code which keeps the "OVERRIDE" indicator on.

"ALARM" on the Display

The "ALARM" word indicator on top illuminates when the sensor interprets the "Status" input code from the controller as an alarm. See Table 6.

"E-SAVE" on the Display

The "E-SAVE" word indicator on top illuminates when the sensor interprets the "Status" input code from the controller as Standby Mode. See Table 6.

"SETPOINT" on the Display

The "Setpoint" word on top illuminates when the sensor is displaying the setpoint on the numerical display (Temperature). When this "Setpoint" indicator is off, the numerical display shows the actual room temperature.

"STATUS" Dot on the Display

● The Status "Dot" on the display indicates the unit status or **STATUS** alarm condition. It is turned "On" and "Off" by interpreting the status input from the controller on Terminal 1.

See Table 6 for the alternating conditions and sensor status.

Table 6: WSHP Unit Status Input Timing Definition

Status Dot "ON" (+ 5 VDC) time	Status Dot "OFF" (0 VDC) Time	WSHP Availability	Display Indication
0.5 seconds	0.5 seconds	Controller Off or Network "Wink" Operation Active	"ALARM" On
0.0 seconds	Continuous	Unit Running in Night Setback Override Mode or No Power to the Unit	"OVERRIDE" On
0.5 seconds	5.5 seconds	Unoccupied Mode	Hollow Occupied Icon
5.5 seconds	0.5 seconds	Standby Mode	"E-SAVE" On
Continuous	0.0 seconds	Occupied Mode	Solid Occupied Icon

Front Panel Button Operation

 ## Override/Reset Button (Timed Override & Alarm Reset)

When the "Override/Reset" Button is pressed, the thermistor sensor is shorted. If held for more than 3 seconds but less than 11 seconds, it puts the controller into a timed Occupied Override (the time is set by the controller). If the unit is in alarm, then holding the "Override/Reset" Button for more than 11 seconds will clear all alarms in the controller but only if the cause of the alarm has already returned to its non-alarm condition. Some alarms will not reset from the digital room sensor. In this case, power to the unit must be cycled off for 5 seconds to clear the alarm.

⚠ CAUTION
Continuously resetting alarms from the room sensor could damage the controller. Please call a service technician when repeated alarm resets are required to keep the unit operational.

 ## Occupied Button (Occupied/ Unoccupied Request)

NOTICE
Terminal "U" opens HI to source power on power-up "Occupied."

When the "Occupancy" Button is pushed, the current "Occupied" or "Unoccupied" status of the sensor will be toggled to the opposite condition for 20 seconds. Both the display and "U" terminal output reflect the new status during the 20 seconds. If a confirmation signal is received from the controller into the Status Input terminal "1" within 20 seconds, then the new occupancy condition remains; otherwise the "U" terminal will return to the original state and the "Occupied" Icon will flash the desired occupancy state every 8 seconds.

Up & Down Setpoint Buttons (Temperature)

Press the Setpoint "Up/Down" Buttons once to enter the Setpoint Adjustment Mode. The current setpoint value will display for 5 seconds. When the "Up/Down" Buttons are pressed in this mode, the temperature setpoint will change in one degree increments. It will only change within the temperature setpoint range that was ordered (or the setpoint range that was set via the Program Mode).

After 5 seconds of no buttons being pushed, the sensor will go into the standard display mode.

Technician Adjustments
(If Needed)

NOTICE
The sensor setup is factory set per your order. Setup adjustments are not required.

The unit is shipped ready to install per the order and does not require any special setup or programming. The following Program Menu Changes are available if the installer decides to change the factory settings. The Setpoint Up/Down Buttons and Occupancy Button are used in the Programming Mode to make Menu changes and selection.

Set-Up Jumper (J50) Configuration
(Factory Set per Order)

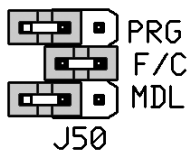| ⚠ CAUTION |
| --- |
| Turn off power to the unit before reconfiguring the F/C or MDL jumper settings. Damage to the sensor board can occur if jumpers are moved while there is power to the unit and sensor. |

Figure 8: J50 Jumper

Table 7: Label Description Setting

PRG	Program Mode or Run Mode	Program Mode = Jumper installed for Program Mode. (See Program Menu.)
		Run Mode = Jumper removed for Run Mode. (Place jumper on one pin only.)
F/C	ºC Indication or ºF Indication	ºC = Jumper installed for ºC ºF = Jumper removed for ºF
MDL	Sets the Model	Jumper is in consequential for PN 910152147.

Program Mode Menu Pages
(Display Required)

NOTICE
Both J50 "F/C" and J50 "MDL" jumpers must be configured first before entering the program "PRG" mode.

Entering Program Mode and Making Changes

1. Install the J50 "PRG" jumper onto both pins with power turned on to enter Program Mode.

2. Press the Up/Down Buttons to advance to the desired program parameter from P1 through P14 (Parameters described below).

3. Press the Occupancy Button to select the specific program parameter to change.

4. Change the parameter value as described in the Mode Menus section below. (Usually with the Up/Down Button)

5. Press the Occupancy Button again to set the selected parameter.

6. Press the Up/Down Buttons to proceed to the next parameter (as in Step 2 above).

7. When done making changes, remove the J50 "PRG" jumper (and place over one pin). This action will end the Programming Mode and store all the values. The sensor is now in the Run Mode.

Program Mode Menu Pages

P1 **Setpoint Mode** (Factory set to temperature value "S1". J50 ºF/ºC must be set before entering the program "PRG" mode).

- **S1** – "UP/DOWN" to select setpoint to absolute temperature setpoint value. Actual setpoint value set in P4 and P5. Example: 55ºF (13º C) to 95ºF (35º C).
- **S2** – "UP/DOWN" to select setpoint to relative temperature setpoint value of ±5.0ºF (±2.8ºC).
- **S3** – "UP/DOWN" to select setpoint to relative temperature setpoint value of ±3.0ºF (±1.67ºC) for Enfinity systems.

P2 **Temperature Offset** (Factory set to zero).

- "UP" to increase offset up to +2.
- "DOWN" to decrease offset down to -2.

P4 **Setpoint Low Range** (Factory set to 55°F or 13°C depending on J50 °F/°C setting).

P1 in S1 Mode: Adjustment range 55 to 65°F or 13 to 18°C.

- "UP" to increase the low setpoint range up to 65°F or 18°C.
- "DOWN" to decrease the low setpoint range down to 55°F or 13°C.

P1 in S2 Mode: No adjustment. Factory set to -5°F (-2.8°C).

P1 in S3 Mode: No adjustment. Factory set to -3°F (-1.6°C) for Enfinity systems.

P5   Setpoint High Range (Factory set to 95°F or 35°C depending on J50-°F/°C setting).

P1 in S1 Mode: Adjustment range 85 to 95°F or 29 to 35°C.

• "UP" to increase the high setpoint range up to 95°F or 35°C.

• "DOWN" to decrease the high setpoint range down to 85°F or 29°C.

P1 in S2 Mode: No adjustment. Factory set to 5°F (2.8°C).

P1 in S3 Mode: No adjustment. Factory set to 3°F (1.6°C) for Enfinity systems.

P8   Display Resolution (Factory set to ±0.5 resolution, "0.5").

• **0.1** – "UP/DOWN" to set resolution to ±0.1, (Rounds up at .05).

• **0.5** – "UP/DOWN" to set resolution to ±0.5, (Rounds up at .08).

• **1** – "UP/DOWN" to set resolution to ±1.0, (Rounds up at .5).

P10 Display Mode (Factory set to #4).

• "UP/DOWN" to set display mode.

• Choose from numbered list below.

1 = No value on the main display (Blank).

2 = Temperature Value (TV).

3 = Temperature Setpoint (TSP).

4 = Temperature Value & Temperature Setpoint (Default).

P11 Setpoint Button Lockout (Factory set to "0": Temperature Setpoint Enabled.

NOTICE
1. Selections in P11 will impact Menu P10.
2. After changing P11 option, remove PRG jumper on J50 to exit programming mode and refresh options. In order to make additional programming changes, PRG Jumper must be reinstalled to enter programming mode.

• **0** – Temperature Setpoint is Enabled.

• **1** – Temperature Setpoint is Disabled.

P13 Occupancy Button Enable/Disable (Factory set to enabled "ObE").

ObE Occupancy Button Enabled (Factory Default)

Obd Occupancy Button Disabled

P14 Firmware Version - XXX.X

For Units with a BACnet or LonWorks Communications Module

P15 Setpoint Calibration Offset (Factory set to "0".)

• "UP" to increase offset up to +100 will raise the MicroTech III or MT2300 perceived setpoint from the sensor.

• "DOWN" to decrease offset down to -100. This will lower the MicroTech III or MT2300 perceived setpoint from the sensor.

Calibrate the displayed setpoint to the setpoint value sent to the MicroTech III or MT2300 as follows:

1. Set the digital room sensor displayed setpoint to 90° F.

2. Observe the local setpoint via the BAS/EMS connected by the BACnet or LonWorks Communications Module.

3. Adjust the Configuration Menu P15 on the sensor until the local setpoint and the displayed setpoint are equal.

For Units Without a BACnet or LonWorks Communications Module

P15 Setpoint Calibration Offset (Factory set to "0").

• "UP" to increase offset up to +100 will raise the MicroTech III or MT2300 perceived setpoint from the sensor.

• "DOWN" to decrease offset down to -100. This will lower the MicroTech III or MT2300 perceived setpoint from the sensor.

The Setpoint Calibration Offset can be calculated using the following formula:

ROUND [(Controller Vdd / Sensor Vdd)*1000]-1000

Example:

Given: Controller Vdd = 5.15 VDC

Sensor Vdd = 4.95 VDC

The programmed Calibration Offset would be:
[(5.15/4.95)*1000] -1000 = 40

Diagnostics

Problem & Possible Solution

No Display

• Check the power connections and power voltage level.

• Replace sensor if power is okay.

No Temperature Signal

• Be sure the termination and wiring is correct and the controller is set up properly. Make sure the "Override/Reset" button is not stuck down.

• Replace sensor if all checks are okay.

Override/Reset Not Working

• Measure the resistance to ground at the sensor output terminal (Terminal 4). When pushing the Override Button, it should show a short. If not, replace the sensor.

Occupied Not Working

• Verify that this terminal is in a powered circuit. Measure the voltage to ground at the occupied terminal (U). When pushing the Occupied Button (<2 secs), it should read close to 0 volts. When you lift the button, it should read high volts.

• Replace sensor if it still doesn't work.

"Err" Shown on the Screen

- This indicates that the temperature and humidity sensing element has failed.

Up or Down Key Does Not Change Setpoints

- Check to verify Setpoints are not locked out in Programming Mode Menu Page P11.

Solid Man Goes Away After 20 Seconds

- Occupancy Request was not acknowledged by Main controller, check wiring of Status Signal from controller.

Maintenance

Wipe the display as needed with a damp water only cotton cloth. Do not use any type of cleaner as it may damage the buttons or scratch the display. Do not paint.

Specifications

Sensor Specifications

Supply Voltage

AC Hot ....(R) 7 to 28VAC, 24VAC nominal, 0.17VA

GND/Neutral ....(5) Sensor common reference ground

Sensor

Temperature ....10K-2 Thermistor, ±0.36ºF (±0.2ºC)

Outputs

Unoccupied...................... (U), Unoccupied = Digital low to ground (same ground as power source), 100mA @5VDC max.

System Off.........................(E), System Off = Digital low to ground (same ground as power source), 100mA @5VDC max.

Setpoint ....(3), Analog, 0 to 5 VDC

Temperature ....(4), Analog thermistor resistance

Sensor Controls

Setpoint .... 2 Up/Down buttons

Occupied ....1 button to check and request change in Occupancy Status

Override/Reset .... 1 button to request timed occupancy override and reset alarms

Inputs............... (1), Controller alarm & system status, 5VDC max.

Termination .... 10 Terminals, 16 to 22 AWG

Mounting.................................. Standard 2″ × 4″ J-Box or Drywall

Field Setup Jumper J50

PRG..............................Program Mode, On = Program, Off = Run

F/C...Display Units, On = ºC, Off = ºF

MDL .... MODEL, not applicable for Sensor P/N 910152147

LCD Display

Overall Size .... 2.04″W × 1.33″H

Main Digits.. ±999.9 Digits @0.6″H

Resolution........................0.5 displayed value, 0.1 for offset adjust

Main Value .... Temp & Setpoint, toggling every 5 sec.

Eng. Units .... ºF, ºC, %RH

Occupied Icon..................Hollow = Unoccupied, Solid = Occupied

Function....................................Override, Alarm, E-Save, Setpoint

Field Configuration Menu

(Requires J50 PRG jumper to be "On")

Offset .... Temp display, ±2ºF (±1.0ºC)

Setpoint Range..........................Default 55º to 95ºF (13º to 35ºC), ±3ºF (±1.6ºC) or ±5ºF (±3ºC). Adjustable between 55º to 95ºF, ±3ºF (±1.6ºC) or ±5.0ºF (±2.8ºC).

Resolution..................................Main display can be default .5 or 1 or 1.0 (ºF, ºC)

Display Mode.............................Temp only, Setpoint only, or both

Enclosure Material

ABS Plastic, UL94V-0.

Ambient

32º to 122ºF (0º to 50ºC), 0 to 95%RH, Non-condensing

Agency

Restriction of the use of certain Hazardous Substances (RoHS).