

Features

- 128 X 64 Monochrome Graphic Display for Comprehensive Process Information
- Simultaneous Display of Process Value & Set Value for both Temperature & %RH
- Universal Input for Temperature & %RH with In-built Excitation Voltage
- Independent Self Tune PID Control Loops for Temperature & %RH
- SSR Drive Outputs for Heat Control, Humidifier Control, Compressor Control & Alarm
- Compressor Switching with Programmable Time Delay
- Intelligent Door-Open Sensing & Alarm
- Smart Water Level Detection with Alarm
- RS 485 MODBUS RTU Serial Communication Port
- Universal Supply Voltage : 85 ~ 264VAC, 50/60 Hz
- Size (mm) : 80 (H) X 160 (W) X 68.2 (D)



Specifications

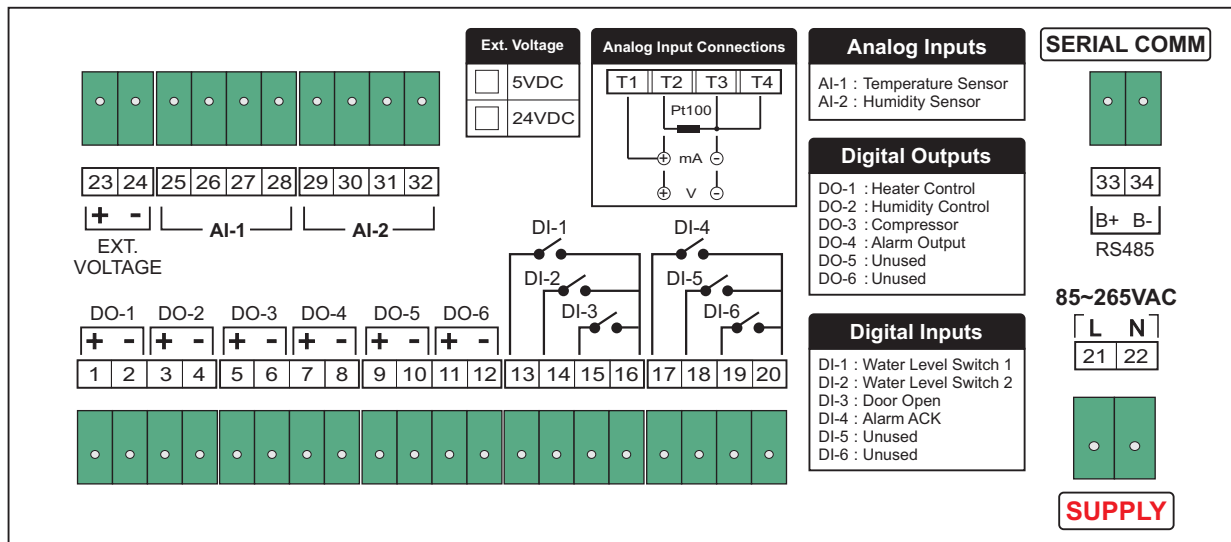
Display	
Graphic LCD	128 X 64 STN Monochrome
Keys	
Type	6 Tactile Switches
Functions	SCROLL UP PAGE DOWN ALARM ACK UP DOWN ENTER
Analog Inputs	
Temperature (User Programmable)	RTD Pt100, 3 wire DC Linear : 0-20 mA, 4-20 mA 0-5 V, 0-10 V, 1-5 V
Humidity (%RH) (User Programmable)	DC Linear : 0-20 mA, 4-20 mA 0-5 V, 0-10 V, 1-5 V
Accuracy	RTD Pt100 : ± 0.25% of reading ± 1°C DC Volts/Current : ± 0.25% of reading ± 1 LSD
Display Range & Resolution	Temperature : 0 to 99.9 °C (0.1 °C Resolution) Humidity : 0 to 99.9 % (0.1 % Resolution)
Zero Offset	User Adjustable over Full Range for Both Temperature & %RH
ADC	16 Bit (±32,768 Counts), Sigma-Delta (ΣΔ)
Sampling Time	500mS (2 Samples per Second)
Common Mode Rejection	> 100dB at 50/60 Hz
Signal Conditioning	L-C Analog Filter on Each Input
Excitation Voltage	
Ratings	5 V @ 15 mA (Standard) 24 V @ 50 mA (Optional)

Boiler (Steam) Water Level Monitoring	
Input	<ul style="list-style-type: none"> Digital Input (Potential-free Contacts) from Float Switch or Thermostat Additional Digital Input for Float with Dual Switches (Low/High Levels or Low/Very-Low Levels)
Function	Alarm Alert & Automatic Boiler Heater Cut-off on Low Water Level Detection
Door Status Monitoring	
Input	Digital Input (Potential-free Contacts) from Door Switch
Function	Alarm Alert on Door Opening for Longer than Set Time
Alarm System	
Process Alarm	Programmable High/Low Process Alarms for Temperature & Humidity
*Door Open Alarm	Alarm on Chamber Door Remaining Open for More than Set Time Period
*Water Level Alarm	Alarm on Boiler Water Level Low Detection
Audio Alert	In-Built Buzzer (Beeper)
Output	SSR Output for Remote Switching of Audio/Visual Gadget on Alarms
Alarm Acknowledge	<ul style="list-style-type: none"> Rear Panel Digital Input for Connecting Remote Alarm Acknowledge (Mute) Button Front Panel Alarm Acknowledge (Mute) Key
Heat Control	
Type	Self Tune PID
Control Parameters	Proportional Band, Integral Time, Derivative Time, Cycle Time
Output	SSR Drive Voltage
Humidity Control	
Type	Self Tune PID
Control Parameters	Proportional Band, Integral Time, Derivative Time, Cycle Time
Output	SSR Drive Voltage
Compressor Control	
Type	On-Off with Programmable Time Delay & Hysteresis
Control Strategy (Programmable)	<ol style="list-style-type: none"> Can be Switched ON-OFF Manually. Based on Programmable Temperature SP Threshold. Compressor is ON for Temperature SP Below Threshold & OFF Above. Cool Control. Switches ON-OFF Based on Temperature PV & SP
Output	SSR Drive Voltage
Power Supply	
Type	Switch Mode (SMPS)
Line Voltage	85 to 264 VAC, 50/60Hz
Consumption	5VA Max

*User Configurable. Can be disabled if not required.

Physical	
Mounting	Plug-in with Panel Mounting Clamps
Overall Dimensions	80 (H) X 160 (W) X 68.2 (D), mm
Panel Cutout	75 (H) X 150 (W), mm
Terminals	3.5 mm Pitch, Pluggable Terminal Blocks
Environmental	
Operating Ambient	0~55°C & 5~90%RH Non-condensing
Storage Temperature	-10 to +70 °C
Atmospheres	Not Suitable for use in Corrosive or Explosive Atmospheres. The Panel in which the Instrument is Mounted must be free of Electrically Conductive Pollution.

Back Panel Terminations



Ordering Code

Model		Excitation	
HTGD	HumiTherm GD	5V	5V @ 15mA (Supplied as Default)
		24V	24V @ 50mA (Supplied on Request)

Example Code **HTGD - 5V**
HumiTherm GD with 5V Excitation