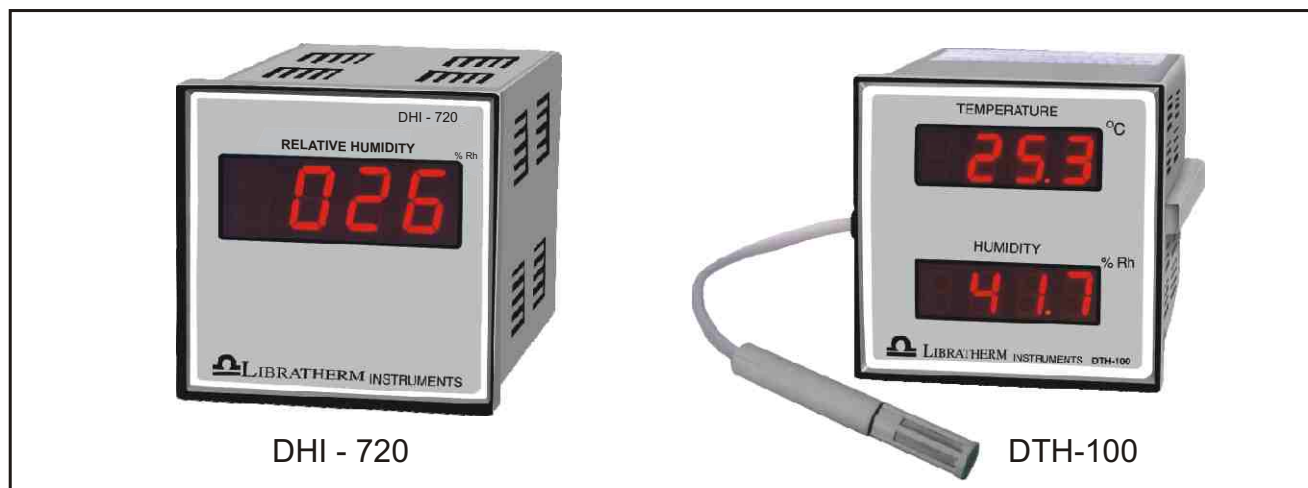


(H1) DIGITAL TEMPERATURE & HUMIDITY INDICATOR / CONTROLLER



MODEL WISE DESCRIPTIONS :

SR.NO.	MODEL	DESCRIPTION
9.1	DHI-720	Digital %RH Indicator
9.2	DHC-721	Digital Two Set Point %RH Indicator /On-off Controller
9.3	DTH-100	Digital %RH / Temperature Indicator (Dual Display)
9.4	DTH-200	Digital %RH / Temperature Indicator / Controller (one Set point / input)

DESCRIPTION :

Libratherm offers Low cost Temperature and Humidity indicators & Controllers, which are best suited for indicating and controlling of the temperature and relative humidity for general-purpose application.

These models accept input from the std. RTD (Pt-100) temperature sensor for temperature and the capacitive type RH sensor for sensing relative humidity. The instrument displays the temperature in the range 0.0-100.0 °C and humidity in the range

0.0 - 100.0 % RH on 4 digit 7-segment Red LED display. The on/off control action is provided for controlling temperature and relative humidity. For example to maintain the controlled climatic condition in a room to maintain the desired level of temperature and %RH, these control outputs can be used to regulate the air heater, air conditioner, de humidifier or moisture/steam / water vapor generator. The control output can also be in the form High or Low Alarm to indicate the high or low level of temperature / %RH from the desired set points.

FEATURES :

- ▶ Microcontroller based design.
- ▶ Elegant appearance and compact in size.
- ▶ Designed for Industrial use.
- ▶ Bright red digital display
- ▶ Accuracy better than $\pm 0.5\%$ of the full scale.
- ▶ Accepts standard Temperature and RH sensor / transmitter.
- ▶ Uses high quality potentiometer and membrane switch for adjusting the set points.
- ▶ Panel mount design

APPLICATION :

- Environmental / Stability Chambers
- Pharmaceutical storage rooms
- Walk In Chambers
- Climate control in a clean room - food industry

TECHNICAL SPECIFICATIONS:

Input	Temperature and %RH sensor / Transmitter (Pt-100 / Capacitance based).
Range	0.0 to 100.0 °C and 0.0 to 100.0 %RH.
Resolution	0.1 °C / %RH .
Accuracy	Better than $\pm 0.5\%$ for temperature and $\pm 2\%$ for RH.
Display	3 & ½ digit 0.5" 7-segment Red LED display.
Control Action	ON/OFF
Control Output	2 Nos. Relay changeover contacts as High & Low Alarm For both °C and %RH Input rated for 5A@230VAC.
Serial Output	RS 485 modbus RTU protocol
Supply	230VAC / 110 VAC $\pm 10\%$ (10VA), 50/60Hz or 24VDC @ 500mA.
Size	96 x 96 x 110 mm.
Panel cut out	92 x 92 mm +/- 0.5 mm.
Enclosure	ABS Plastic with polycarbonate front.

MODEL WISE TECHNICAL SPECIFICATIONS

Model	DHI-720	DHC-721	DTH-100	DTH-200
Input1	From % RHsensor (0-1)V (1-3)V (4-20)mA	From % RHsensor (0-1)V (1-3)V (4-20)mA	From % RHsensor (0-1)V (1-3)V (4-20)mA	From % RHsensor (0-1)V (1-3)V (4-20)mA
Input 2	-	-	RTD(Pt-100)	RTD(Pt-100)
Range 1	0.0 to 100.0 %RH	0.0 to 100.0 %RH	0.0 to 100.0 %RH	0.0 to 100.0 %RH
Range 2	-	-	0.0 to 100.0oC	0.0 to 100.0oC
Setpoint 1	-	0.0 to 100.0%RH	-	0.0 to 100.0 %RH
Setpoint 2	-	-	-	0.0 to 100.0 oC
Output 1	-	Relay/SSR	-	Relay / SSR
Output 2	-	-	-	Relay / SSR
Supply	230VAC	230VAC	230VAC	230VAC
Size	72 x72 x 120 mm.	72 x72 x 120 mm.	96 x 96 x 120 mm.	96 x 96 x 120 mm.

DETAILS ON DIFFERENT TYPES OF TEMPRATURE/%RH SENSORS :

(which can be used with above types of controller)

TYPE	I	II	III	IV
MODEL	HS 220	HTS-222	HYGRO CLIP S3	H290
TEMP. SENSOR	Pt-100	Pt-100	In-built	In-built
SUPPLY	5VDC	5VDC	(5-24) VDC	(5-24) VDC
%RH O/P	1 TO 3 VDC	0 -3 VDC	0 TO 1 VDC	(4-20) mADC
RANGE	30 to 90%RH	0 to 100%	0 to 100%RH	0 to 100%RH
ACCURACY	+/-5%RH@25oC	+/-3% @ 25oC	+/- 2 to 3 %RH	+/- 1% RH
TEMP. O/P	Ohmic value	Ohmic value	0 to 1 VDC	(4-20) mADC
TEMPERATURE	0 to 60 oC	0 to 85 oC	0-60 oC	0-150 oC.
ACCURACY	+/- 0.5%	+/- 0.5%	+/- 0.5%	+/- 0.5%
Enclosure	Aluminum	SS tubular	ABS tubular	ABS-IP65
Size				
Cable				