Vinostech Co., Ltd,

A company that knows the importance

Of enviroment

Transmitter Series

Humidity/Temperature

Communication Transmitter

Communication Transmitter

GHS-20



Registered ISO 9001:2000

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1. Introduction

Communication Transmitter (Model name : GHS-20) is an instrument to measure atmospheric humidity and temperature with digital sensor.
Communication Transmitter (Model name : GHS-20, an ideal product for demanding building energy management, has excellent and consistent safety and durability against chemicals and moisture.
With MCU (Micro Control Unit) in the transmitter body, it includes the functions to detect "sensor open error" and to compensate humidity and temperature easily.
Current analog output(2 channel, 4~20mA) allows this transmitter to display humidity, temperature and dewpoint in the remote area. And it is also compatible with a variety of controllers.
And with the built-in data storage function to collect humidity, temperature and dewpoint data, it is easy to do data analysis, report, etc.

1.1 Feature

■ Communication Transmitter (Model name : GHS-20) uses graphic LCD(128 x 64)with backlight. So it is easy to check humidity, temperature and dewpoint in the dark area.

■ GHS-20 uses current analog output(2 channel, 4~20mA) as a basic output. So it is applicable to a variety of displays.

■ Current analog output(2 channel, 4~20mA) outputs more precise analog signal with 16 bits DAC.

■ User can set the desired temperature range, and so can control analog output(2 channel, 4~20mA) more precisely.

■ By the digital adjustment function, user can adjust analog output error easily with five keypads.

■ Its user-oriented design allows user to operate parameter setting at all times with five keypads ((ESC(Escape), Enter(Enter), SFT(Shift), UP(Up) and DWN(Down)).

■ For the integrated humidity and temperature management. user can use RS-232C/RS485 to connect with PC

▼ User can send and receive a variety of data by connecting one or more GHS-20s.

(GHS-20 can be connected up to maximum 255ea)

▼ Humidity and Temperature parameters can be set on the PC
(Our own protocol will be provided)

■ Data storage function is built in to collect humidity and temperature data for For the effective and integrated humidity and temperature management(Data Logging).

▼ The total storage capacity is 16MBit. Data can be stored for about 1 year with the interval of 1data per 10mins. And data's cycle logging is possible.

▼ It is designed to store the existing data in the inside without loss against a sudden blackout and other problems.

■ The humidity, temperature and dewpoint data can be displayed by a graph with a software. And this transmitter's function is advanced to utilize humidity, temperature and dewpoint data for data output, report, etc.

■ Dewpoint can be calculated by humidity and temperature. And it is possible to display dewpoint display.

※ Dewpoint display is optional.

1.2 Order Form

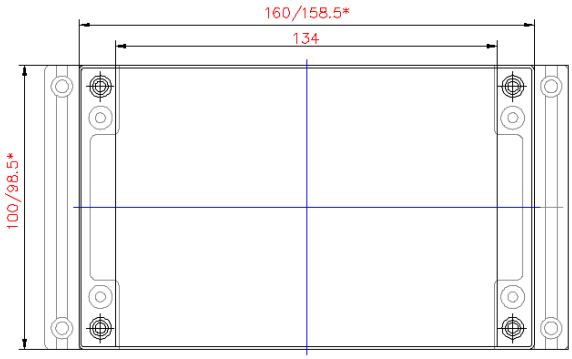
GHS-20	-	XX		X		XX	
Basic model name		Main Display		Sensor Type		Sensor Cable Length	
		Humidity /Temperature	HT	General Probe	P	None	000
		Humidty /Dewpoint	HD	General Lead	L	0.5M	005
		Temperature /Dewpoint	TD	Special Lead (High Temperature)	S	1M	010
						User...	
				Max Temperature (120[℃])		Max(5M)	050

[Table - 1.1] Order form

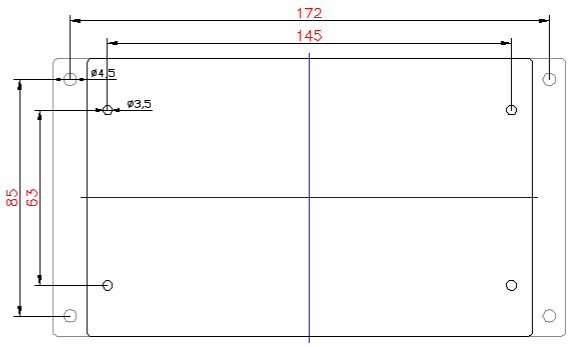
※ General Full Order Number
GHS-20-HTP000

1.3 Dimension

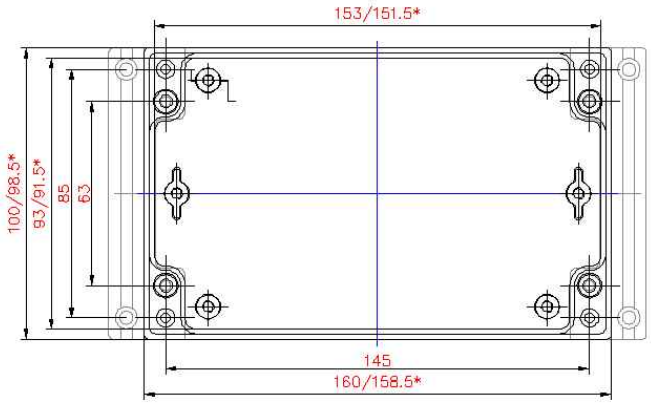
1.3.1 Case Dimension



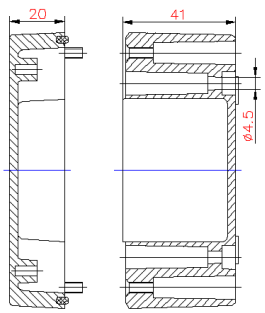
Front



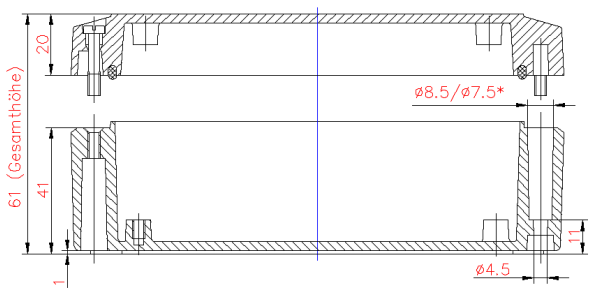
Bottom Hole Dimension



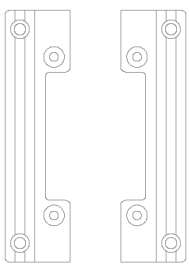
Bottom



Side



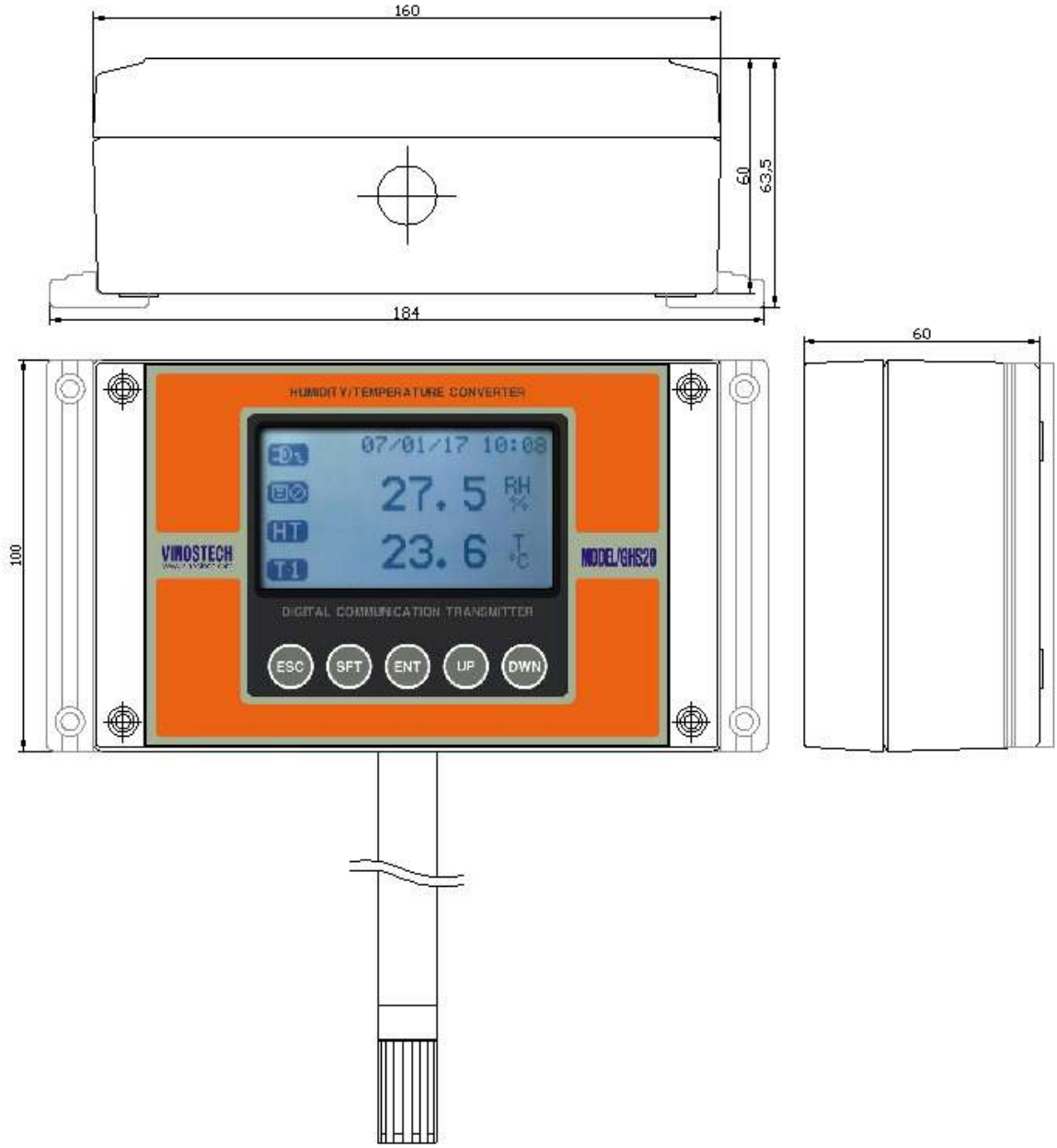
UpSide



Mounting Bar

[Figure - 1.1] Case Dimensions

1.3.2 Drawings



[Figure - 1.2] Drawings

2. Specification

2.1 Mechanical/Electrical Specification

Power Input	24VDC@1A
Current Consumption	0.5A (Max 1A)
Operating Temperature	0～70℃(32 to 158°F)
Storage Temperature	-40 to 125℃(-40 to 257°F)
Case Material	Al Si12, DIN 1725
Protection Grade	IP 66, EN 60529
Output	4～20mA Current Output (2 Channel) (16bit Resolution)
Output Max. Load	500 Ohm(General 250 Ohm)
Communications	RS-232C RS-485 for multiple connection up to 255 devices (Proprietary Protocol)
Display	Graphic LCD 128×64 with White Backlight
User Interface	Programmable 5 Keys Push Buttons Switch
Logging Memory	1Years of data storage at 10 minutes logging intervals, Total 16Mbit

[Table - 2.1] Mechanical/Electrical Specification

2.2 Sensor Specification

Relative Humidity(RH)

Accuracy/Range	±2%RH (10～90%RH) ±3.5%RH (0～10, 90～100%RH)
Non-linearity	<<1%RH
Response Time	4 Seconds
Repeatability	±0.1%RH
Resolution	0.1%RH(12bit)

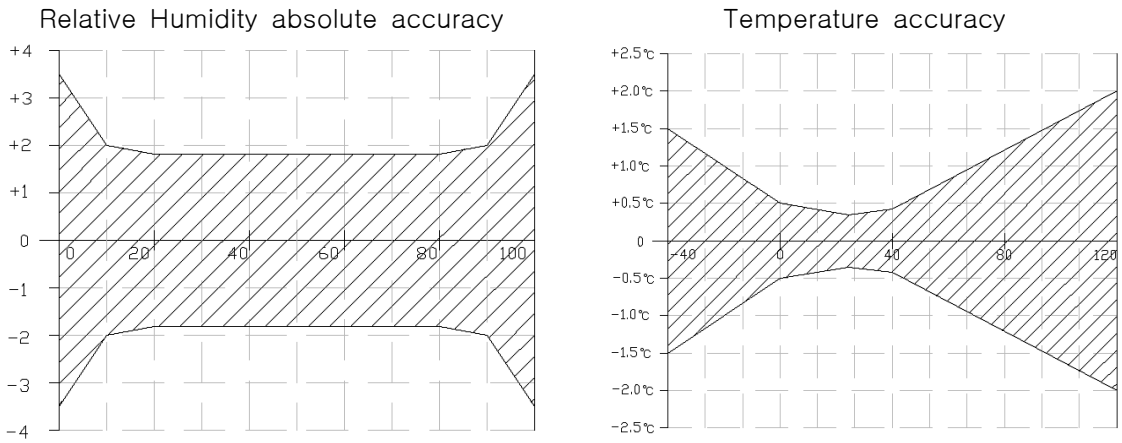
[Table - 2.2] Humidity sensor specification

Temperature(T)

Accuracy/Range	±0.3℃ 0 ～ 70℃
Response Time	5 Seconds
Repeatability	±0.1℃(±0.2°F)
Resolution	0.1℃(14bit)

[Table - 2.3] Temperature sensor specification

Sensor(Humidity, Temperature) Characteristic Graph



[Figure - 2.1] Sensor characteristics graph