TELEDYNE HASTINGS INSTRUMENTS
Everywhereyoulook™

THCD-101 Power Supply & Display

THCD-101 Controller/Display

Self -contained display for flow meters, flow controllers, and pressure transducers

FEATURES

- USB, Ethernet and Analog Interfaces
- Excellent Accuracy
  ±(0.02% of Reading + 0.01% Full Scale)
- ± 15 VDC and +24 VDC Supply
- 16 Bit Resolution
- Internal Webserver for Ease of Setup
- Dual Relays for Process Control
- Free User Software (DisplayX)
- NIST Traceable Calibration

APPLICATIONS

- Power, Operate, and Monitor:
  - Mass Flow Controller
  - Mass Flow Meter
  - Vacuum Gauge
  - Pressure Transducer
- Data Logging
- Process Control

BENEFITS

- Easy to Install
  - Reduce Wiring Hassles
  - Bench Top or Panel Mount
- Easy to Operate with Intuitive Menus
- Highly Visible Display
- Low Power Consumption
- Compact Size (1/8 DIN Package)
- Field Selectable Display Units
- Flexible I/O (Digital and Analog)
- Reliable

NEW!



THCD-101



HFC-302 Mass Flow Controller



Display X Data Logging Software (Free)

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Description

The THCD-101 from Teledyne Hastings is a single channel 5-digit display, power supply, and controller which can be used with a wide variety of gas mass flow meters, mass flow controllers, vacuum gauges, and pressure transducers.

The THCD-101 features a bright graphical OLED display that is easy to view and is flexible enough to allow the operator to display any unit of measurement that is required using alphanumeric characters.

Menus, which are accessed via the front panel, are intuitive. The menu structure is easy to learn so the user does not need to spend time reading the manual to get the instrument up and running.

The instrument provides many convenient features including both USB and Ethernet serial communications, flexible analog I/O, and alarm outputs with relays for process control.

In addition to the internal set point function, the THCD-101 features an external set point input which allows control by remote control systems. The instrument can also be configured to be tamper proof. By connecting one or both of the "DIG" pins on the interface connector, the user can selectively lock out the Menu and/or the Zero buttons.



THCD-101

Free Software - Display X

The DisplayX software also allows the user to control the THCD-101 remotely via the USB connection. DisplayX also provides an easy method to log data. The free software can be downloaded from the Teledyne Hastings website.

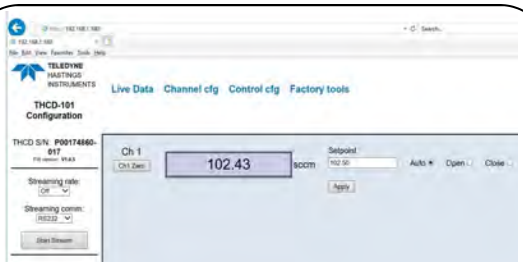
The THCD-101 is configured at the factory per the customer's requirements for range and units. In other words, the instrument is ready to use "out of the box". If however you need to change the THCD-101's setup, DisplayX can be used to quickly reconfigure the instrument.



THCD-101 Rear Panel

Ethernet - Internal Webserver

An Ethernet port on the back of the THCD-101 can be used to connect the instrument to a PC. Next, a browser can be opened to view the THCD-101's webserver using an IP address. With the internal webserver, the user can configure and operate the THCD-101.



Internal Webserver via Ethernet

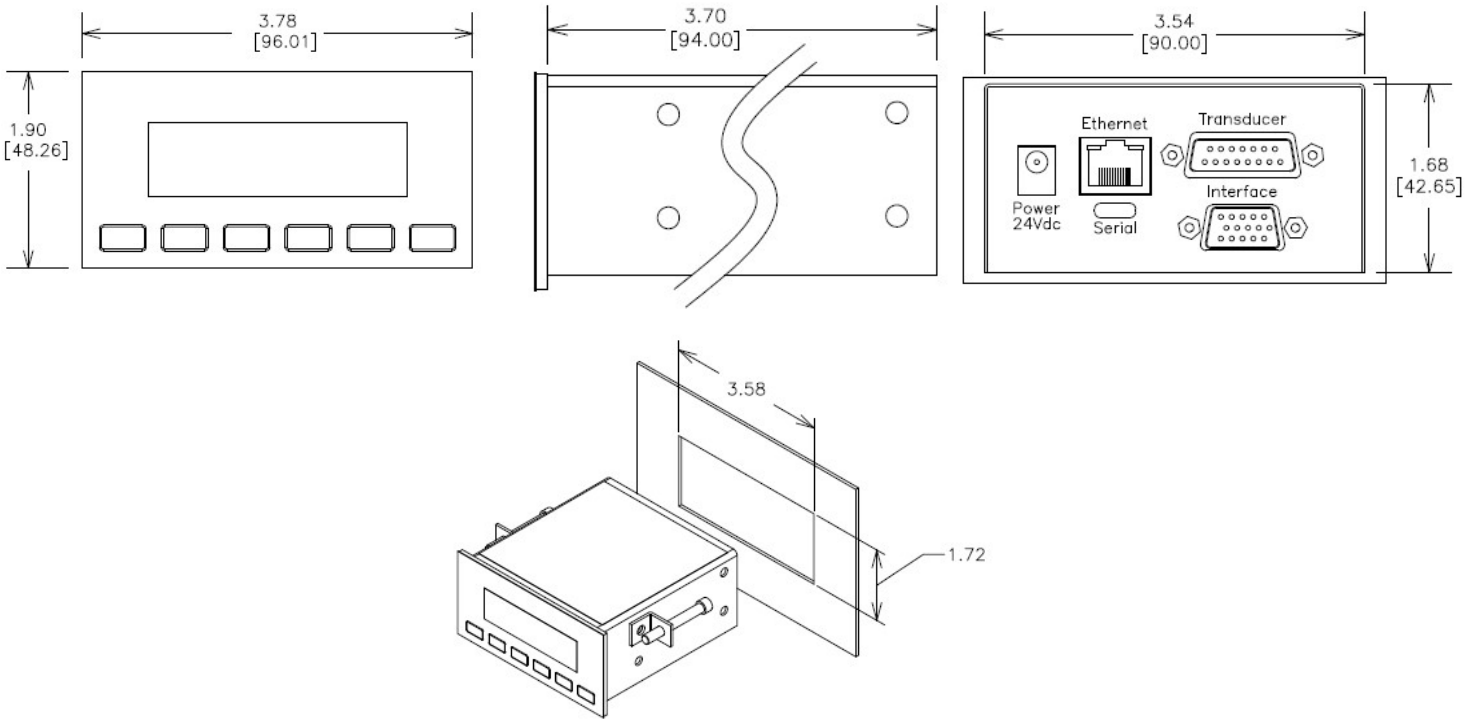
Teledyne Hastings Instruments reserves the right to change or modify the design of its equipment without any obligation to provide notification of change or intent to change.

Specifications

Specifications THCD-101

Full Scale Input	0-5 VDC or 0-10 VDC [1]
Accuracy	±(0.02% of Reading + 0.01% Full Scale)
Input Impedance	> 100 kΩ
Measurement Resolution	16 bit
Command Output	0-5 VDC, 0-10 VDC (user selectable)
Display Type	OLED
Display Range	-9.999 to +99.999
Power	± 15 VDC @ 250 mA +24 VDC@300 mA
Operating Temperature Range	+5 to +50 °C
Storage Temperature Range	-20 to +70 °C
Maximum Relative Humidity	95% at 50 °C (non-condensing)
Warm Up Time	20 mins
Decimal Point Selection	Operator Selectable from Front Panel
Power Supply (sold separately)	24 VDC
Weight	200g
Panel Cutout	1/8 DIN
Relays	2 Alarm Outputs / Mechanical Relays (Max 50 VDC)
Serial	USB “C”
Ethernet (TCP/IP)	Configurable IP Address and subnet mask 100 Base-T
CE Mark	EN61326; EN61010
RoHS Compliant	YES
Note 1:	-10.8 to +10.8 VDC (User Selectable)

Outline Drawing & Pinouts THCD-101



Transducer Connector 15 Pin "D" (Female)	Interface Connector 15 Pin HD "D" (Female)
1 - Unused	1 - Analog Out
2 - Unused	2 - Relay 2 COM
3 - Unused	3 - Relay 2 N.O.
4 - Unused	4 - Relay 2 N.C.
5 - Signal Common	5 - 0V GND
6 - Signal Input	6 - Ext. Input Return
7 - Case Ground	7 - Unused
8 - Unused	8 - Ext. Input (+)
9 - -15 VDC	9 - Unused
10 - Unused	10 - 0V GND
11 +15 VDC	11 - DIG1 (Menu)
12 - Valve Return	12 - DIG2 (Zero)
13 +24 VDC	13 - Relay 1 COM
14 - Set Point Out	14 - Relay 1 N.O.
15 - Unused	15 - Relay 1 N.C.



Ordering Information



Part Number: THCD-101

Shipment Includes	*Sold Separately*
THCD-101 Controller/Display	24 VDC Switching Power Supply
15-Pin HD "D" Male Connector & Backshell	Transducer Cables
Mounting Brackets	Interface and Communication Cables



Part Number: 12-01-169

24 VDC Switching Power Supply	AC Input Clip Required (See Below)

AC Input Clips

12-01-160 United States



12-01-165 United Kingdom



12-01-164 Europe



THCD-101 Setup Information

Range:

Units:

Cables



Flow Transducer Cable Part Numbers: Connect THCD-101 to Hastings Flow Meters & Flow Controllers

AF-4-AM	4’ Cable
AF-8-AM	8’ Cable
AF-25-AM	25’ Cable
AF-50-AM	50’ Cable
AF-100-AM	100’ Cable
AF-200-AM	200’ Cable



Transducer Cable Part Numbers: Connect THCD-101 to Teledyne Hastings Digital 300 Series “B” Version (9-pin)

CB-AF-8-24VM	8’ Cable



Transducer Cable Part Numbers: Connect THCD-101 to Teledyne Hastings Digital 300 “A” Series with IP-67 Enclosure

CB-12-PCF-8-AM	8’ Cable—Circular IP-67 to 15 Pin “D”
CB-12-PCF-XXX-AM	Custom Length Cable



Transducer Cable Part Numbers: Connect THCD-101 to Teledyne Hastings HVG-2020 Vacuum Gauge

CB-AF-8-HVG9M	8’ Cable
CB-AF-XXX-HVG9M	Custom Length Cable

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CE ISO 9001 CERTIFIED

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