HP125 SERIES

Edgetech Instruments

QUICK STARTUP GUIDE

Electrical and compressed Gas Hazards

Safety

The HP125 delivered to you has been tested for safety, calibrated and approved as shipped from the factory. Note the following precautions:

CAUTION	Do not modify the unit. Improper modification can damage the product or lead to malfunction.

CAUTION	The transmitter body does not have user serviceable parts inside, and is not designed to be opened. Opening the transmitter will void the warranty.

ESD Protection

Electrostatic Discharge (ESD) can cause immediate or latent damage to electronic circuits. Edgetech Instruments products are adequately protected against ESD for their intended use. It is possible to damage the product, however, by delivering electrostatic discharges when touching, removing, or inserting any objects inside the equipment housing.

1. To make sure you are not delivering high static voltages yourself when handling the replaceable sensor tip PCB
2. Handle ESD sensitive components on a properly grounded and protected ESD workbench.
3. When an ESD workbench is not available, ground yourself to the equipment chassis with a wrist strap and a resistive connection cord.
4 If you are unable to take either of the above precautions, touch a conductive part of the equipment chassis with your other hand before touching ESD sensitive components.

Always hold component boards by the edges and avoid touching the component contacts.

Using "Swagelok" fitting

1. How to install Swagelok fittings. Insert the HP125 probe to your selected insertion depth, tighten by hand until the nut is finger tight. Further tighten the nut until the probe will not turn by hand and cannot be moved axially in the fitting.
   Mark the nut at the at the 6-0-clock position
   While holding the fitting body steady, tighten the nut one and one quarter turns till the nut is in the 9-0-clock position.
   Swagelok fittings may be disassembled and reassembled many times. See HP125 Manual

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When the Probe is first introduced into the process it will need a period of time for the materials to dry down before the sensor reads Dew Point and RH correctly.
During installation process the probe will have been exposed to ambient conditions. The stainless steel filter and the tip PCB will have absorbed some moisture.
Once installed in the process any entrained moisture will be drawn off by the process gas and the unit will quickly reach equilibrium.

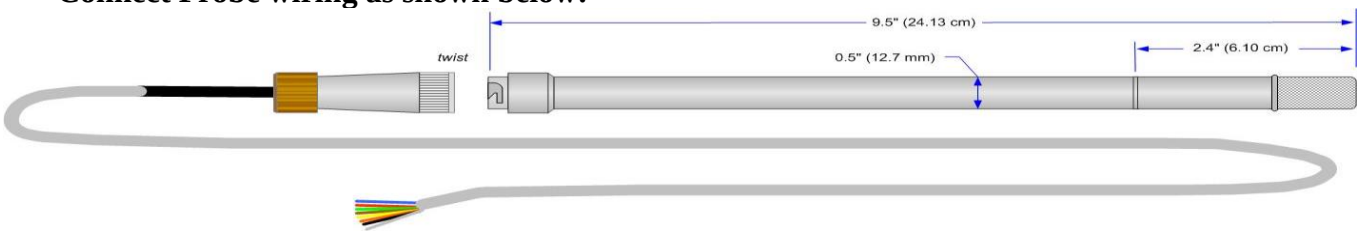
The initial RH and Dew Point values displayed when first installed may be misleading
WHEN USING PROBE with CABLE.

Before mounting the probe into any system ensure the system is safe to work on. Depressurised and verify that all power to connections are isolated in the Off position. Installation should be carried out by trained technicians and following local safety protocols

1. Select Probe insertion position, ensure safe clearance around the probe to avoid damage
2. Check all pipe fittings and pipe boss dry assembly for fit up
   (Probe is standard with ½" NPT fitting option ¾"NPT)
3. Insert pipe fittings using suitable sealing tape or sealing compound
   Mount the Probe in position to measure the desired gas.
4. Ensure the Probe is inserted to an adequate depth to obtain a good flow of the sample gas around the tip sensor. Insertion depth; Max 6" (15cm) Min 2.4" (6cm) compression fitting should avoid the threaded tip cover joint area
5. Tighten the swage fitting till it grips the probe in place but at this stage do not apply force.
6. Re check the probe position and measurement depth are correct, fully tighten all pipe fittings
7. Ensure there is adequate cable length from the probe cable to make connection to customer system (3ft or 6ft length are supplied) cable can be cut to fit.
8. Check Probe Pin connector correctly mates with cable connector

ITEM	CABLE colour
24VdcPower Supply – Pos.	RED
24VdcPower Supply – Neg.	BLACK
0-10V **Temperature**.	YELLOW
0-10V **RH**	WHITE
0-10V **Dew Point**	BLUE
0-10V **psig or mbar**	ORANGE
RS232 Serial Input – TX	GREEN
RS232 -Com	BROWN

Connect Probe wiring as shown below:



Notes:
Connect only the Outputs desired. See drawing in the HT125 Manual for further connection details.

Do not apply DC Power until all wiring is completed and checked.

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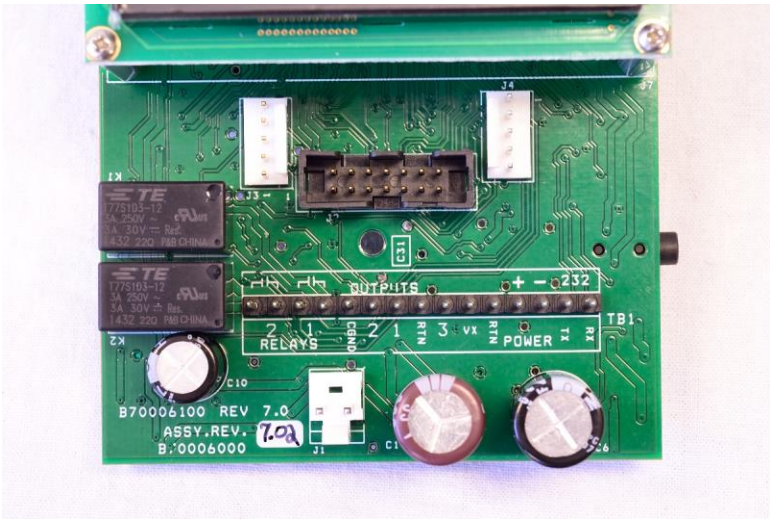
WHEN USING PROBE with INTERFACE CONTROL & DISPLAY MODULE

1. Mount the Probe as detailed in page 1 section 1 through 6.

2. Connect cable from Probe to Electronics Unit
   (if applicable). Unit is prewired if ordered as an option from factory.

3. Customers connections can be made as detailed in table below
   Alarm values can be defined with order or
   Alarm relays can be programed on site via RS232 (see manual)



TERMINAL TB1	ITEM
1,2	ALARM 2
3,4	ALARM 1
5	CHASSIS GROUND
6	ANALOG OUTPUT 2
7	ANALOG OUTPUT 1
8	ANALOG OUTPUT RET.
9	*FOR FACTORY USE*
10	*FOR FACTORY USE*
11	RS232 RETURN
12	DC POWER IN (+)
13	DC POWER IN (-)
14	RS232 TX
15	RS232 RX

DC power supply. Specifications are: 24VDC ± 10%, 1A maximum.

See Attached TB1 Pin Connector Guide. Note Pin Nine is used as terminal location guide

Notes:

Connect only the Outputs desired. See the HT125 Manual for details.

Double check that the 24V power supply is correctly connected terminals 12 & 13

Do not apply DC Power until all wiring is completed.