



**CONDUCTIVITY 2-WIRE TRANSMITTER  
MODEL 874**



(Din rail)



(Din rail)



(Din rail)

**Introduction**

Pantech's Two Wire Transmitters, model 874 is designed over low drift low power components. It pumps in a constant current into the liquid through the conductivity cell to measure the electrical conductivity of any liquid. The square wave signal is selected as an excitation voltage for the conductivity cell for the ease for processing. It provide 4-20mA dc signal on the same two wire which carry the 24 V DC for conductivity measurement. The transmitter is an ideal choice for Linearized measurement with standard conductivity cell. Temperature of the liquid is monitored by a RTD element and compensation is provided over the complete operating range. It provides a current output signal of 4 – 20 mA DC capable of driving a load of upto 650.

The range of the instrument can be selected by setting the DIP switches on the module and with proper cell constant. The temperature compensation provided as standard is 2%/deg. C but can be changed to a value anywhere between 0 to 4%.

The transmitter is available in field mounted housings with or without local display. The local 3-½ digit loop powered display reduces the load capability of the transmitter to around 500. Also the transmitter is available in weather or explosion proof housing.

**Specifications**

**Input**

- 1) Conductivity cell, K=0.1 or 1
- 2) RTD Type Pt.100

**Input Range**

0 – 100µS to 0 – 5000 µS  
(Selected by DIP switches)

**Temp. Compensation**

0 - 125°C  
2%/deg. C (standard)

**Analog Output**

4 – 20mA DC

**Analog output load capability**

600 maximum  
500 with digital display

**Output accuracy**

+/- 0.25% of span

**Power supply**

24 V DC (22.5 to 28.0V)

**Power consumption**

0.5 VA max.

**Ambient temperature**

0 – 50 C.

**Storage temperature**

0 – 70 C.

**Humidity**

90% RH (non-condensing)

**Ordering Information**

Please confirm the availability of the model by cross checking the table mentioned on the backside.

**Basic Model No.** (Specified by first 3 digits)  
874-Conductivity Transmitter

**Mounting** (Specified by letter following 3 digits)  
P-Panel  
W-Weather proof housing  
F-Flame proof housing

**Input 1** (Specified by first digit following the letter)  
1-Conductivity cell

**Input 2** (Specified by the second digit)  
1-RTD Pt 100  
2-T/C Type K

Please specify the maximum temperature range.  
**Cell constant** (Specified by the third digit)  
1-Cell K = 1  
2-Cell K – 0.1

**Display Option** (Specified by the fourth digit)  
0-None  
1-3-½ digit LCD

**Option** (Specified by the fifth digit)  
0-None

**Option** (Specified by the sixth digit)  
0-None



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**Basic Model No.** (Specified by first 3 digits)807D-Dual channel

807T-Triple Channel

807n-Multichannel > 2

N = no. of channel

**Enclosure / Mounting** (Specified by letter following 3 digits)

P-Weatherproof - Panel

R-Weatherproof -Din Rail

E-Weatherproof - Euro card

W-Weatherproof - Wall

F-Flame proof – Wall / Field

I-IP65 grades – Wall / Field

S-Specials

**Input** (Specified by first digit following the letter)

1-mA DC signal input

2-V/mV DC signal input

3-RTD type

4-Thermocouple

5-Resistances

U-UNIVERSAL1 type

V-UNIVERSAL2 type

S-Specials / Others

**Power Option** (Specified by the second digit)

1-24 V DC

2-110 V AC

3-230 V AC

4-90-270 V AC – SMPS

S-SPECIALS

**Alarms Option** (Specified by the third digit)

0-None

1-1 no. of alarm per channel

2-2 no. of alarms per channel

**Analog O/P Option** (Specified by the fourth digit)

0-None

1-mA/V DC isolated per chn.

2-mA/V DC non-isolated per ch

S-Any other type of output

**Bargraph Option** (Specified by the fifth digit)

0-None

1-YES ( in dual / 72 \* 144 type )

**Display Resolution** (Specified by the sixth digit)

1-3 digit per channel

2-4 digit per channel

**Communication output**

0-None

1-YES



PANTECH INSTRUMENTS

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