

Model 722 Conductivity and Temperature Monitor

Overview

The Model 722 Conductivity and Temperature monitor is used in conjunction with the WEDGEWOOD Model B600 Series flow cells to measure the conductivity and temperature of any process liquid in-line.

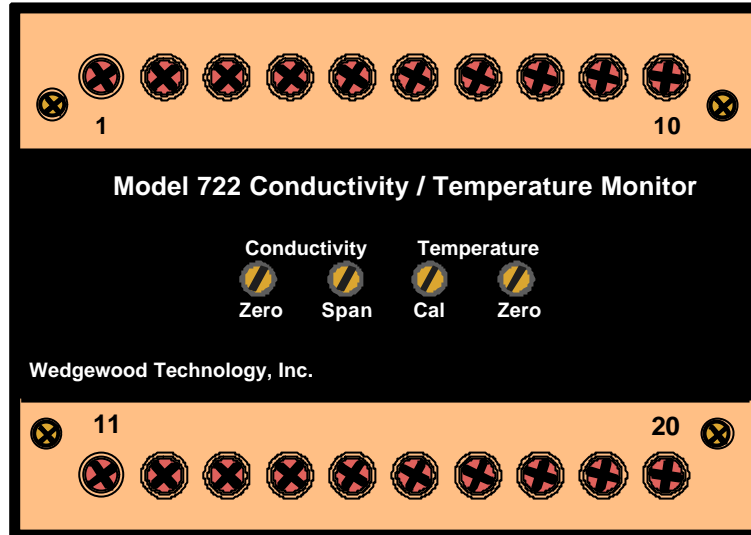
The Model 722 is available with one of two full scale measurements: 0 to 100 mS/cm and 0 to 200 mS/cm. In addition to these ranges, the user can select, via contact closure, a second range that is 10% of the supplied full scale. The temperature range is 0 to 100°C.

The instrument is designed to provide measurement elements in an overall control scheme. It is ideally suited for computerized process plant where user interface with the process is through computer terminals and MMI nodes rather than directly with the measurement element.

Outputs

There are four analog outputs from the unit, two for conductivity and two for temperature. The temperature measurement has a Voltage output and a 4 to 20mA current signal following the full range of the instrument while the conductivity loop has a Voltage and a current output tracking the selected measurement range.

All electrical connections are through the two strips of terminal screws on the top face of the instrument.



Temperature Compensation

The Model 722 features built in temperature compensation for the conductivity measurement. Two curves are available, one to compensate for NaCl and the other for KCl. The compensation can be disabled if required by internal jumper. The compensation type is selected by hard wire loop or contact closure from a PLC or similar device.

The electronics used at the heart of the Model 722 are state-of-the-art solid state low-noise amplifiers, signal generators and a RISC CPU, allowing accurate, repeatable and reliable measurement.

All calibration of the instrument is done with adjustments to controls on the front panel. Four controls are available - Conductivity Zero and Span and temperature Zero and Cal.

An optional NEMA 4X/IP66 polished stainless steel enclosure is available to enable the transmitter to be mounted locally in the field.

722 Features and Specifications

Model 722 Features

- Two Selectable Full Scale Ranges
- Remote Range Change Operation
- Built-In Temperature Compensation for NaCl and KCl
- 1000 ohm RTD Input for Greater Accuracy
- All Calibration Controls Accessible Externally
- Maximum Range of 200 mS/cm

Model 722 Specifications

Signal Inputs	4 Electrode Input for Conductivity and 1000 ohm RTD Input for Temperature
Ranges	2 Selectable Ranges on each Instrument. Two Factory Calibration Variants Available: 0 - 200/0 - 20 mS/cm or 0 - 100/0 - 10 mS/cm
Calibrated Conductivity Accuracy	±2% of Range
Conductivity Linearity	±2% of range
Temperature Accuracy	± 0.5°C
Input Isolation	Conductivity Sensor is galvanically Isolated from Outputs and Power Supply
Conductivity Signal Outputs	4 - 20 mA Tracking Range Selected (0 - 600 ohm load) 0 - 2 Vdc Tracking Full Range (10 KOhm load min)
Temperature Signal Outputs	4 - 20 mA Tracking 0 to 100°C (0 - 600 ohm load) 0 - 2 Vdc Tracking 0 to 100°C (10 KOhm load min)
Power	115/230 Vac +/- 15%, 50/60 Hz, 15 VA, (Optional 18 - 36 VDC, 10 W)
Operating Environment	Temperature 0 - 55°C Humidity 0 - 90% RH
Dimensions	35mm DIN Rail Mount Enclosure 74 x 119 x 100mm (2.91" x 4.69" x 3.94")

Part Number Selection

7 2 2

Cable Length

F	Feet
N	None

Enter 3 digit value for length

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Available lengths:
10ft, 25ft only

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Cable Type

-T	To BT721 Cond./Temp. Sensor
-N	None

Transmitter Range

T-	0 - 200mS/cm
U-	0 - 100mS/cm

Transmitter Setup

6	Kynar Flowcell
7	Stainless Steel Flowcell

Power Supply

C	115/230Vac
D	24Vdc