

Measuring Range:

pH	0 to 14 pH units
ORP:	-2000 to +2000 mV
Conductivity:	0.55 μ S/cm to 1 S/cm
Resistivity:	0 to 20 M Ω ·cm
TDS:	0 to 100,000 ppm or mg/L Total Dissolved Solids
NaOH:	0 to 15 % by weight
NaCl:	0 to 20 % by weight
H ₂ SO ₄ :	0 to 25 % or 94 to 100 % by weight
HCl:	0 to 18 % by weight
Salinity:	0 to 42 ppt (‰) or PSU [TC Seawater curve]

Output Scale Expansion:

Zero anywhere from, 0 to 90%. Span anywhere from, 10 to 100%. Zero and Full Scale, reversible.

Accuracy: Standard deviation \pm 0.1% of range.

Display Precision: \pm 1 digit.

Repeatability: \pm 1 digit.

Stability: \pm 0.01 % per day.

Temperature Coefficient:

Input: \pm 0.003 %/ $^{\circ}$ C.

Output: \pm 0.006 %/ $^{\circ}$ C.

Temperature Measurement:

-25 to +260 $^{\circ}$ C (-13 to +437 $^{\circ}$ F), Pt1000 RTD.

Response Time:

90% within 3 seconds (default), function of flow/temperature.

Damping Adjustment: 0 to 99 seconds.

Calibration

pH Calibration: Single-standard or two-standard calibration with auto recognition of IC Controls NIST traceable standards.

Conductivity Standardization: Single-standard calibration with auto-recognition of standards. Custom value standard, grab sample calibration, air zero calibration.

Temperature Standardization: Direct entry of temperature correction.

Display: Back-lit Dot Matrix (Graphical)

Process Variable Characters, 1.13 cm (0.45 inch) high, for primary measurement, secondary characters, 0.75 cm (0.3 inch) temperature, efficiency, errors, prompts and diagnostic information.

4 alarms

Signal Outputs:

Two (2) 4 to 20 mA, continuous, assignable, programmable, isolated, max. load 600 ohms.

Programmable non-linear characteristic that is graphically displayable: one for acid control with valve or acid titration curve correction, the second for caustic control with separate valve or caustic titration curve. Or your process curve.

Four (4) relays

1-3 SPST Form A, epoxy sealed, normally open contact

4 SPDT, Form C, epoxy sealed contacts

Rated 115 V 5 Amps Resistive, 3 Amps Inductive

230 V 5 Amps Resistive, 1.5 Amps Inductive

28 VDC 5 Amps Resistive, 3 Amps Inductive

PID Control Functions -11 (optional)

Standard PID using one 4-20 mA or dual PID using two 4-20 mA; Pump pulser contact PID control using one relay, or dual using two relays; Time-proportional PID (ON/OFF) using one relay or dual using two relays.

Relay Functions:

Alarms Three independent, assignable, programmable

Assign to: primary measurement, temperature, timer, ON/OFF control, time proportional PID control.

Actions: high, low, deviation

Adjustments: Set-point; 0 to 100% of units;

Differential; 0 to 10 % of units.

Delay; 0 to 9999 seconds.

Unit Selection: $^{\circ}$ C/ $^{\circ}$ F Temperature.

Override: Press "Manual" key, 15 minute OFF.

ON/OFF: Can be set to permanent OFF.

Indication: LCD "flashing" the alarm, relay contact, and serial output.

Fault Alarm One independent, assignable, programmable

Assign to: Sensor and/or Analyzer and/or Process.

Indication: LCD "flashing" the alarm, relay contact, and serial output.

Timer Programmable cleaning or override timer function allows time

based automated cleaning of a sensor plus hold of outputs during cleaning and recovery period. Uses one relay.

Advanced Functions:

Intelligence and Real-time Clock

(Communication Protocol Module & Program Recommended)

Internal 1000 point history: Measurement, temp, time, date.

Last 12 calibration history: time, date, calibration record.

Last 20 event record: time, date, power ON/OFF, error & caution messages, alarm, off-scale.

Real-time Clock: internal year, month, day, hour, minute, second; maintains date even when power is off.

Communication Protocol (optional alternatives)

-21 RS485 (RS232 compatible) for communication with PC

Universal Ratings:

Environment Ratings

Operating Temperature Range: -20 to 60 $^{\circ}$ C (-4 to 140 $^{\circ}$ F)

Relative Humidity: 95% maximum, non-condensing.

Extended Environment Rating: IP66 (NEMA 4X) corrosion resistant.

Pollution Degree: 2

Installation Category: II

Electrical Requirements

115/230 VAC \pm 10%, 0.25 Amp., 50/60 Hz, 50 Watts.

20 to 30 VDC, 50 Watts

Electrical Classification - General Purpose

Enclosure: Panel mounts in Standard 138 x 138 mm cutout.

Epoxy Painted white aluminum case and door.

Front Panel orange membrane keypad with tactile feedback.

144 * 144 * 140 mm, DIN size (5.7 * 5.7 * 5.5 inch)

Weight/Shipping Weight: 1.8 kg / 2.2 kg (4 lb / 4.8 lb)

Revision History: