

D500 | D520 Series pH/ORP Digital Analyzer Controller



- ✓ Large color LCD display
- ✓ Intelligent menu operation
- ✓ Data recording / curve display
- ✓ Multiple automatic SimplCal® calibration
- ✓ Manual and automatic temperature compensation
- ✓ Three (3) relays
- ✓ 4-20mA & RS485 multiple output modes
- ✓ Multi-parameter display — simultaneously shows pH, ORP and temperature
- ✓ Password protection

High Performance Industrial Controller

The ProCon® D500/D520 series is an extremely robust industrial pH/ORP controller.

The modular design is both easy to install and operate providing first measurement values in under one minute.

The D500/D520 is packed with all the extra features included, no need to pay extra for relay, 4-20mA or RS485 outputs.

The SimplCal® feature makes calibrating your sensor easier and quicker than ever before.

The cost-saving quick and simple setup is done through our user-friendly step-by step on-screen menu.

Active display of red alarm LED provides notification of out-of-bounds sensor readings and indication for sensor cleaning/recalibration or replacement.

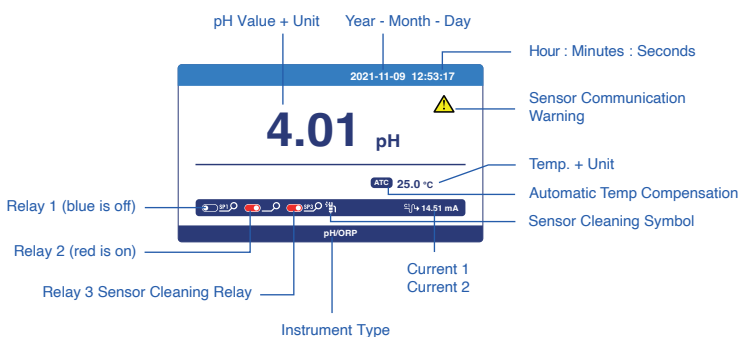
Enclosure

The D500/D520 is packaged in a rugged polycarbonate enclosure making it ideally suited for heavy-duty applications. A mounting kit is included for surface and panel mounting. Pipe mounting kits are available.

SimpliConnect™
Cable Grip Connectors

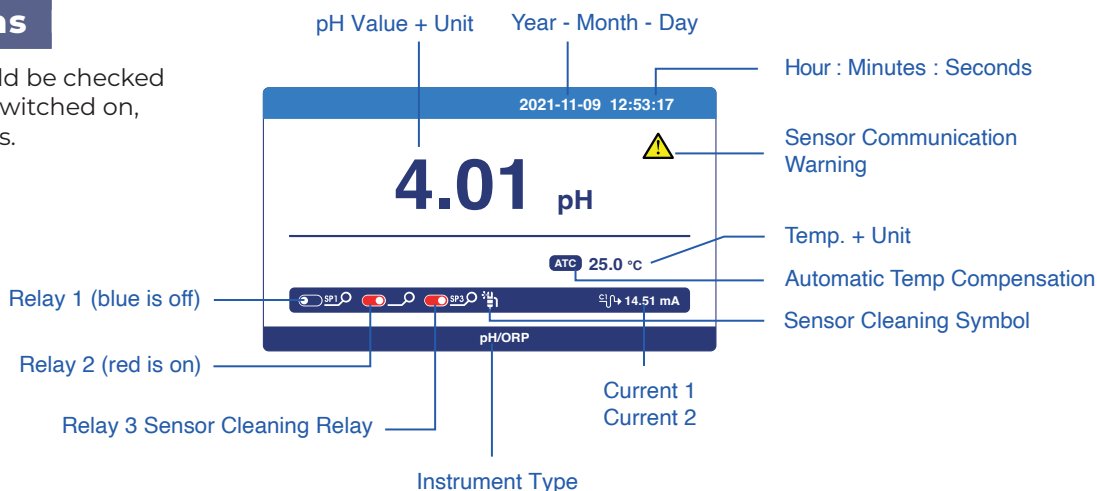
No tools required

Cable Grip Wire Connector Combo
(no internal wiring required)



Display Descriptions

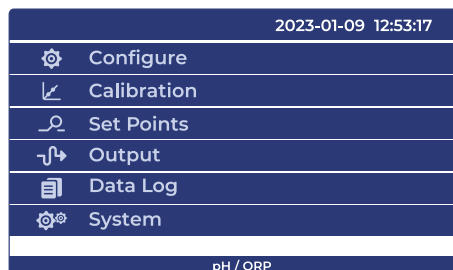
All electrical connections should be checked before use. After the power is switched on, the meter will display as follows.



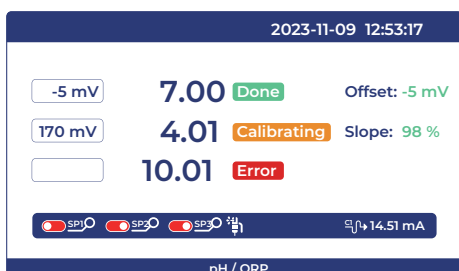
Measurement Mode



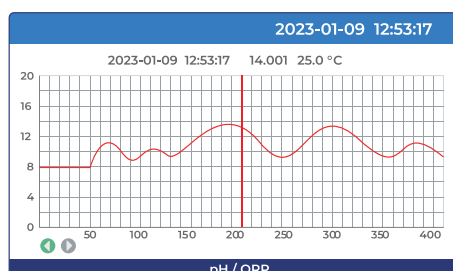
Programming Menu



Calibration Mode



Trend Chart Data Logging Display



SimplCal® Calibration



PH Calibration



ORP Calibration

Technical Specifications

Measuring Range	pH: -2 – 16pH ORP: -2000 – +2000mV
Unit	pH mV
Resolution	pH: 0.001pH ORP: 1mV
Basic Error	pH: 0.001pH ORP: 1mV
Temperature Range	14 – 302°F -10 – 150°C (Sensor Selection Dependant)
Temperature Resolution	0.18°F 0.1°C
Temperature Accuracy	±0.54°F ±0.3°C
Temperature Compensation	Manual or Automatic
Stability	pH: 0.01pH/24h ORP: 1mV/24h
Outputs	Two (2) 4–20mA 20–4mA 0–20mA
Communication	RS485 MODBUS RTU
Relay Control Contact	5A 240VAC 5A – 28VDC
Power Supply	9 – 36VDC (std) 85 – 265VAC Power Consumption 3W
Working Temperature	14 – 140°F -10 – 60°C
Relative Humidity	≤ 90%
Enclosure Rating	IP65
Weight	0.7kg
Dimensions	144 × 144 × 118mm
Installation Opening Size	138 × 138mm
Installation methods	Panel Pipe Wall
Other functions	Data record & Curve display



Keypad Descriptions

1. Enter Calibration Mode
2. Check Calibration Status



Main Menu



Return to Previous Menu



Cursor Down / Info



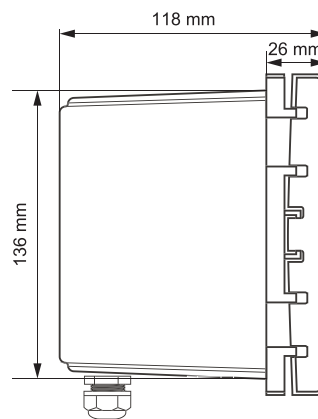
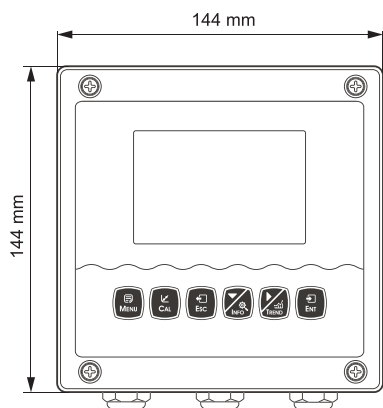
Cursor Right / Display Trend Chart



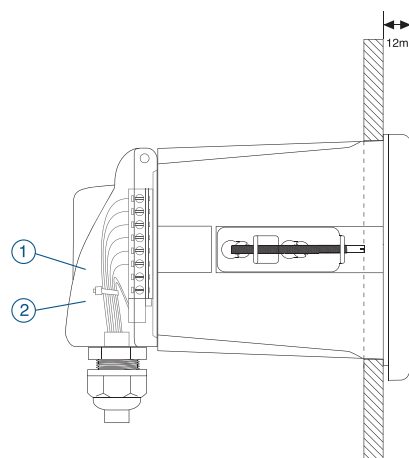
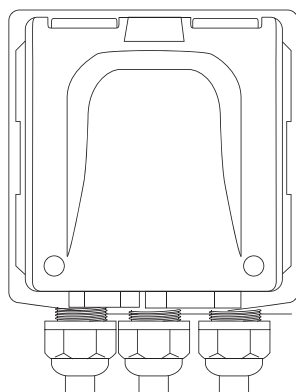
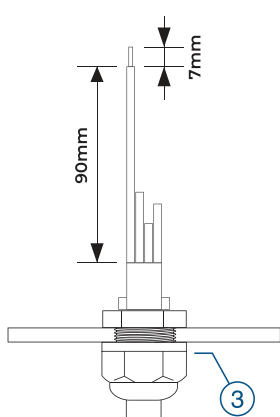
Confirm Selections



Dimensions

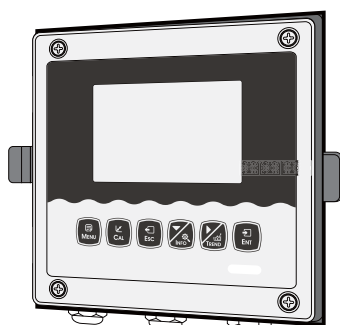
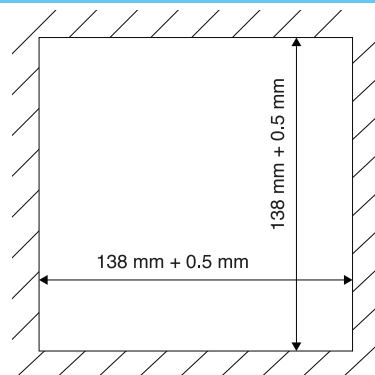
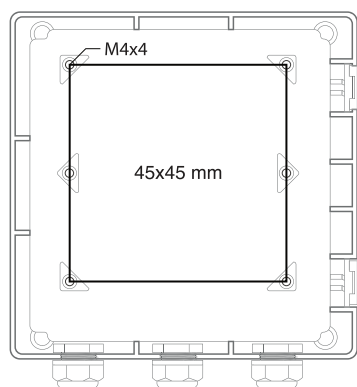


Instrument Installation

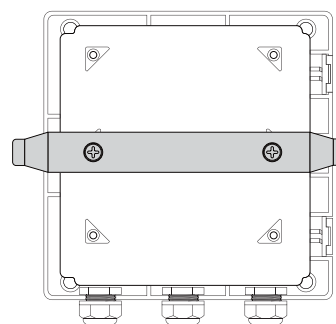


1. Cable (Recommended stripping length for cables is at least 90mm)
2. Cable ties
3. Waterproof cable glands

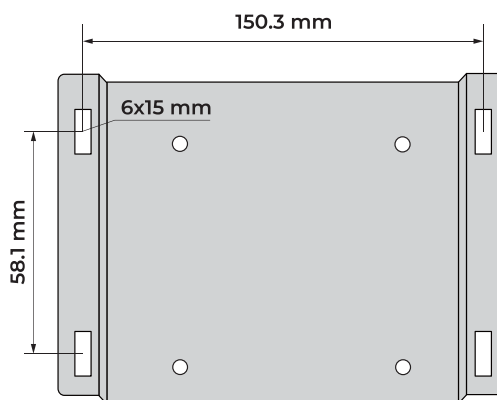
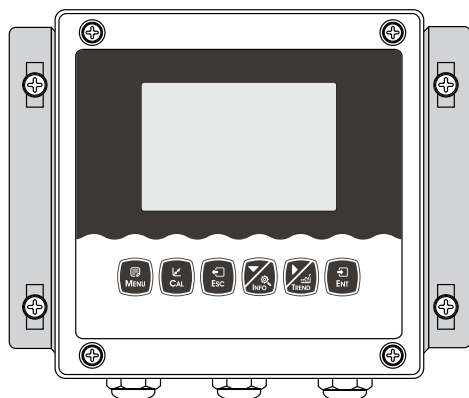
D500 | D520 Series pH/ORP Digital Analyzer Controller



Install fixing bracket for instrument
Insert into the cut-out hole



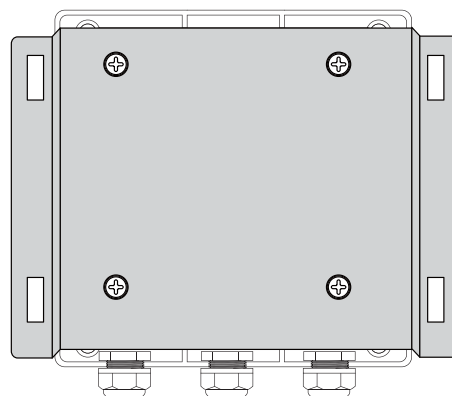
Slim Line Wall Mount Bracket



Installation Full Bracket



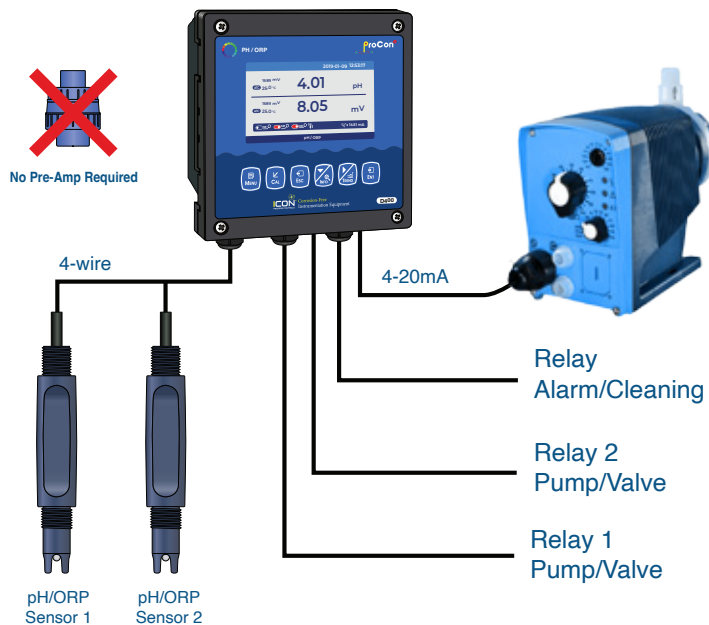
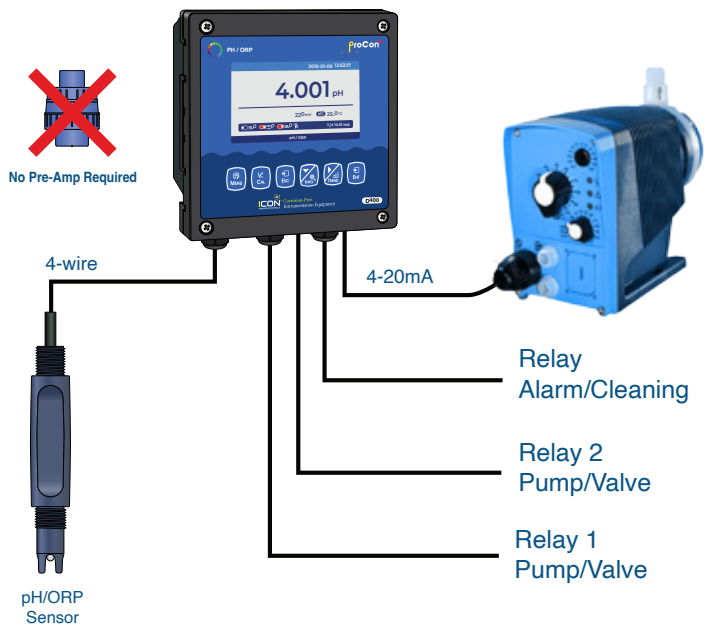
Install fixed bracket top view



D500 | D520 Series pH/ORP Digital Analyzer Controller



Typical Application



Model Selection

D500 - 4 - C - Y - P - 0 (Single Display)

Power	Output	Power Cord	Sensor Type
4: 24VDC (std) 2: 120VAC	B: 3 Relays D: 4-20mA + 3 Relays	Y: Yes N: No	P: pH/ORP

D520 - 4 - D - Y - P - C (Dual Display)

Power	Output	Power Cord	Sensor Type #1	Sensor Type #2
4: 24VDC (std) 2: 120VAC	B: 3 Relays D: 4-20mA + 3 Relays	Y: Yes N: No	P: pH/ORP	C: Conductivity P: pH/ORP