

# ProCon® — D500 | D520 Series

## Digital pH/ORP Controller Analyzer



- ✓ 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 outputs
- ✓ Multi-parameter display — simultaneously shows pH, ORP and temperature
- ✓ Password protection

### High Performance Industrial Controller Analyzer

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

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 alert provides notification of out-of-bounds sensor readings and indication for sensor cleaning/recalibration or replacement.

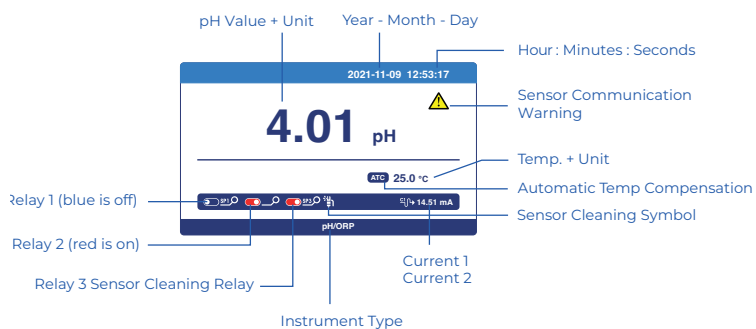
### Enclosure

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**

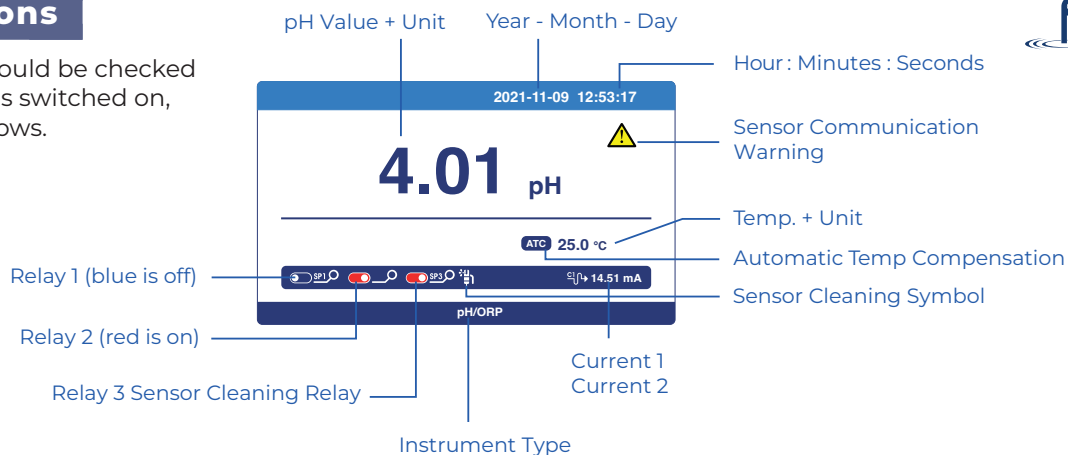
**Cable Grip Wire Connector Combo**  
(no internal wiring required)





### Display Descriptions

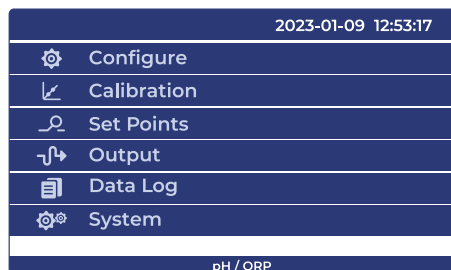
All electrical connections should be checked before use. After the power is switched on, the meter will display as follows.



Measurement Mode



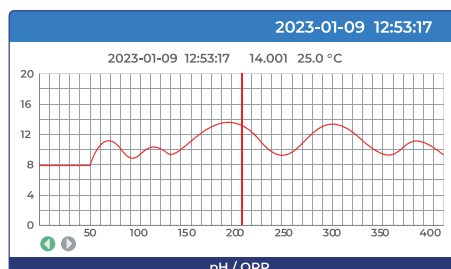
Programming Menu



Calibration Mode



Trend Chart Data Logging Display



### SimplCal® Calibration



pH Calibration

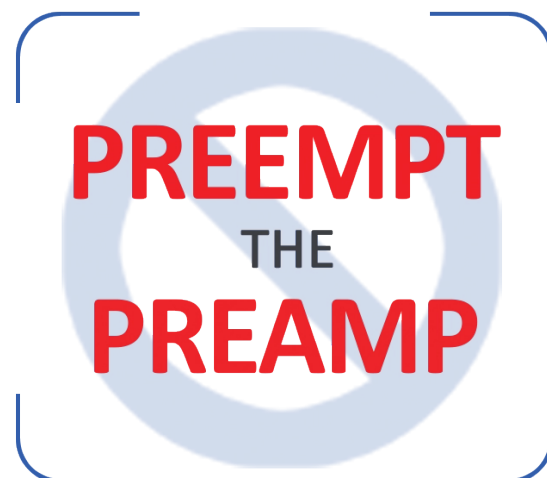


ORP Calibration

### 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

Cursor Down / Info

Confirm Selections



Main Menu



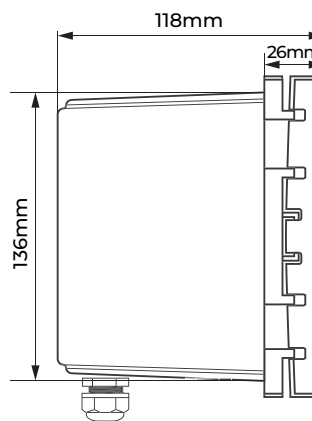
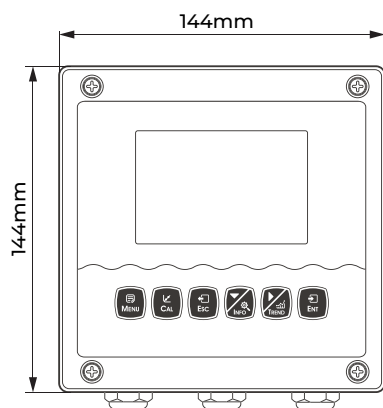
Return to Previous Menu



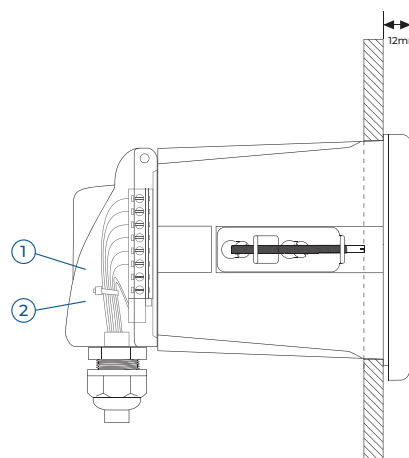
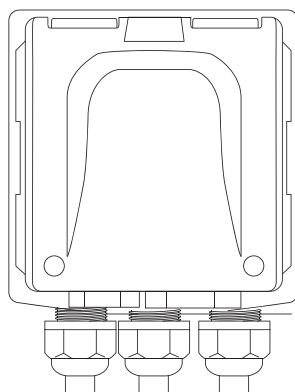
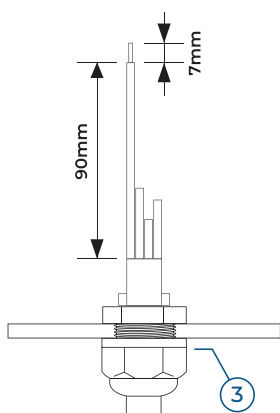
Cursor Right / Display Trend Chart



### Dimensions

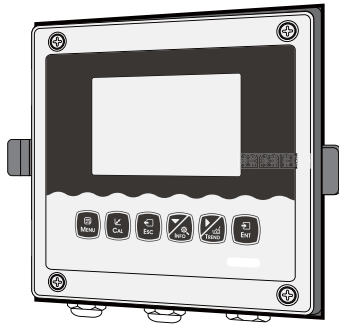
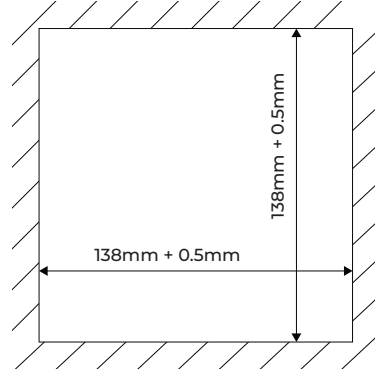
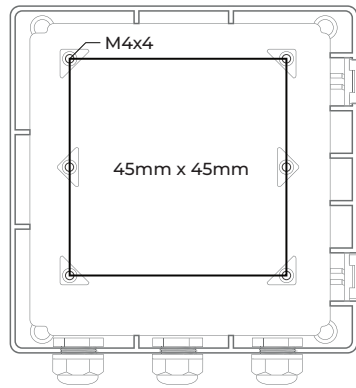


### Instrument Installation

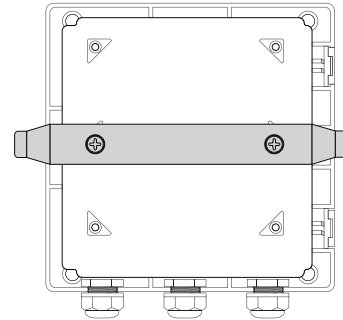


1. Cable (Recommended stripping length for cables is at least 90mm)
2. Cable ties
3. Waterproof cable glands

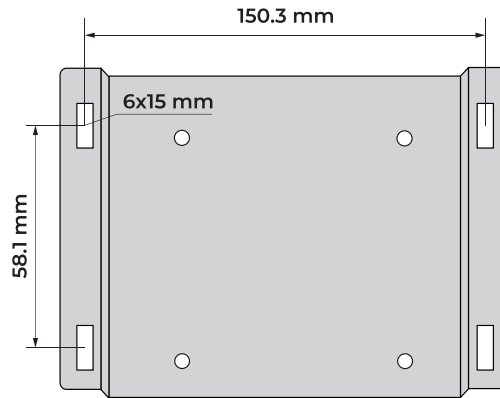
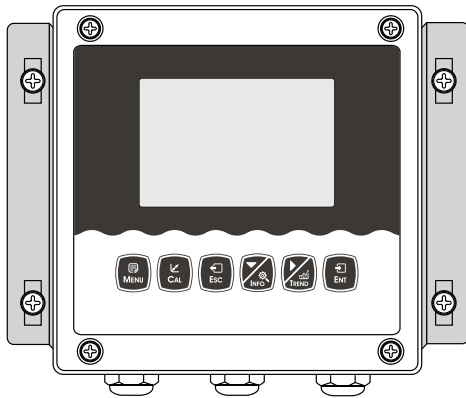
# ProCon® — D500 | D520 Series Digital pH/ORP Controller Analyzer



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



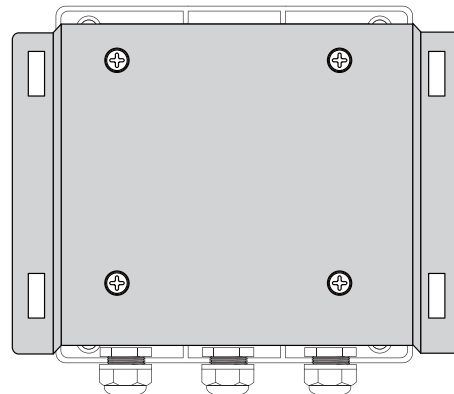
## Slim Line Wall Mount Bracket



## Installation Full Bracket



Install fixed bracket top view

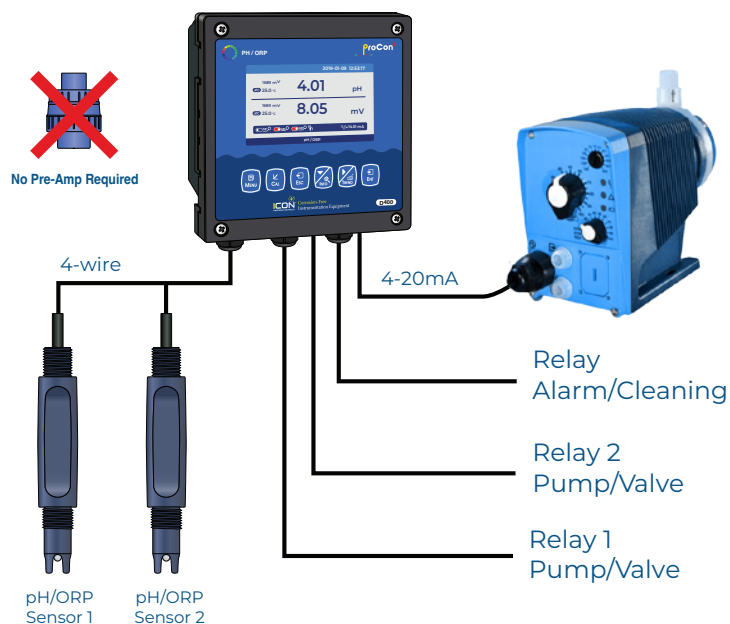
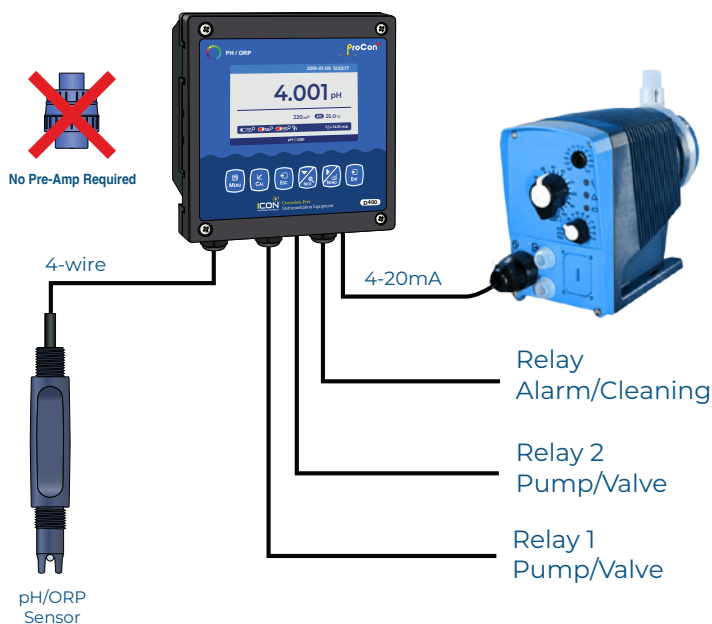


# ProCon® — D500 | D520 Series

## Digital pH/ORP Controller Analyzer



### Typical Application



### Model Selection

#### D500 — pH/ORP Controller (Single Data Trending)

Part Number	Power	Output	Power Cord	Display 1	Display 2
D500-4-D-N-P-0	24VDC	4-20mA + 3 Relays	No	pH/ORP	Single Display
D500-4-D-Y-P-0	24VDC	4-20mA + 3 Relays	Yes	pH/ORP	Single Display

Communication: RS-485 RTU Modbus

#### D520 — pH/ORP Controller (Dual Data Trending)

Part Number	Power	Output	Power Cord	Display 1	Display 2
D520-4-D-N-P-P	24VDC	4-20mA + 3 Relays	No	pH/ORP	pH/ORP
D520-4-D-Y-P-P	24VDC	4-20mA + 3 Relays	Yes	pH/ORP	pH/ORP
D520-4-D-N-P-C	24VDC	4-20mA + 3 Relays	No	pH/ORP	Conductivity
D520-4-D-Y-P-C	24VDC	4-20mA + 3 Relays	Yes	pH/ORP	Conductivity

Communication: RS-485 RTU Modbus