

# ProCon® — D500 | D520 Series

## Digital pH/ORP Controller Analyzer



- ✓ Large color LCD display
- ✓ Intelligent menu operation
- ✓ Data recording / curve display
- ✓ Multiple automatic SimpliCal® 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 SimpliCal® feature makes calibrating your sensor easier and quicker than ever before.

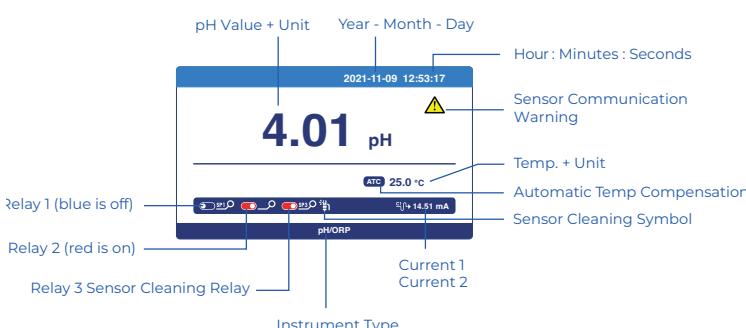
The cost-saving quick and simple setup is done through our user-friendly step-by step on-screen menu.

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.

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



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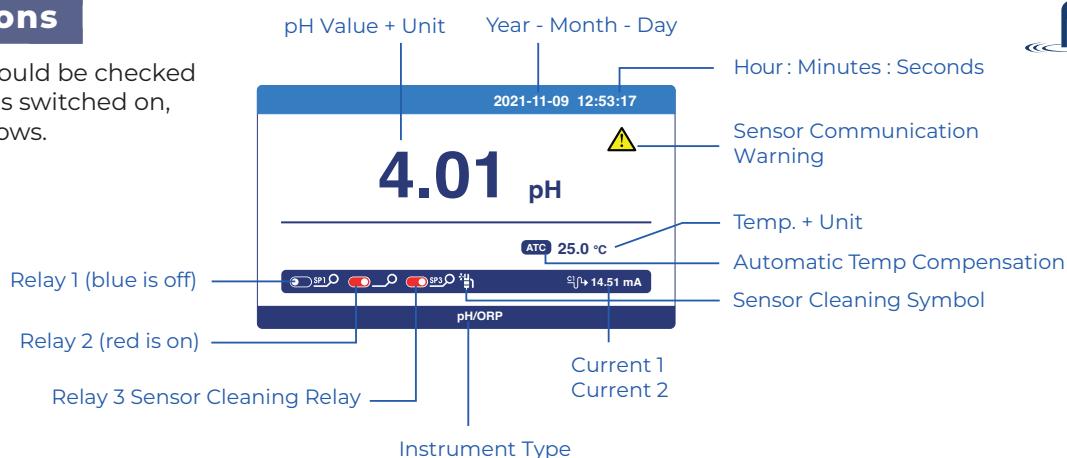
## Digital pH/ORP Controller Analyzer



Corrosion-Free  
Instrumentation Equipment

### Display Descriptions

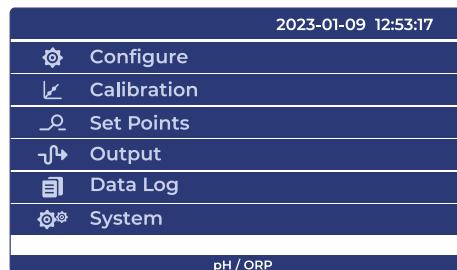
All electrical connections should be checked before use. After the power is switched on, the meter will display as follows.



### Measurement Mode



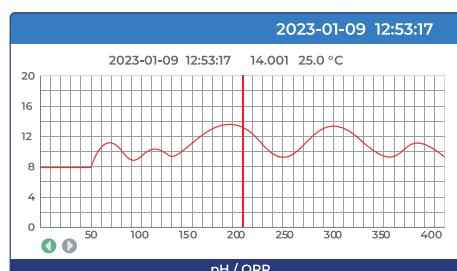
### Programming Menu



### Calibration Mode



### Trend Chart Data Logging Display



### SimplCal® Calibration



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**ICON**  
PROCESS CONTROLS

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### 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



**PREEMPT  
THE  
PREAMP**

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## Digital pH/ORP Controller Analyzer

### Keypad Descriptions



1. Enter Calibration Mode
2. Check Calibration Status



Main Menu



Return to Previous Menu



Cursor Down / Info

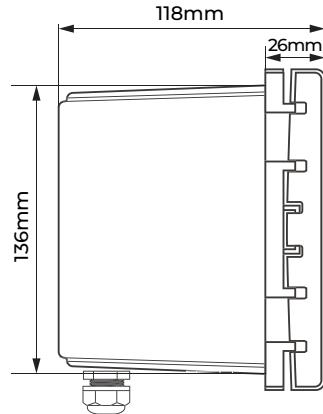
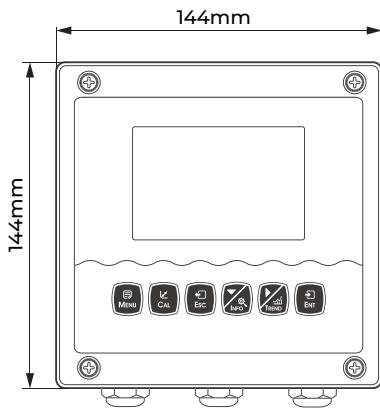


Cursor Right / Display Trend Chart

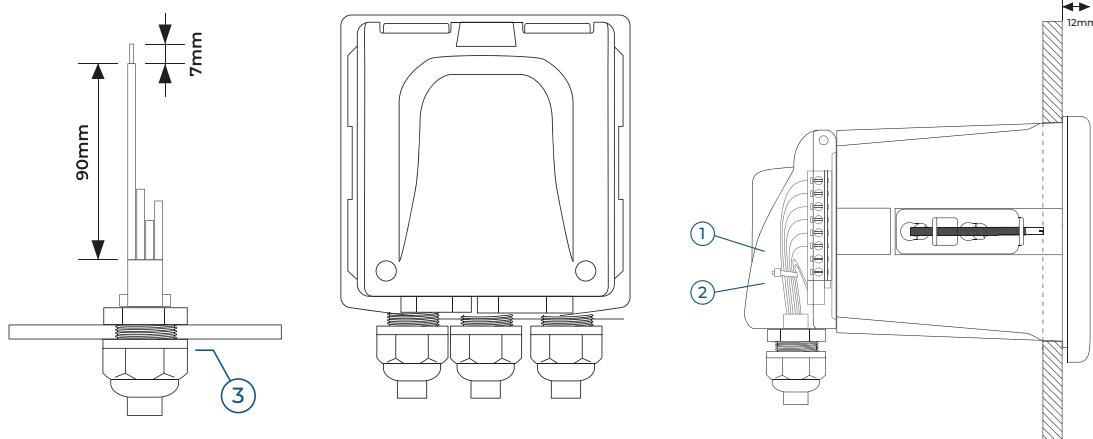
Confirm Selections



### Dimensions



### Instrument Installation



1. Cable (Recommended stripping length for cables is at least 90mm)

2. Cable ties

3. Waterproof cable glands

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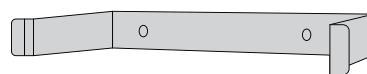
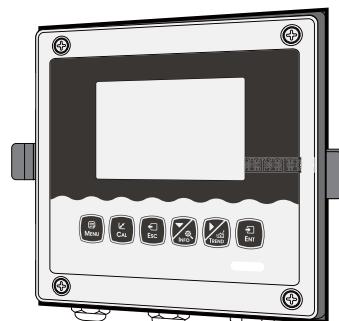
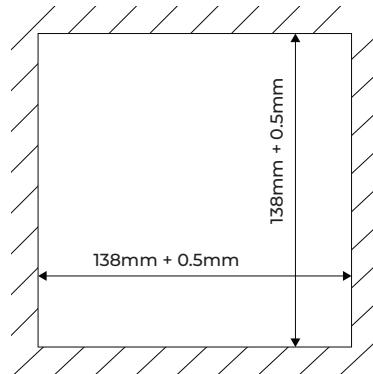
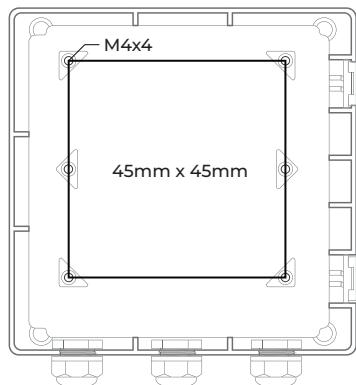
## Digital pH/ORP Controller Analyzer



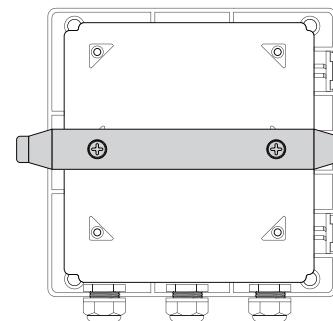
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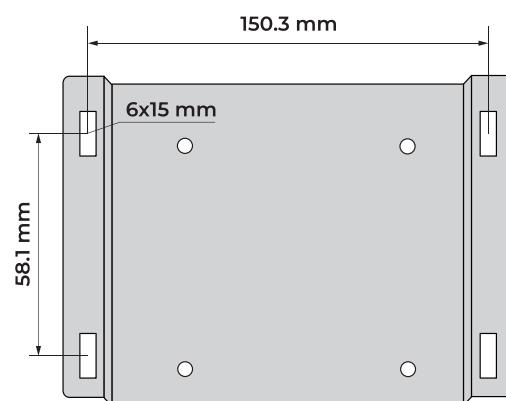
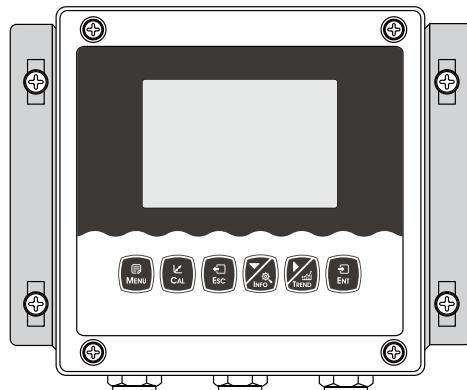
**ProCon**



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



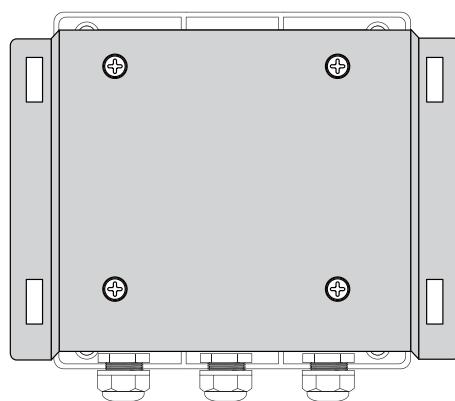
### Slim Line Wall Mount Bracket



### Installation Full Bracket



Install fixed bracket top view



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PROCESS CONTROLS

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### Typical Application



### Model Selection

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

Part Number	Power	Output	Power Cord	Display 1	Display 2
<b>D500-4-D-N-P-0</b>	24VDC	4-20mA + 3 Relays	No	pH/ORP	Single Display
<b>D500-4-D-Y-P-0</b>	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
<b>D520-4-D-N-P-P</b>	24VDC	4-20mA + 3 Relays	No	pH/ORP	pH/ORP
<b>D520-4-D-Y-P-P</b>	24VDC	4-20mA + 3 Relays	Yes	pH/ORP	pH/ORP
<b>D520-4-D-N-P-C</b>	24VDC	4-20mA + 3 Relays	No	pH/ORP	Conductivity
<b>D520-4-D-Y-P-C</b>	24VDC	4-20mA + 3 Relays	Yes	pH/ORP	Conductivity

Communication: RS-485 RTU Modbus