

C500 | C520 Series Controller

Conductivity, TDS, Resistivity, Salinity



Corrosion-Free
Instrumentation Equipment



- ✓ 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 conductivity and temperature
- ✓ Password protection

High Performance Industrial Controller Analyzer

The ProCon® C500/C520 series is an extremely robust industrial conductivity controller analyzer.

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

The C500/C520 is packed with all the extra features included, no need to pay extra for relay, 4-20mA or RS485 outputs.

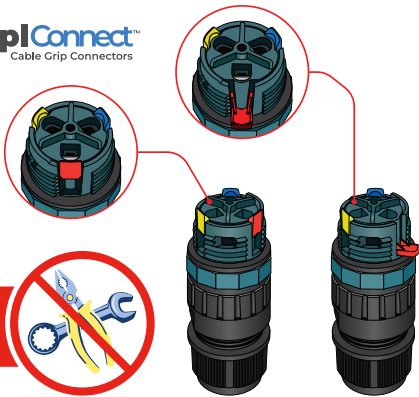
The SimpliCal® feature makes calibrating your sensor easier and quicker than ever before.

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.

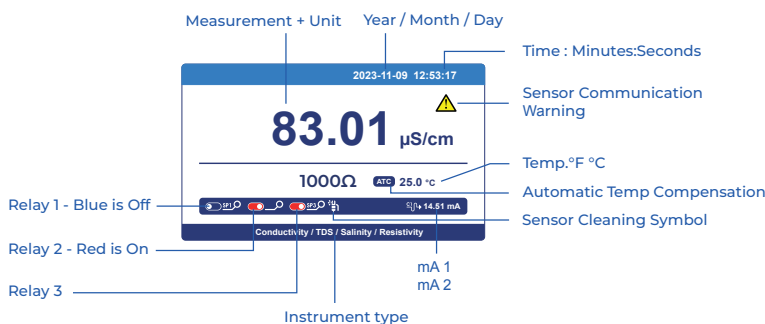
Enclosure

The C500/C520 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.



No tools required

Cable Grip Wire Connector Combo (no internal wiring required)



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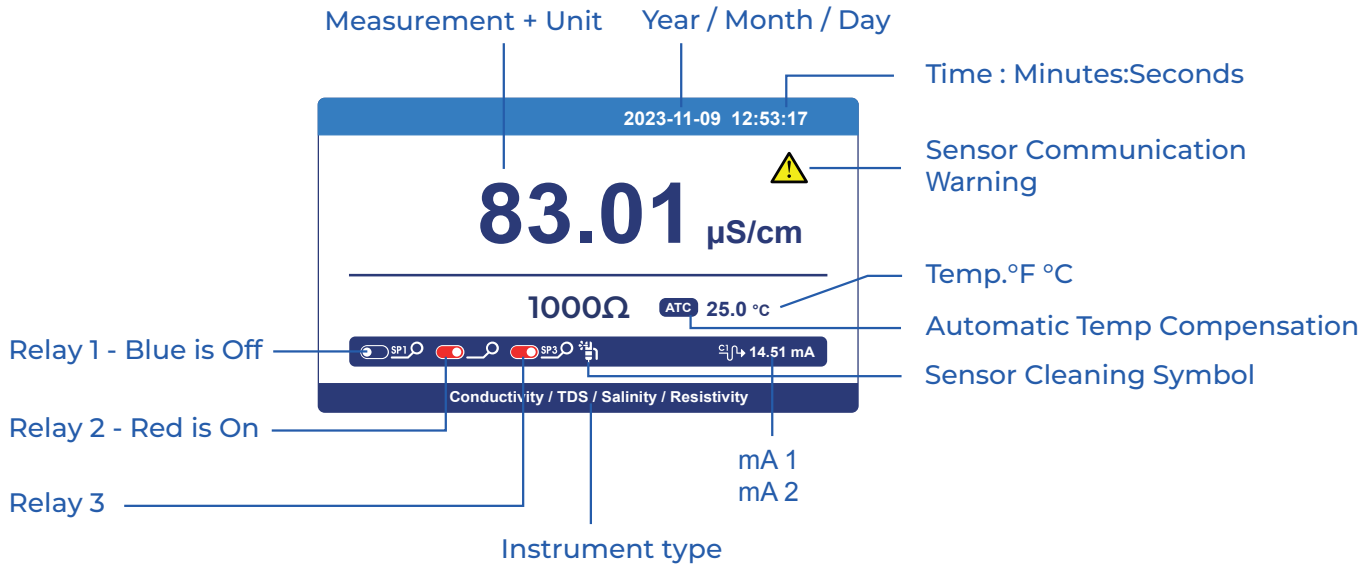


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Instrumentation Equipment

Display Descriptions



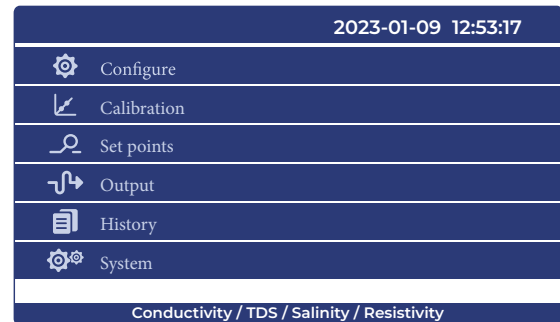
All electrical connections should be checked before use. After the power is switched on, the meter will display as follows.



Measurement Mode



Programming Mode

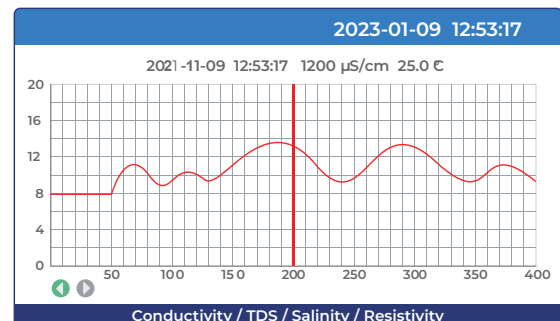


Calibration Mode

Note: New Sensors are Factory Calibrated



Data Logging Trend Chart



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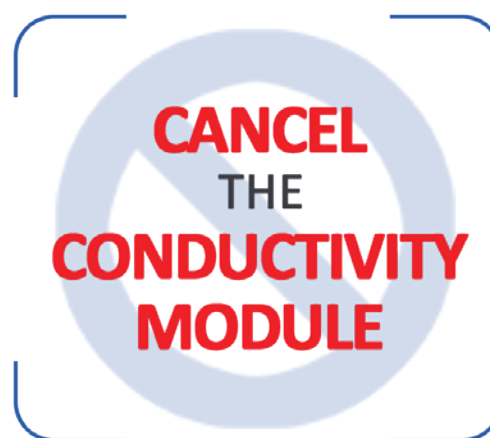


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Technical Specifications



Measuring Range	0 – 500mS/cm
Resolution	0.1µS/cm 0.01mS/cm
Intrinsic Error	±0.5% F.S
Resistivity	0 – 18.25MΩ/cm
Resolution	0.01KΩ/cm 0.01MΩ/cm
TDS	0 – 250g/L
Resolution	0.01mg/L 0.01g/L
Salinity	0 – 700ppt
Resolution	0.01ppm 0.01ppt
Working Temperature	32 – 302°F 0 – 150°C
Temperature Compensation	Automatic or Manual
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
Environmental 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



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Keypad Descriptions



1. Enter Calibration Mode
2. Check Calibration Status

Cursor Down / Info

Confirm Selections



Main Menu



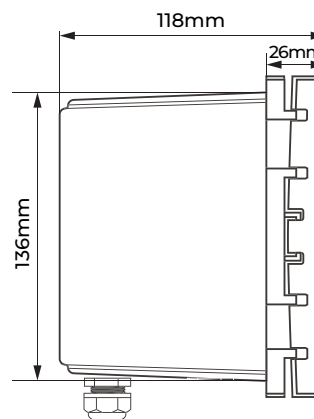
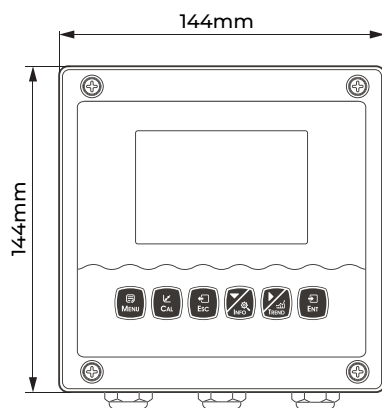
Return to Previous Menu



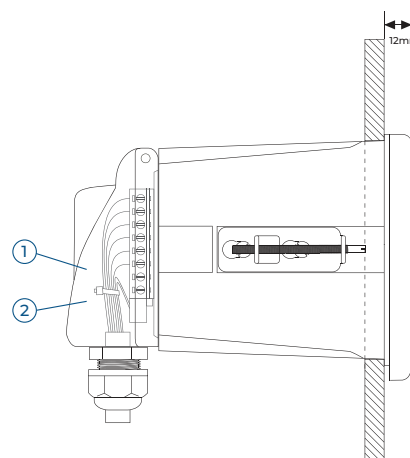
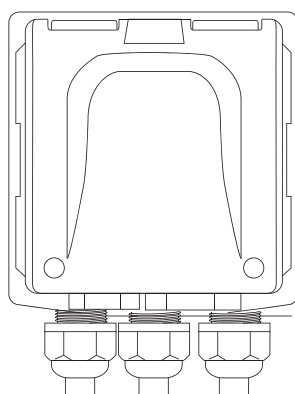
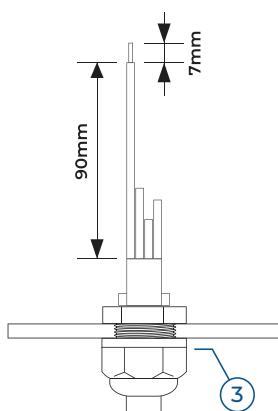
Cursor Right / Display Trend Chart



Dimensions



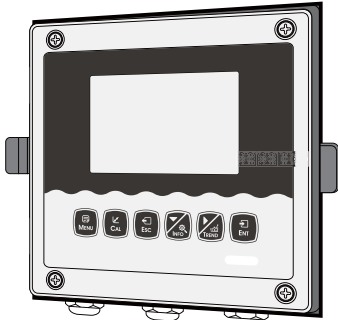
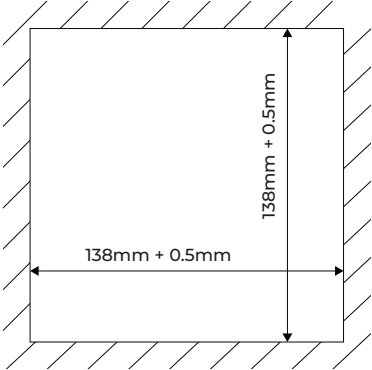
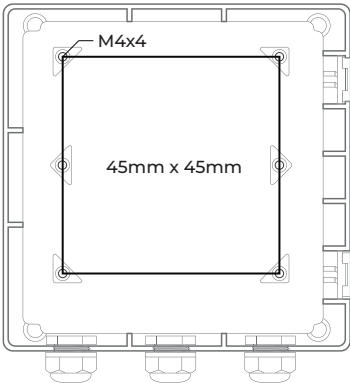
Instrument Installation



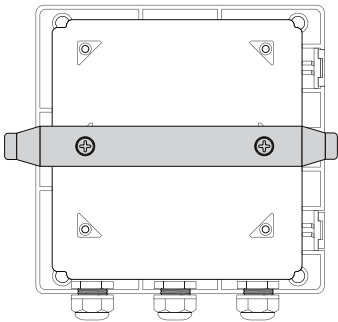
1. Cable (Recommended stripping length for cables is at least 90mm)
2. Cable ties
3. Waterproof cable glands

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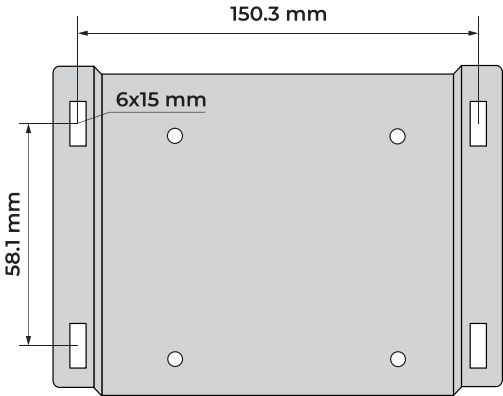
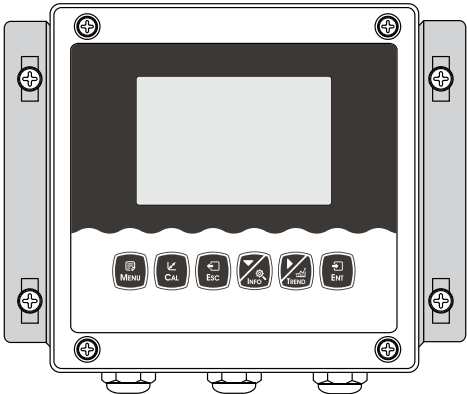
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Install fixing bracket for instrument
Insert into the cut-out hole



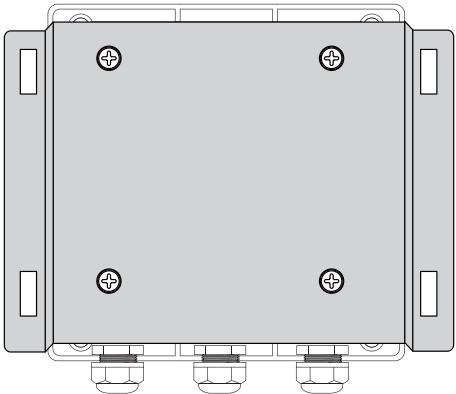
Slim Line Wall Mount Bracket



Installation Full Bracket



Install fixed bracket top view



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Typical Application



Model Selection

C500 — Conductivity Controller (Single Data Trending)

Part Number	Power	Output	Power Cord	Display 1	Display 2
C500-4-D-N-C-0	24VDC	4-20mA + 3 Relays	No	Conductivity	Single Display
C500-4-D-Y-C-0	24VDC	4-20mA + 3 Relays	Yes	Conductivity	Single Display

Communication: RS-485 RTU Modbus

C520 — Conductivity Controller (Dual Data Trending)

Part Number	Power	Output	Power Cord	Display 1	Display 2
C520-4-D-N-C-P	24VDC	4-20mA + 3 Relays	No	Conductivity	pH/ORP
C520-4-D-Y-C-P	24VDC	4-20mA + 3 Relays	Yes	Conductivity	pH/ORP
C520-4-D-N-C-C	24VDC	4-20mA + 3 Relays	No	Conductivity	Conductivity
C520-4-D-Y-C-C	24VDC	4-20mA + 3 Relays	Yes	Conductivity	Conductivity

Communication: RS-485 RTU Modbus