

Alpha CON 2000 Conductivity

Controller/Transmitter

Seven ranges in a single controller allows the controller to be used in a wide variety of applications. Maximum measurement range is 1000 mS/cm. Accuracy of $\pm 1\%$ is achievable for most ranges, while $\pm 2\%$ for measurements above 500 mS/cm.

4- or 2-cell electrode system can be used with a selection of 0.01, 0.1, 1.0 or 10.0 cell constants.

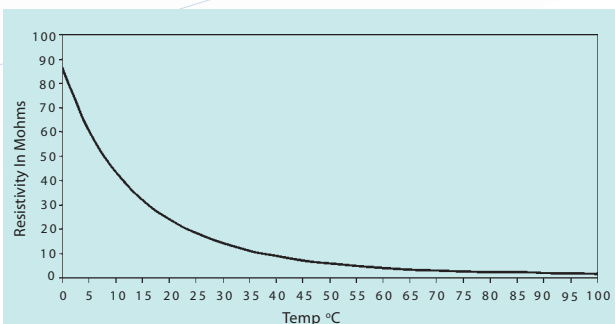
New 4-cell electrode system eliminates polarizing effects ensuring more accurate measurements in highly conductive samples.

The cell constant corresponding to the cell connected to the controller can be input independently during calibration.

Status of the cell is updated and displayed after every calibration and can be viewed at anytime.

Temperature Coefficients can be set for more precise temperature compensation. Select from 0.0% to 10.0%.

In addition, for 0 to 2,000 $\mu\text{S}/\text{cm}$ range, select 'Pure water' compensation graph to correct for the non-linearity of pure water temperature correction curves.



Resistivity Of Pure Water

Specifications

Alpha CON 2000		
Measuring range No	Conductivity Measuring range	Resolution
1	... to 2.000 $\mu\text{S}/\text{cm}$	0.001 $\mu\text{S}/\text{cm}$
2	... to 20.00 $\mu\text{S}/\text{cm}$	0.01 $\mu\text{S}/\text{cm}$
3	... to 200.0 $\mu\text{S}/\text{cm}$	0.1 $\mu\text{S}/\text{cm}$
4	... to 2000 $\mu\text{S}/\text{cm}$	1 $\mu\text{S}/\text{cm}$
5	... to 20.00 mS/cm	0.01 mS/cm
6	... to 200.0 mS/cm	0.1 mS/cm
7	... to 1000 mS/cm	1 mS/cm
Relative accuracy	$\pm 1\%$ of full scale reading ($\pm 2\%$ $>500 \text{ mS}/\text{cm}$)	
Temperature range	-10.0 to + 125.0 $^{\circ}\text{C}$ (14.0 to 257.0 $^{\circ}\text{F}$)	
Resolution	0.1 $^{\circ}\text{C}$ / $^{\circ}\text{F}$	
Relative Accuracy	$\pm 0.5 \text{ }^{\circ}\text{C}$ ($\pm 1.0 \text{ }^{\circ}\text{F}$)	
Sensor	Pt100 / Pt1000 (jumper selectable); 2 or 3 wire	
Temperature Compensation	Auto / manual (normalized at 25 $^{\circ}\text{C}$)	
Set-point and Controller Functions		
Function (switchable)	P/PI control (pulse length/pulse frequency); limit control	
Integral time	0 to 999.9 minutes	
Adjustable period with pulse length controller	0.5 to 20 sec.	
Adjustable period with pulse frequency controller	60 to 120 pulses/min	
Pickup / Dropout delay	0 to 2000 seconds	
Wash cycle	0.1 to 199.9 hours	
Wash duration	1 to 1999 seconds	
Switching conductivity hysteresis	0 to 10 % of full scale	
Contact outputs, controller	1 SPDT, 3 SPST relays	
Switching voltage / current / power	Max. 250 VAC / Max 3A / Max 600VA	
Alarm Functions		
Function (switchable)	Latching / pulse	
Pickup delay	0 to 2000 seconds	
Switching voltage / current / power	Max. 250 VAC / Max 3A / Max 600VA	
Display		
LCD	UV coat, backlit 14 segments display with symbols for status information	
Backlight	On/Off selectable with four level of brightness control	
Electromagnetic Compliance (EMC) Specifications		
Emitted Interference	According to EN 50081-1	
Immunity to Interference	According to EN 50082-1	
Environmental Conditions		
Ambient temperature operating range	0 to 40 $^{\circ}\text{C}$	
Maximum Relative humidity	80% up to 31 $^{\circ}\text{C}$ decreasing linearly to 50% at 40 $^{\circ}\text{C}$	
Power Supply		
Input	80 to 250 VAC/DC 50/60 Hz Approx. 10VA	
Main Fuse	250 mA anti-surge, S504 BUSSMANN	
Pollution Degree	2	
Transient Overvoltage category	II	
Electrical Data and Connections		
Signal Output	Two 0/4 to 20 mA outputs for conductivity and temperature, galvanically isolated	
Load	Max. 600 W	
Conductivity input	Screw terminal	
Connection terminal (Wall mount)	5-pin, 8-pin, 9-pin and 13-pin terminal, detachable blocks	
Connection terminal (Panel mount)	5-pin, 9-pin and 19-pin terminal, detachable blocks	
Mechanical Specifications		
Dimensions (W x H x D)	Wall Mount	144 x 144 x 110 mm
	Panel Mount	96 x 96 x 175 mm
Weight	Wall Mount	745g (unit) / 1100g (Packed)
	Panel Mount	550g (unit) / 950g (Packed)
Environmental Rating	Wall Mount	IP 65 (NEMA 4X)
	Panel Mount	IP54 (front panel)

Ordering Information

Alpha CON 2000 Conductivity Controller/Transmitter – Wall mount	ECCONCTP2000W
Alpha CON 2000 Conductivity Controller/Transmitter – Panel mount	ECCONCTP2000P