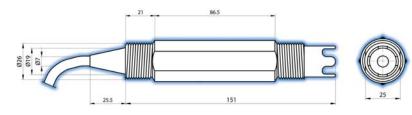
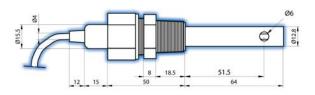
Technical Information

Dimensions (in mm)

pH/ORP Electrode

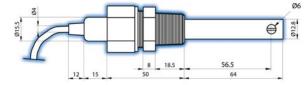


Conductivity/TDS Cells





ECCS10-0-1S





ECCS10-1-0S



ECCONSEN88X



Specifications

αlpha 200 Series

pH Range	0.00 to 14.00 pH	
,		
Resolution/Accuracy	0.01 / ± 0.01 pH -999 to 1000 mV	
mV Range		
Resolution/Accuracy	1 / ± 2.0 mV	
Temperature	-10 to 110 °C	
Resolution/Accuracy	0.1 / ± 0.5 °C	
Sensor	Pt 100 (3-wire)	
Temperature Compensation	Automatic / Manual (0 to 100 °C)	
Set-point And Controller Functions		
Function	Limit Control	
Switching pH/ORP Hysteresis	0.00 to 2.00 pH / 0 to 300 mV	
Contact Outputs, Controller	2 SPDT relays	
Switching Voltage/Current/Power	Max 250 VAC / Max 3A / Max 600 VA	
Electrical Data And Connections		
Power Requirements	85 to 260 VAC, 50/60 Hz or DC	
Signal Output / Load	4-20 mA galvanically isolated / 200 Ω	
pH / ORP Input	BNC ($10^{12} \Omega$ Impedance)	
Connection Terminals	3 Detachable connectors (3-pin, 7-pin & 9-terminal blocks)	
Main Fuse	250 mA, Anti-surge (BUSSMAN S504+250m	
Environmental Conditions		
Ambient Temp. Operating Range	- 10 to 50 °C	
Rel. Humidity	10 to 95 % (non-condensing)	
Mechanical Specifications		
Dimensions (Control Panel Housing - W x H x D)	96 x 48 x 150 mm	
Weight	300g (350g boxed)	

αlpha CON/T	DS 200					
Conductivity Range	Resolution	Cell Constant	TDS Range	Resolution	Cell Constan	
0.00 - 20.00 μS/cm	0.01 µS/cm	0.1	0.00 - 10.00 ppm	0.01 ppm	0.1	
0.0 – 200.0 μS/cm	0.1 μS/cm	0.1	0.0 - 100.0 ppm	0.1 ppm	0.1	
0.0 – 200.0 μS/cm	0.1 μS/cm	I	0.0 - 100.0 ppm	0.1 ppm	I	
0 – 2000 μS/cm	I μS/cm	I	0 - 1000 ppm	I ppm	Į.	
0.00 - 10.00 mS/cm	0.01 mS/cm	I	0.00 - 5.00 ppt	0.01 ppt	I	
0.00 - 20.00 mS/cm	0.01 mS/cm	I	0.00 - 10.00 ppt	0.01 ppt	I	
0.0 - 200.0 mS/cm	0.1 mS/cm	I	0.0 - 100.0 ppt	0.1 ppt	I	
0.0 - 200.0 mS/cm	0.1 mS/cm	10	0.0 - 200.0 ppt	0.1 ppt	10	
Relative Accuracy ± 1 % of full scale						
Temperature			-10 to	10 °C		
Resolution/Accurac		0.1 / ± 0.5 °C				
Sensor Pt 100 (3-wire)						
Temperature Compens		Automatic / Manual (0 to 50 °C)				
Temperature Coefficie		0.0 to 5.0 %				
TDS Factor 0.40 to 1.00						
Set-point And Controller Functions						
Function Limit Control						
Switching Conductivity		10% of full scale				
Contact Outputs, Controller			2 SPDT relays			
Switching Voltage / Cu		Max 250 VAC / Max 3A / Max 600 VA				
Electrical Data	And Connecti	ons				
Power Requirements			85 to 260 VAC, 50/60 Hz or DC			
Signal Output / Load			4-20 mA galvanically isolated / 200 Ω			
Connection Terminals		3 Detachab	le connectors (3-pin;	7-pin & 9-pin	terminal blocks)	
Main Fuse	250 mA, Anti-surge (BUSSMAN S504+250mA)					
Environmental C	onditions					
Ambient Temp. Operat	mbient Temp. Operating Range - 10 to 50 °C					
Rel. Humidity			10 to 95 % (non-condensing)			
Mechanical Spec	ifications					
Dimensions (Panel Ho	x D)	96 x 48 x 150 mm				
Weight		300g (350g boxed)				

Warranty

Eutech Instruments supplies meters with 3-year warranty and electrodes with 6-month warranty against manufacturing defects.

WORLD-WIDE SALES AND SERVICE SUPPORT

Eutech Instruments provides world-wide sales and service support for all its products through its network of international distributors. Contact Eutech Instruments for details of your nearest distributor.

Note: Eutech Instruments reserves the rights to make changes, improvements and modifications to products shown, without prior



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Olpha 200 series

Controllers & Transmitters

¹/₈ DIN Panel Mount Controllers for Process Monitoring and Control













αlpha pH 200

pH/ORP Controller / Transmitter

The α lpha 200 pH controller / transmitter uses advanced microprocessor technology and is an ideal choice for industrial process monitoring and control applications.



pH / ORP Controller

The α lpha pH 200 controller is both a pH and an ORP controller – simply configure the controller via the keypad as needed.

Bright LED

New 14 segment alpha numeric 4-digit LED display is bright, clear and easy to read, even at a distance. Either pH or Temperature measurements can be viewed.

Fine Resolution of Readings

4-digit LED allows 0.01 pH resolution and 1 mV for ORP.

Menu-driven Setup

6 submenus accessible via the 4-button keypad, allows customization of operating parameters.

Ordering Information:

	Product Description	Order Code
	αlpha pH 200 pH/ORP Controller/Transmitter	ECPHCTP0200
	pH Combination Electrode with Pt 100 RTD and PMP	EC-100GTSO-05B
	pH Combination Electrode with HF resistant glass (w/o ATC & PMP)	EC-ARTSOHF-05B
	pH Combination Electrode with PMP (w/o ATC)	EC-ARGTSO-05B
	pH Combination Electrode with high temperature (110 °C) and high pressure resistance (9 bar) (w/o ATC & PMP)	EC-ARHTTSO-05B
	pH Combination Electrode (w/o ATC & PMP)	EC-ARTSO-05B
	Submersible pH Combination Electrode (w/o ATC 2 PMP)	ECDA93506-05B
	ORP Gold Electrode	EC-HTAUTSO-05B
	ORP Platinum Electrode	EC-HTPTTSO-05B
*	Electrodes are supplied with 5m cable length.	

* Electrodes are supplied with 5m cable length.



ARGTSO/100GTSO0-05B



ARTSO-05B/ARHTTSO-05B/ ARTSOHF-05B

• Push-button Auto-calibration

Single push-button activates calibration sequence. Buffer recognition feature quickens calibration process. Unique 'HOLD' feature freezes relay activity during calibration setup.

USA / NIST Buffer Options

Both buffer sets are available in the same controller. Simply select the appropriate buffer in the calibration mode.

• Dual Setpoints with Independent Hysteresis for Limit Control

Two Single Pole Double Throw (SPDT) relays are provided for limit control operations. Peripheral devices are protected by the 'Hysteresis' function which prevents relay-chattering.

Symmetrical Mode of Operation

Eliminate fluctuating pH/ORP readings as a result of electrical noise in the application tank. Used in conjunction with the Potential Matching Pin (PMP) in the electrode, readings are stabilized.

Password Protection

Unauthorized and accidental tampering of configuration and calibration data is prevented by password access.

• Temperature Compensation

pH readings can be automatically compensated for temperature fluctuations when Pt 100 sensor is attached. 3-wire system compensates for cable resistance. Manual temperature compensation is possible with separate inputs for Calibration and Process temperatures.

4-20 mA, Galvanically Isolated Output

pH mode : 0.00 pH – 4 mA & 14.00 pH – 20 mA ORP mode : -999 mV – 4 mA & 1000 mV – 20 mA

• Switch Mode Power Supply

85 to 260 VAC, 50/60 Hz or DC variable input allows controller to be used with wide supply voltages that might be available.

Panel Installation

Designed to 1/8 DIN size, installation is easy with the supplied accessories. Detachable plug-in connectors offer quick and easy attachment or removal of wires from controller.



HTAUTSO-05B



αlpha Conductivity 200/TDS 200

Conductivity/TDS Controller / Transmitter

Use the αlpha 200 Conductivity / Total Dissolved Solids panel mount controller / transmitter to monitor and control a wide variety of industrial water and waste water applications.



Multiple Ranges in a Single Unit

Up to 10 different measurement ranges are available in a single unit (software selectable) with fine resolution of readings. Each unit is configurable for a wide range of user applications from pure water to electroplating rinse tank conductivity control.

Conductivity Range	Resolution	TDS Range	Resolution
$0.00 - 20.00 \mu S/cm$	0.01 µS/cm	0.00 - 10.00 ppm	0.01 ppm
0.0 - 200.0 μS/cm	0.1 μS/cm	0.0 - 100.0 ppm	0.1 ppm
0.0 - 200.0 µS/cm	0.1 μS/cm	0.0 - 100.0 ppm	0.1 ppm
$0-2000~\mu S/cm$	I μS/cm	0 - 1000 ppm	l ppm
0.00 - 10.00 mS/cm	0.01 mS/cm	0.00 - 5.00 ppt	0.01 ppt
0.00 - 20.00 mS/cm	0.01 mS/cm	0.00 - 10.00 ppt	0.01 ppt
0.0 - 200.0 mS/cm	0.1 mS/cm	0.0 - 100.0 ppt	0.1 ppt
0.0 - 200.0 mS/cm	0.1 mS/cm	0.0 - 200.0 ppt	0.1 ppt

• High Accuracy in Measurements

Up to ± 1 % of full scale accuracy is possible with the alpha CON/TDS 200.

Bright LED

New 14 segment alpha numeric 4-digit LED display is bright, clear and easy to read, even at a distance. Either Conductivity/ TDS or Temperature measurements can be viewed.

• Menu-driven Setup

Extensive submenus accessible via the 4-button keypad, allows customization of operating parameters, including measurement range selection.

Push-button Calibration

In each selected range, calibration can be performed easily, with push-buttons. Irrespective of temperature, accuracy is maintained during calibration due to the active ATC. All relays freeze during the calibration sequence with the unique 'HOLD' function.

• Selectable Temperature Coefficient (TC)

To obtain a higher degree of accuracy in your measurement, you can select an appropriate TC from 0.0 to 5.0%.

Dual Setpoints with Independent Hysteresis for Limit Control

Two Single Pole Double Throw (SPDT) relays are provided for limit control operations. Peripheral devices are protected by the 'Hysteresis' function which prevents relay-chattering.

Password Protection

Unauthorised or accidental tampering of configuration and calibration is prevented by password access.

• Temperature Compensation

Conductivity/TDS readings can be automatically compensated for temperature fluctuations when a Pt 100 sensor is attached. 3-wire system compensates for cable resistance. Manual temperature compensation is possible with separate inputs for calibration and process temperature.

4-20 mA, Galvanically Isolated Output

Full scale 4-20mA galvanically isolated current output is available for process control.

Switch Mode Power Supply

85 to 260 VAC, 50/60 Hz or DC input allows controller to be used with wide range of voltages.

Panel Installation

Designed to 1/8 DIN size, installation is easy with the supplied accessories. Detachable plug-in connectors offer quick and easy attachment or removal of wires from controller.







Ordering Information

			4	
Prod	ct Description		Order Code	
αlpha	CON 200 Controller/Ti	ansmitter	ECCONCTP020	0
αlpha	TDS 200 Controller/Tra	nsmitter	ECTDSCTP0200	
Cond	ctivity cell, epoxy body	graphite sensor,	ECCONSEN89X	
0.1 ce	ll constant			
Cond	ctivity cell, epoxy body	graphite sensor,	ECCONSEN88X	
1.0 ce	II constant			
Condi	ctivity cell, stainless stee	l, 1.0 cell constant	ECCS10-1-0S	
Condi	ctivity cell, stainless stee	l, 0.1 cell constant	ECCS10-0-1S	
* Flectron	es are supplied with 3-wire P	100 8m cable length		

Technical Information

Dimensions (in mm)

