

8 TECHNICAL SPECIFICATIONS

8.1 Measurement and Compensation	
(a) Dissolved Oxygen	
Dissolved Oxygen Measuring Range	0.00 to 25.00 mg/l or 0.00 to 25.00ppm or 00.0 to 300.0 % Saturation
Resolution	0.01 mg/l or 0.01 ppm or 0.1 %
Relative accuracy	1.5 % of full-scale reading for all ranges
(b) Temperature	
Temperature measuring range	-10.0 to +125.0 °C or +14.0 to +257.0 °F
Resolution	0.1 °C or 0.1 °F
Relative accuracy	0.5 °C or 1.0 °F
Sensor	Pt100 or Pt1000 (Jumper Selectable) – 2 wire or 3 wire
(c) Compensation	
Temperature Compensation	Automatic or Manual
Pressure Compensation	0.740 to 3.000 BAR or 555 to 2250 mmHg or 10.73 to 43.51 PSI (Manual setting and automatic correction)
Salinity Compensation	0.0 to 50.0 ppt (Manual setting and automatic correction)

8.2 Set-point and control function – Relay 1 & Relay 2	
Function Switchable - Selection in Control (CNTR) function of Setup	Off Limit Control P/PI Control (Pulse length / Pulse frequency)
(a) Off	
The control function of the controller is off	SP1 & SP2 function will not appear in setup when Off is selected in CNTR function to off mode
(b) Limit Control & P/PI Control	
Relay contact selection for active mode	Energise (EN) or De-energise (DEEN)
Set Point 1 (SP1)	0.0 to 300.0 % (0.00 to 25.00 mg/l) (0.00 to 25.00 ppm)
Set Point 2 (SP2)	0.0 to 300.0 % (0.00 to 25.00 mg/l) (0.00 to 25.00 ppm)
Active mode selection (for SP1 & SP2)	LO (Relay is active when measured value < set point) HI (Relay is active when measured value > set point)
Hysteresis (for SP1 & SP2)	1.0 to 10.0 %
On (pickup) Delay (for SP1 & SP2)	0 to 2000 seconds
Off (Dropout) Delay (for SP1 & SP2)	0 to 2000 seconds

(c) P/PI Control only	
Proportional Range	10 to 500 %
Integral Action Time (IAT)	0.0 to 999.9 minutes
(c) (1) Pulse Length Control (PLC)	
Pulse Length	0.5 to 20.0 seconds
(c) (2) Pulse Frequency Control (PFC)	
Pulse Frequency	60 to 120 pulses / minutes
Contact Outputs	Two SPST relays
Switching Voltage / Current / Power	Max 250VAC / Max 3A / Max 600VA

8.3 Wash Function – Wash Relay	
Relay contact selection for active mode	Energise (EN) or De-energise (DEEN)
Wash Cycle Interval	0.1 to 200.0 hours
Wash Duration	1 to 2000 seconds
Contact Outputs	One SPST relay
Switching Voltage / Current / Power	Max 250VAC / Max 3A / Max 600VA

8.4 Alarm Function – Alarm Relay	
Alarm Delay	0 to 2000 seconds
Alarm control	Steady or fleet (pulse)
Contact Outputs	One SPDT relay
Switching Voltage / Current / Power	Max 250VAC / Max 3A / Max 600VA

8.5 Transmitter Function	
(a) Current Output 1 - DO	Proportional to Dissolved Oxygen measured
Current output selection	4 – 20mA or 0 – 20mA
DO value for 0 or 4mA current	0 to 25 mg/l or 0 to 300 %
DO value for 20mA current	0 to 25 mg/l or 0 to 300 %
CU22 function	<p>On</p> <ul style="list-style-type: none"> - 22mA current output for over range or under range or if outside zoom setting <p>Off</p> <ul style="list-style-type: none"> - 0 or 4 mA current output for under range or below lower zoom setting - 20mA current output for over range or above upper zoom setting
(b) Current Output 2 - Temperature	Proportional to Temperature measured
Current output selection	4 – 20mA or 0 – 20mA
Temperature value for 0 or 4mA current	-10.0 to +125.0 °C or +14.0 to +257.0 °F
Temperature value for 20mA current	-10.0 to +125.0 °C or +14.0 to +257.0 °F

8.6 Voltage Output & Hold Function Switch	
+12 V Output	11.5 to 12.5 V Output – Max 50 mA
Hold Function Switch	Hold function to freeze output current (0/4...20mA) and release control relays

8.7 Display	
LCD	UV coat, backlit 14 segments display with symbols for status information
Back light	On/Off selectable with four levels of brightness control

8.8 Power Supply	
Input	80 to 250VAC/DC, 50/60Hz, Approximately 10VA
Main Fuse	315mA Time Delay, 250V, Bussmann BK/GDC-315mA
Pollution Degree	2
Transient Voltage Category	II
Connector	5-pin screw terminal

8.9 Electrical data and Connections	
Dissolved Oxygen Input	8-pin Screw Terminal (3.5mm pitch)
Temperature Input	8-pin Screw Terminal (3.5mm pitch)
Relay 1, Relay 2, Wash Relay & Alarm Relay	9-pin Screw Terminal (7.62mm pitch)
Current Output 1, Current Output 2, 12V output & Hold function switch	13-pin Screw Terminal (3.5mm pitch)
Connection terminal	5-pin, 8-pin, 9-pin & 13-pin terminal connectors

8.10 Mechanical Specifications	
Dimensions (W x H x D) - Wall Mount	144 x 144 x 111.5 mm
Weight - Wall Mount	950g (unit) / 1100g (Packed)
Environmental Rating - Wall Mount	NEMA 4X, IP65

8.11 Electromagnetic Compliance (EMC) Specifications	
Emitted Interference	EN 61326
Immunity to Interference	EN 61326

8.12 Environmental Conditions	
Ambient Temperature operating range	0 to 40 °C
Maximum Relative Humidity	80% up to 31 °C decreasing linearly to 50% at 40°C