

BL983315 • BL983319
BL983321 • BL983329

TDS Mini Controllers

- Large Clear LCD
- Fire Retardant Casing
- Splash-resistant cover

These compact, panel mounted, process controllers are for measuring total dissolved solids (TDS) of a process stream. The controllers feature a large LCD with protective cover. Users may choose from automatic or manual dosing modes.

When in automatic mode, the BL983315's dry contact relay is activated when a reading is above the set point. The relay can be used to supply power to a dosing pump or a solenoid connected to a valve. The BL983315 can also be used to monitor the quality of water produced from ion exchange, reverse osmosis (RO) or distillation.

BL983315 uses a 0.5 conversion factor in which $1.0 \mu\text{S}/\text{cm} = 0.5 \text{ ppm}$.

When in automatic mode the BL983319's dry contact relay is activated when a reading is below the set point. The relay can be used to supply power to a dosing pump to add fertilizer to a nutrient solution in order to maintain an ideal concentration.

BL983319 uses a 0.65 conversion factor in which $100 \mu\text{S}/\text{cm} = 65 \text{ ppm}$.

When in automatic mode, the BL983321's dry contact relay is activated when a reading is above the set point. The relay can be used to activate a solenoid that switches from one DI (deionized) tank to another or to open a valve that will allow lower TDS water to flow into a tank being monitored in order to lower its TDS. The BL983321 can also be used to monitor the quality of water produced from ion exchange, reverse osmosis (RO) or distillation.

BL983321 uses a 0.5 conversion factor in which $1.00 \mu\text{S}/\text{cm} = 0.50 \text{ ppm}$.

When in automatic mode, The BL983329's dry contact relay is activated when a reading is above the set point. The relay can be used to supply power to a dosing pump or a solenoid connected to a valve.

BL983329 uses a 0.5 conversion factor in which $100 \mu\text{S}/\text{cm} = 50 \text{ ppm}$.



Specifications	BL983315	BL983319	BL983321	BL983329
Range	0.0 to 199.9 mg/L (ppm)	0 to 1999 mg/L (ppm)	0.00 to 19.99 mg/L (ppm)	0 to 999 mg/L (ppm)
Resolution	0.1 mg/L (ppm)	1 mg/L (ppm)	0.01 mg/L (ppm)	1 mg/L (ppm)
Accuracy (@25°C/77°F)	±2% F.S.	±2% F.S.	±2% F.S.	±2% F.S.
TDS Conversion Factor	0.5	0.65	0.5	0.5
Dosing Relay	maximum 2A (fuse protected), 250 Vac, 30 VDC Contact close when measure:			
	> setpoint	< setpoint	> setpoint	> setpoint
Setpoint	adjustable from 0 to 199.9 mg/L (ppm)	adjustable from 0 to 1999 mg/L (ppm)	adjustable from 0 to 19.99 mg/L (ppm)	adjustable from 0 to 999 mg/L (ppm)
Temperature Compensation	automatic from 5 to 50°C (41 to 122°F) with $\beta = 2\%/^{\circ}\text{C}$			
Calibration	manual, with CAL trimmer			
Overtime	adjustable, typically from 5 to approximately 30 minutes			
Power Supply	models "-0": 12 VDC adapter (included) models "-1": 115/230 VAC; 50/60Hz			
Dimensions	83 x 53 x 99 mm (3.3 x 2.1 x 3.9")			
Weight	models "-0": 200 g (7.1 oz.) models "-1": 300 g (10.6 oz.)			
Ordering Information	BL983315-0 (12 VDC), BL983315-1 (115/230V), BL983319-0 (12 VDC), BL983319-1 (115/230V), BL983321-0 (12 VDC), BL983321-1 (115/230V), BL983329-0 (12 VDC) and BL983329-1 (115/230V) are supplied with mounting brackets, transparent cover and instruction manual.			
Recommended Probe	HI7634-00 EC/TDS probe with internal temperature sensor and 2 m (6.6') cable (not included). HI7634-00/4 EC/TDS probe with internal temperature sensor and 4 m (13.1') cable (not included). HI7634-00/5 EC/TDS probe with internal temperature sensor and 5 m (16.4') cable (not included).			