



BL983315 • BL983319  
BL983321 • BL983329

## TDS Mini Controllers

- Models available with 4-20 mA galvanic isolated output with external dosing disable contact
- 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.

BL983315: When in automatic mode, the 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  $1.0 \mu\text{S}/\text{cm} = 0.5 \text{ ppm}$ .

BL983319: When in automatic mode, the 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  $100 \mu\text{S}/\text{cm} = 65 \text{ ppm}$ .

BL983321: When in automatic mode, the 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  $1.00 \mu\text{S}/\text{cm} = 0.50 \text{ ppm}$ .

BL983329: When in automatic mode, The 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                 | $\pm 2\%$ f.s. at 25 °C (77 °F)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                            |                                      |                                      |                                      |
| TDS Factor               | 0.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0.65                                                                                                                                                       | 0.5                                  | 0.5                                  |                                      |
| Temperature Compensation | automatic from 5 to 50°C (41 to 122°F) with $\beta = 2\%/^{\circ}\text{C}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                            |                                      |                                      |                                      |
| Calibration              | manual, with calibration trimmer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                            |                                      |                                      |                                      |
| Output                   | galvanic isolated 4-20 mA output; accuracy $\pm 0.2 \text{ mA}$ ; 500 $\Omega$ maximum load (BL9833XX-2 only)                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                            |                                      |                                      |                                      |
| Dosing                   | adjustable setpoint                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | adjustable setpoint: covers measure range                                                                                                                  |                                      |                                      |                                      |
|                          | relay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | relay closes when reading > setpoint                                                                                                                       | relay closes when reading < setpoint | relay closes when reading > setpoint | relay closes when reading > setpoint |
|                          | dosing contact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | maximum 2A (internal fuse protection), 250 VAC or 30 VDC                                                                                                   |                                      |                                      |                                      |
|                          | overtime                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | dosing relay is disabled if setpoint is not reached within the set time interval. Timer adjustable between approx. 5 to 30 minutes, or disabled by jumper. |                                      |                                      |                                      |
|                          | external disable input                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Normally Open: enable / Closed: disable dosing (BL9833XX-2 only)                                                                                           |                                      |                                      |                                      |
| Power Supply             | models "-0": 12 VDC adapter (included)<br>models "-1": 115/230 VAC, 50/60Hz<br>models "-2": 115/230 VAC, 4-20 mA Output<br>input: 10 VA for 115/230 VAC, 50/60 Hz models; 3 W for 12 VDC models; fuse protected; installation category II.                                                                                                                                                                                                                                                                                                         |                                                                                                                                                            |                                      |                                      |                                      |
| Dimensions               | 83 x 53 x 99 mm (3.3 x 2.1 x 3.9")                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                            |                                      |                                      |                                      |
| Weight                   | 12 VDC models, 200 g (7.1 oz); 115/230 VAC models 300 g (10.6 oz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |                                      |                                      |                                      |
| Ordering Information     | <b>BL983315-0</b> (12 VDC), <b>BL983315-1</b> (115/230 VAC),<br><b>BL983315-2</b> (115/230 VAC, 4-20 mA Output),<br><b>BL983319-0</b> (12 VDC), <b>BL983319-1</b> (115/230 VAC),<br><b>BL983319-2</b> (115/230 VAC, 4-20 mA Output),<br><b>BL983321-0</b> (12 VDC), <b>BL983321-1</b> (115/230 VAC),<br><b>BL983329-0</b> (12 VDC), <b>BL983329-1</b> (115/230 VAC),<br>and <b>BL983329-2</b> (115/230 VAC, 4-20 mA Output), are supplied with mounting brackets, transparent cover and quick reference guide with instrument quality certificate. |                                                                                                                                                            |                                      |                                      |                                      |
| Recommended Probe        | <b>HI7634-00</b> EC/TDS probe with internal temperature sensor and 2 m (6.6') cable (not incl).<br><b>HI7634-00/4</b> EC/TDS probe with internal temperature sensor and 4 m (13.1') cable (not incl).<br><b>HI7634-00/5</b> EC/TDS probe with internal temperature sensor and 5 m (16.4') cable (not incl).                                                                                                                                                                                                                                        |                                                                                                                                                            |                                      |                                      |                                      |

ติดต่อบริษัท นีโอนิคส์ จำกัด

Tel: 098-479-5684 หรือ 061-8268939

E-mail: sale@neonics.co.th หรือ sale@tools.in.th