



Turtle Tough's TT-DSS200 Optical Analyser allows for extremely reliable and traceable data measurements

TT-DSS200 Optical Analyser

Code: TT-DSS200

- Monitor Dissolved Oxygen, Turbidity NTU, Suspended Solid, Sludge Blanket turbidity
- Digital communication technology for extremely reliable measurements without any interference.
- Four digital sensor inputs
- Two 4-20 mA outputs, 2 relay outputs
- Modbus RTU output
- Wide range of sturdy and smart sensors

Scope

- Wastewater treatment
(aeration basins to monitor/control nitrification/denitrification processes)
- Drinking water (raw water testing)
- Sewerage networks
- Treatment of industrial effluents
(discharge testing, control, etc.)
- Surface water monitoring
- Fish farming, etc.





TURTLE TOUGH

TT-DSS200 Optical Analyser

Code: TT-DSS200C

Turtle Tough's new TT-DSS200 Optical Analyser connects four digital sensors to monitor:

- Dissolved Oxygen (by optical channel)
- Turbidity (NTU)
- Suspended Solid (g/L)
- Sludge Blanket Turbidity (%)

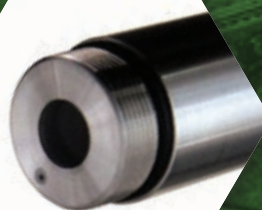
The measured values are displayed and transferred by analog or digital means. The preconfigured regulatory functions optimize process control.

The TT-DSS200 Optical Analyser is related to a wide range of perturbation-resistant digital sensors: pre-amplification built into the sensor and digital processing of signals.



Digital "SMART" Optical Sensors

All data regarding calibration, logs, users and measurements are processed directly in the sensor allowing for extremely reliable and traceable measurements.





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Specifications

TT-DSS200 Optical Analyser

	Principle	Ranges	Accuracy	Material
Oxygen	Fluorescence optics	0.00 mg/l to 20.00 mg/l 0% to 200%	±0.1 mg/l and ±1%.	Special membrane, stainless steel 316L or Titanium, herazil
Turbidity (Sensor NTU)	IR Nephelometry (IR diffusion at 90°)	0.00 to 50.00 NTU 0.0 to 200.0 NTU 0 to 1,000 NTU 0 to 4,000 NTU	< 5% of NTU reading	Delrin, PVC, PMMA, Stainless steel
Suspended Solid	IR Absortimetry (870 nm)	Suspended: 0,00-50,00 g/L Turbidity: 0-4,000 FAU	Suspended Solid < 10% Turbidity: ± 5% FAU	Delrin, Nickel-plated brass
Sludge Blanket	IR Absortimetry (870 nm)	0-100 %	VB ± 2%	Delrin, Nickel-plated brass

Software and features

1 to 4 digital inputs	4 RS485 digital sensor inputs
2 digital inputs	Controller stop by external dry contact Flow measurement Impulse input
2 analog outputs	0/4-20 mA with galvanic insulation 500Ω, resolution < 0.010 mA
2 relay digital outputs	Dry contact free potential configurable MAX. 12 V, 200 mA
3 relay outputs	2 configurable digital outputs: - 1 as alarm relay - 1 NO free potential Max. 250 V, 6A, 1000 VA
Controller	On/Off control with hysteresis, P or PI
Control	On/Off control with hysteresis Pulse – pause, Frequency pulse Analog uninterrupted
Limit value	Min. and Max. values Adjustable time (09999 s)
Digital interface	Slave Modbus RTU

Technical characteristics

Power supply	230 V/AC ± 10 % (50/60Hz)	117 V/AC ± 10 % (50/60Hz)
Power consumption	16 VA	
Display	Backlit LCD screen 4x20 characters 5 directional button keyboard	
IP index	IP 65	
Operating temperature	-20° to 50°C Max. 90 % relative humidity at 40 °C not condensed	
Storage temperature	-20°C to +65°C	
Dimensions	160 x 165 x 85 mm (HxWxD)	
Weight	1.1 kg	