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colored wastewater detector

The ECD-100 Colored Wastewater Detector provides real-time monitoring of discoloration in industrial and municipal wastewater treatment systems. Using advanced RGB LED light transmission technology, the sensor detects even the slightest changes in water color. Measurements are taken every 5 seconds and transmitted via dual 4–20 mA outputs, making integration into existing systems straightforward. Thanks to its compact, submersible design and automatic air-cleaning system, the ECD-100 Colored Wastewater Detector is both low-maintenance and highly reliable. It's ideal for early detection of contamination, process control, or compliance with environmental discharge regulations. With no need for chemical calibration, a fast setup, and affordable operation, the ECD-100 is an innovative and cost-effective alternative to turbidity or colorimeters in a wide range of applications, including food and beverage, chemical plants, and wastewater treatment facilities.

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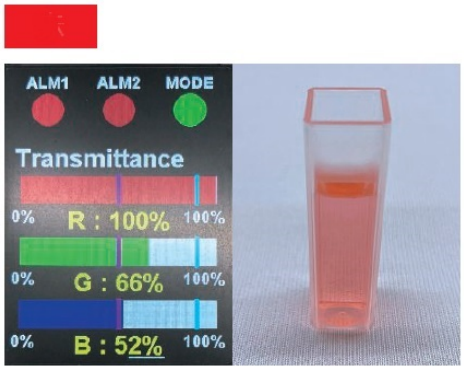
colored wastewater detector

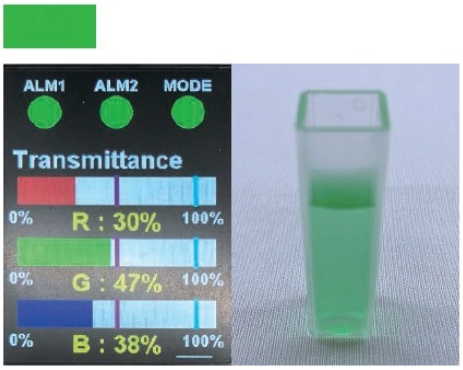
colored wastewater detector

- Real-time color detection
- Accurate RGB analysis
- Perfect for wastewater & effluent monitoring
- Plug & play installation
- Automatic air cleaning
- Direct integration with your system

intelligent, cost-effective real-time monitoring of color pollution in wastewater

Instantly detect discoloration in industrial wastewater without complex systems or expensive installation. The ECD-100 Colored Wastewater Detector combines simplicity, reliability, and continuous monitoring in a single, robust design. The system detects subtle color changes using intelligent visible light transmission (iVLT) with RGB-LED. Ideal for wastewater treatment, process control, and environmental compliance.





applications

- Industrial wastewater
- Effluent discharge monitoring
- Food, chemical, and paper industries
- Water reuse and environmental compliance
- Alternative to expensive color or turbidity sensors

technical specifications

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Parameter	Specification
Measurement Range	0–100% transmission / 0.00–2.00 absorbance / 0–100% attenuation
Measurement Frequency	Every ~5 seconds (value held during cleaning)
Sensor Type	Submersible (in-tank or channel)
Cleaning Method	Automatic air purge (0.05–0.50 MPa)
Power Supply	AC 100 V ±10%, 50/60 Hz, approx. 6 W
Signal Output	2 × 4–20 mA analog outputs (configurable per RGB channel), alarm, and fault relays
Sensor Dimensions	Ø 90 × 300 mm
Display Unit Dimensions	160 × 260 × 130 mm
Cable Length	5 meters (sensor to display)

With its fast setup, automatic cleaning, and straightforward 4–20 mA output, the ECD-100 is ideal for any site where discoloration indicates contamination, process deviations, or product loss.

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ecd-100

	Description	Metric	Imperial
1	Model name	ECD-100	ECD-100
2	Model number	ECD-100	ECD-100
	Liquid	**Metric**	**Imperial**
3	Strainer availability and size		
	Gas	**Metric**	**Imperial**
4	Gas quality		
5	Gas remark		
	Electrical	**Metric**	**Imperial**
6	Unit phase Ø voltage	AC 100 V ±10%, 50/60 Hz	AC 100 V ±10%, 50/60 Hz
7	Unit power consumption	6 watts	6 watts
8	Wetted parts		
9	Pump model		
10	Pump phase Ø voltage		
11	Pump phase Ø voltage 60Hz		
12	Pump pressure setting		
13	Control		
	Connections	**Metric**	**Imperial**
14	Water inlet		
15	Water outlet		
16	Gas inlet		

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