

- **Input signal from probes type INGOLD or compatible**
- **Temperature compensation input**
- **Built-in source for probe polarization voltage**
- **Rechargeable battery for probe polarization voltage**
- **Current or voltage output signals**
- **Digital display option**

DESCRIPTION

BDOT105 is an panel mount electronic transmitter for dissolved oxygen measurement. It converts the signal from a standard probe for dissolved O₂ made by INGOLD or compatible. The transmitter provides the polarization voltage necessary for probe operation and performs the measurement temperature compensation using the signal from the built-in thermistor. The output is a standard voltage or current signal allowing connection of any standard control, data logging, or indication device. An optional digital display may be fitted for indication of measured dissolved oxygen value in % and a keyboard for indication calibration. BDOT105 has a built-in rechargeable battery for constant maintaining of probe polarization even when power supply is absent. A front panel switch may turn off the polarization voltage. The transducers of dissolved oxygen BDOT105 are used when dissolved oxygen has to be measured by standard (low-cost) indicators, data loggers, and controllers. The fields of application include biotechnological, chemical, food, etc. industries, and research.

TECHNICAL SPECIFICATIONS

Input	: From probe type INGOLD or compatible
Range	: 0 to 100,0 %
Temp compensation	: NTC22k Ω
Range	: 0 to 70,0°C
Output	: 4-20, 0-20mA, 0-2VDC or custom
Load	: 600 Ω
Accuracy	: < \pm 0.5% FS
Polarization voltage	: 675mV DC
Display	: 3-digit LED, height 9mm
Keyboard	: 2 membrane keys and 1 switch for polarization
Supply	: 110, 230 VAC 50/60 Hz or 12 to 24VDC
Ambient temp	: 0 to +60°C RH 10-85%
Mounting	: Panel
Wiring	: Screw terminals
Housing	: IP44
Battery	: 3 years min
Size	: H96 x W48 x D120mm
Weight	: 350g

INSTALLATION

Supply	: 110, 230 VAC 50/60 Hz or 12 to 24VDC
Ambient temp	: 0 to 60°C
Humidity	: 0-85%
Dimension	: H96 x W48 x D120mm
Weight	: 350g

**PERFORMANCE (% of span)**

Accuracy	: < \pm 0.5% FS
Repeatability	: < \pm 0.5% FS
Response time	: < 30sec, 0-95%
Polarization voltage	: < \pm 0.1mV
Indication	: 3-digit LED
EMC	: EN 50081-1, EN 50082-2, EN 61010-1, ϵ

**ORDER INFORMATION****BDOT105**

SUPPLY	PROBE	OUTPUT	ISOLATION
Z Specify	Z Specify	Z Specify	X No Isolation
A 230VAC	A Sensorex	E 0-20mA	I Isolated output
B 110VAC	B Ingold	F 4-20mA	
R 24VAC		H 0-2VDC	
Q 12-24VDC			
Isolated			

PROTECTION

X None
P IP65 front