ISM Sensor Signal Converter

Easy Upgrade for Biocontrollers*



Use digital sensors on analog biocontrollers*

With the J-Box BTLE, digital ISM pH and optical DO sensors can be used on analog biocontrollers. Optical DO sensors provide fast response, high signal stability and very low maintenance (no liquids, no polarization).



Sensor status at a glance

Convenient access to ISM predictive diagnostics on iSense and iSense Mobile is enabled over Bluetooth communication.



Flexible wireless operations

Wireless sensor calibration, maintenance, and configuration provide optimized process control.



Simplified compliance

Sensor history and calibration data are stored in ISM sensors for convenient electronic documentation on iSense PC software.



Digital signal converter for ISM sensors on analog biocontrollers*

J-Box BTLE (Bluetooth Low Energy) is a junction box that converts the digital signal from ISM pH and optical DO sensors into an analog signal (mV for pH and nA for optical DO). The J-Box BTLE provides direct connection of a 1-wire ISM pH sensor and an RS485 ISM optical DO sensor to an analog biocontroller.

The J-Box BTLE features a Bluetooth 4.0 interface that operates with iSense PC software and the iSense Mobile app. These tools enable wireless access to ISM's advanced diagnostics, full calibration options, maintenance, and data logging features.

* Can also be used with analog transmitters.



Key technical data for the J-Box BTLE Signal Converter

pH (ISM 1-wire sensors) Dissolved oxygen (ISM optical sensors)		
24 VDC		
pH signal output	$-500+500 \text{ mV } (R_0 = 17 \text{ k}\Omega)$	
Signal	mV non T-compensated	
Zero point adjusted to	0 mV @ 25 °C	
Slope adjusted to	−59.16 mV/pH @ 25 °C	
Output range	05000 nA	
Signal	nA non T-compensated	
Zero point/offset	0 nA @ 25 °C	
Air current/slope adjusted to	−70 nA @ 25 °C	
Bluetooth 4.0 iSense PC-based and iSense Mobile (Android, iOS)		
	24 VDC pH signal output Signal Zero point adjusted to Slope adjusted to Output range Signal Zero point/offset Air current/slope adjusted to	

¹ Only to be used with optical dissolved oxygen sensors with a nA output

Ordering information

J-Box BTLE Signal Converter

Designation	Order No.
J-Box BTLE	30 365 368

Accessories

Designation	Order No.	Usage
Power supply	30 323 961	To power up the J-Box BTLE
BT 4.0 USB dongle	30 371 387	To be used with PC-based iSense software
Cable VP-8/VP-8, 1m	30 094 370	Connection cable for oDO sensor to J-Box BTLE ¹
Cable AK9/1m/BNC-50	59 902 168	Connection cable pH 1-wire sensor to J-Box BTLE ¹

¹ Other cable lengths available



www.mt.com/isense-mobile

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For more information

Sales and service:





Management System certified according to ISO 9001 / ISO 14001

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