Meiry Solutions

Datasheet

MB-2PBS-001

ModBlock[™] - Dual Probe + Bridge option + Scan Data



What is ModBlock™

ModBlock[™] is a digital transmitter which allows easy integration of Hamilton probes into your control system. The Bridge option allows incorporating a strain gauge measurement (pre-calibrated for Pendotech pressure)

Key Benefits

- Fully digital design. No analog conversion is required.
- Complete probe parameter dataset is available. For typical Hamilton probe this amounts to several hundred parameters
- Calibration using Hamilton approved methods are made easy.
- All probe diagnostic parameters are visible from control system. Preventative maintenance is simplified.
- Efficient use of system resources. All complicated communication is performed by device.
- Fully "Plug and Play" for factory probes. No complicated configuration is required
- Integrated pressure or load cell measurement with configurable amplifier gain. Standard cable available for Pendotech single use

Ver: 1.0, Feb 12, 2024

Meiry Solutions

Specifications

Supported Probes (Hamilton)	Visiferm DO ARC, Visiferm SU DO, EasyFerm Arc pH, OneFerm SU pH, CO2 CO2NTROL, InCyte (with scan)
System Driver/Graphics	Available for DeltaV version 14.3.1. Includes driver module, and iFix module faceplate
DST Usage (DeltaV system)	2 x Analog control output + 1 Analog input (Scan Data)
Master Protocol	Modbus RTU. All Modbus RTU conformant baud rate, data/stop bits and parity settings are supported.
Master Protocol Configuration	Automatic, by commissioning magnetic key
Probe Protocol (ports 1 & 2)	Modbus RTU. All supported probe baud rates allowed. Probes can be auto-detected.
Enclosure Rating	NEMA 4X, IP65
Power Supply	24VDC, 4 watt maximum. Supplied via master communication cable. Includes power to probes.
Operating temperature	-20 to 65 °C, max 95% relative humidity (non-condensing)
Dimensions (in)	4.9 x 3.14 x 2.26 (w x h x d)
Master Port Cable	5 pin, M12 male for ModBlock end. Flying leads on customer side for power (24+, Gnd) and RS-485 (A, B).
	Part Number: MBK-MCB-xxx, where xxx denotes length. Available in lengths of 10, 20, 50, 100, 200, 500 ft.
Probe Port Cable	5 pin, M12 male for ModBlok end. VP connector on probe end.
	Part Number: MBK-PCB-xxx, where xxx denotes length. Available in lengths of 10, 20, 50, 100, 200, 500 ft.
Bridge amplifier gain	Adjustable (10 to 850)
Bridge resolution	13 bit, 12 bit for positive pressure range
Bridge excition voltage	2.5V
Bridge Port Cable (Pendotech sensor)	5 pin, M12 male for ModBlock end. Pendotech 4 pin connector on sensor end. 12 ft long.
	Part Number: MBK-BCB-012

Ver: 1.0, Feb 12, 2024