

Water Quality Monitoring System

Model Q51 Mobile Calibrator

DESCRIPTION

The Badger Meter MetriNet water quality monitoring system accommodates a variety of smart sensors for remote monitoring of water quality. The system allows operators to calibrate sensors in the lab and simply swap them in the field. The Q51 Mobile Calibrator is a portable battery-operated unit that can be used to program and calibrate MetriNet M-Node sensors wherever and whenever needed.

The Q51 Mobile Calibrator is ideal for applications where MetriNet sensors are connected directly to PLC systems or other digital devices. Digital systems can simply poll the sensors for the main measurement data. All the complicated setup and calibration functions can be done with the Q51 Mobile Calibrator, greatly simplifying customer interface programming requirements.

In addition to the setup and calibration functions, the Q51 Mobile Calibrator is also a datalogger. It can be used for temporary data collection when connected to one or more sensors.

Connection of up to 8 sensors is possible with the use of added bus bars.

FEATURES

- Battery-powered using three standard AA size alkaline batteries
- Connection to 16 different MetriNet sensors
- Programming of all sensor setup variables such as damping, power mode and alarms
- Calibration of any MetriNet sensor anywhere
- Integral Datalogger with data storage interval from 0.1...60 minutes
- 4 GB of data storage with USB download port
- Logs one sensor continuously for up to 90 days



SPECIFICATIONS

Description	MetriNet M-node sensor setup and calibration
Analysis Method	Various depending on parameter
Power	Three internal AA alkaline batteries
Display	128 × 64 graphical OLED
Environmental Rating	Nema 6 (IP68) submersible
Data Log Frequency	0.1...60 minutes, programmable
Data Storage	4 MB SPI flash memory
Size	Approx. 11 × 7 × 4 in. (279 × 178 × 102 mm)
Connection	Data cable with M8 waterproof connector, 3.2 ft (1 m)
Temperature Limits	32...140° F (0...60° C)
Enclosure	ABS UL94-V0 with silicon boot
Electromagnetic Immunity	Designed to EN 61326-1
Environmental	RoHS Compliant

AVAILABLE SENSORS

Part No.	Measurement	Range	Sensitivity
00-1847	Free Chlorine	0...5.00 ppm	0.01 ppm
00-1854	Combined Chlorine	0...5.00 ppm	0.01 ppm
00-1855	Total Chlorine	0...5.00 ppm	0.01 ppm
00-1849	pH	2...12 pH	0.01 pH
00-1848	Conductivity	0...2000 µS	1 µS
00-1850	ORP	0...1000 mV	1 mV
00-1851	Dissolved Oxygen	0...20.00 ppm	0.01 ppm
00-1856	Fluoride	0.1...10.00 ppm	0.01 ppm

Part No.	Measurement	Range	Sensitivity
00-1852	Dissolved Ozone	0...2.000 ppm	0.001 ppm
00-1857	Chlorine Dioxide	0...5.00 ppm	0.01 ppm
00-1858	Peracetic Acid	0...200 ppm	1 ppm
00-1859	Hydrogen Peroxide	0...20.00 ppm	0.01 ppm
00-1853	Turbidity	0...40.00 NTU	0.01 NTU
00-1864	Pressure	0...300 PSIG	1 PSIG
00-1863	4E Conductivity	0...2000 mS	1 µS
00-1861	Nitrite (NO ₂)	0...2.000 ppm	0.001 ppm

ORDERING INFORMATION

00-1798 Q51 Mobile M-Node Calibrator. Sensors sold separately.
Calibrator includes cables for sensor and USB connections.