

WATER QUALITY MONITOR/ANALYZER

Liquid Analysis

ONLINE WATER QUALITY MONITOR - PCM200

Measurement & Monitoring



DESCRIPTION

The PCM200 Water Quality Online Monitor is designed for high reliability and accurate long-term monitoring, featuring a durable sapphire valve core with a 10-valve system that offers excellent wear resistance and strong tolerance to acids, alkalis, and organic solvents. Its advanced reference and digestion pool design eliminates measurement interference from displacement or light pollution, while waste liquid separation and dynamic dilution functions optimize reagent usage and adapt automatically to varying concentration ranges. The system supports comprehensive quality control, including standard addition recovery, blank and parallel sample testing, zero and span checks, with automatic, manual, and remote QC operation. Enhanced safety and reliability are ensured through automatic fault diagnosis, alarms, overheating protection, power-on alerts, and automatic recovery after power interruption. With hourly data logging, alarm records, over 5 years of data storage, USB export capability, and three-level user access management, the PCM200 delivers a robust, intelligent, and user-friendly solution for continuous water quality monitoring.

FEATURES

- ✓ Advanced reference and digestion pool design
- ✓ Automatic fault diagnosis and alarm
- ✓ Automatic recovery after power interruption
- ✓ Communication Modbus RS-232, RS-485; output 4-20mA
- ✓ 7" touchscreen display
- ✓ Data logging function

TECHNICAL FEATURES

Display	7" touchscreen
Measurement Mode	Continuous mode, periodic mode (adjustable from 1 hour to 30 days), fixed point mode, controlled mode, and manual mode are optional
Calibration	Manual calibration or automatic calibration
Maintenance Cycle	Once a month
Power Supply	220VAC±10%, 50HZ±10%
Output	4-20mA
Communication	Modbus RS-232, RS-485
Operating Conditions	Temperature adjustable room, recommended temperature +5-40°C Humidity ≤85% (no condensation)
Dimensions	302mm x 271mm x 462mm

I-SYSTEM MEASUREMENT
www.ismesb.com



WATER QUALITY MONITOR/ANALYZER
ONLINE WATER QUALITY MONITOR - PCM200

01-2026

I-SYSTEM

511007

I-SYSTEM

511/007

PARAMETER LIST

	Parameter	Working Principle	Measuring Range	
1	CODcr Chemical Oxygen Demand	Dichromate method	Range:	0-50000mg/L (customisable)
			Indication	Range 0-200mg/L: 20%* $\leq \pm 10\%$; 50%* $\leq \pm 8\%$; 80%* $\leq \pm 5\%$
			Deviation:	Range >200mg/L: $\leq \pm 3\%$
			Repeatability:	$\leq 2\%$
2	NH3N Ammonia	Salicylic acid optical colorimetry	Resolution:	0.1mg/L
			Range:	0-500mg/L (customisable)
			Indication	Range 0-10mg/L: 20%* $\leq \pm 8\%$; 50%* $\leq \pm 5\%$; 80%* $\leq \pm 3\%$
			Deviation:	Range >10mg/L, $\leq \pm 3\%$
3	TP Total Phosphorus	Ammonium molybdate spectrophotometry	Repeatability:	$\leq 2\%$
			Resolution:	0.0001mg/L
			Range:	0-100mg/L (customisable)
			Accuracy:	$\leq \pm 5\%$ or $\leq \pm 0.005\text{mg/L}$ (whichever is higher)
4	TN Total Nitrogen	Alkaline potassium persulfate oxidation – resorcinol method	Repeatability:	$\leq 2\%$
			Resolution:	0.0001 mg/L
			Range:	0-250mg/L (customisable)
			Accuracy:	$\leq \pm 5\%$
5	TMn Total Manganese	Formaldehyde oxime spectrophotometry	Repeatability:	$\leq 2\%$
			Resolution:	0.0001 mg/L
			Range:	0-10mg/L (customisable)
			Accuracy:	$\leq \pm 5\%$
6	TFe Total Iron	O-phenanthroline spectrophotometry	Repeatability:	$\leq 2\%$
			Resolution:	0.0001 mg/L
			Range:	0-20mg/L (customisable)
			Accuracy:	$\leq \pm 5\%$
7	Cr6+ Hexavalent Chromium	Diphenylcarbazide (DPC) spectrophotometry	Repeatability:	$\leq 2\%$
			Resolution:	0.0001 mg/L
			Range:	0-5mg/L (customisable)
			Indication Error:	$\leq \pm 10\%$
8	CODmn Chemical Oxygen Demand	Permanganate Index	Repeatability:	$\leq 5\%$
			Resolution:	0.001 mg/L
			Detection Limit:	≤ 0.5 mg/L
			Indication Error:	$\leq \pm 10\%$ or $\leq \pm 0.2$ mg/L (whichever is higher)

