



PCOD-3M

COD ANALYZER PCOD-3M

Introduction

TOP INSTRUMENT COD Analyzer PCOD-3M uses advanced cold light source, narrow-band interference technology and microcomputer to automatically process data. The instrument first digests the sample with sealed catalyst, and then measure them by colorimetric method.

Features

- **Separation of Analyzer and Digester:** The separation ensures that the analyzer doesn't impact the stability of the optical system in the digester. This design choice enhances the overall performance and accuracy of the analysis.
- **Optical System:** The analyzer utilizes a cold light source and a narrow-band interference optical system, providing excellent optical stability. This choice of technology contributes to reliable and consistent results in COD analysis.
- **User-Friendly Interface:** Both the analyzer and digester feature a color touch screen with a user-friendly interface. This makes the operation intuitive and accessible for users.
- **Operation Efficiency:** The digestion colorimetry process does not require changes, simplifying and saving time in the operation. This feature streamlines the analysis process for more efficient water quality testing.
- **Multi-Point Error-Free Calibration:** The digester employs multi-point error-free calibration, ensuring zero error measurements at set points. This eliminates errors that might arise from the nonlinearity of temperature sensors in common digesters, contributing to more accurate results.
- **Safety Features:** The digester includes a timing reminder function and an automatic shutdown after digestion. Moreover, there is a secondary protection feature that cuts off power if the digester's temperature exceeds 200 °C , ensuring the safety of the digestion process.
- **Data Storage and Retrieval:** The analyzer can store up to 300 standard curves and 1000 measurements, with data retention even in the event of a power outage. The ability to inquire about curve details, standard substance values, absorbance, calibration information, and calibration state enhances traceability and reproducibility.
- **Printing Function:** The analyzer allows for the printing of single or multiple page results, facilitating documentation and reporting of analysis outcomes.
- **Connectivity:** Equipped with a USB interface, the instrument can be connected to a computer for data transfer and further analysis.
- **One-Key Recovery:** The instrument features a one-key recovery function, preventing accidental loss of curve and data. This ensures data integrity and reduces the risk

of errors.

- **Self-Calibration Function:** The instrument has a self-calibration function, allowing it to recalibrate during operation. This feature helps eliminate drift errors that may occur over prolonged use, maintaining measurement accuracy.

Technical Parameter

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| Measurement range | COD: 5 ~ 2000mg/L | Indication error | COD: $\leq \pm 5\%$ |
| Repeatability | $\leq 3\%$ | Display | color touch screen, Chinese and English display |
| Anti-chlorine interference: | $\leq 2000\text{mg/L}$ | Temperature control system | can be set at room temperature $\sim 200^\circ\text{C}$, COD digestion temperature is 165°C |
| Temperature control accuracy | $\pm 0.5^\circ\text{C}$ | Temperature control time | adjustable from 1 to 9999min |
| digestion time | COD is 15min | Optical stability | the instrument absorbance value drifts less than 0.002A within 20min |
| Batch volume | 16 water samples | Weight | Main unit 5kg; digestion instrument 5.5kg |
| Dimensions | measuring instrument 400mm*310mm*158mm; Digestion instrument 355mm*260mm*135mm | | |
| Power consumption | <500W | | |
| Normal use conditions | | | |
| Ambient temperature | 5 to 40°C | Relative humidity | $\leq 85\%$ |
| Power supply | AC (220 \pm 22) V; (50 \pm 0.5) Hz | No significant vibration and electromagnetic interference, avoid direct sunlight. | |