

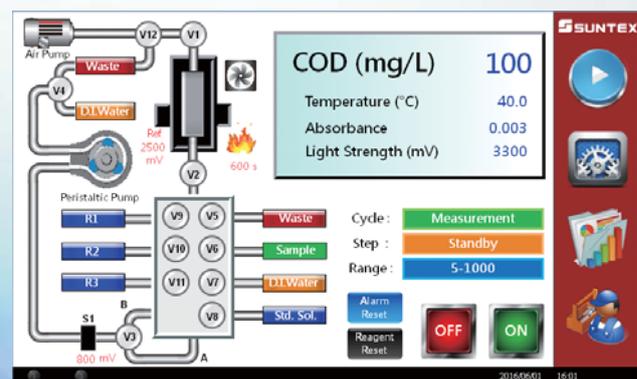
# Intelligent Online COD Analyzer

SIA-9100



## Reliable and User-Friendly for a wide range COD measurement

The All-New SIA-9100 is an all range online COD analyzer which is applicable for both inlet or effluent stage of industrial & municipal wastewater treatment, tap water and ground water. The unique liquid dosing design reduces cross contamination risk and ensures the measurement reliability. It also greatly increases the durability of the pump & tubing and thus reduces the maintenance loading. The convenient touch screen HMI provides full process information, convenient setting, historical data, trend curve, allows downloading via USB stick. The SIA-9100 is the state-of-art instrument to optimize the quality of your online COD measurement.



Convenient touch screen with graphical process procedure illustration and data logger function

### Features:

- User-friendly interface with graphic display allows intuitive & quick operation
- Human-Machine Interface is equipped with graphic procedure illustration
- The interior transmitter can also show real-time measurement
- Automatic estimation and display for the amounts of residual reagents
- Historical measurement data up to 10,000 sets downloading through USB memory stick
- Graphical trend curve of measurement help you master the process history
- Programmable setting of measuring steps, feed, waste discharge and heating duration
- Automatically discharge residual amounts of reagents before starting measurement
- Unique liquid dosing design—reagents and waste do not contact the peristaltic pump tubing so that its lifetime can be extraordinarily prolonged, and cross contamination of samples can be avoided
- Automatic compensation to the intensity of light source enhances measurement stability
- Security protection: password protection and self-diagnostics, warning & operation shutdown by rapid real-time leak monitoring, by acrylic security door unlocked, by system error or usual sampling or insufficient reagents
- Programmable controls external sample dosing pump according to the measurement setting cycle avoids external pump running in all time and thus extends the external pump lifetime



# Intelligent Online COD Analyzer

## SIA-9100

### Specifications:

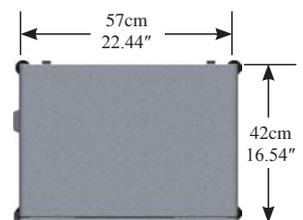
Model		SIA-9100
Measuring mode		COD / ABS / Temperature
COD range		5~1000 mg/L, 500~5000 mg/L, 1000~10000 mg/L
Accuracy		<±10% of measuring values
Repeatability		<±5% of measuring values
Principle		Potassium Dichromate method
Ambient conditions		Temperature: 5~50°C; Humidity: <90% (without condensation)
Display		10 inch of HMI with color touch screen display
Languages		English/ Traditional Chinese/ Simplified Chinese
Digestion time		3 ~ 120 minutes
Min. measuring time		Approx. 30 minutes (as digestion time is set as 10 minutes)
Measuring cycle		Fixed duration of 25~1440 minutes, or self-defined on the hour
Calibration		Manual or automatic calibration, automatic calibration duration: 1~99 days
Contact output	Relay 1 & 2	RELAY ON/OFF contact, 240VAC 0.5A Max. (recommended) Two individual programmable contacts for Hi point, Lo point, measurement, calibration, wash and error shutdown
	Relay 3	RELAY ON/OFF contact, 250VAC 10A Max. (recommended) One control point for sampling pump
Analog output 1		Isolated DC 0/4~20mA corresponding to COD measurement, max load 500Ω
Analog output 2		Isolated DC 0/4~20mA corresponding to COD measurement or temperature, max load 500Ω
Digital interface	HMI	Isolated RS-485 interface, with Modbus RTU protocol, offers readouts, calibration data and setup information and available for remote setting of control parameters
	Transmitter	Isolated RS-485 interface, timing interval outputs COD measurement, temperature, status & time
HMI		1.Remote control via Modbus; 2. HMI is movable to remote place and control via RS-485
Transmitter		1.Running programs of transmitter are regulated by HMI 2.While not connected to HMI, it can still work independently based on set programs 3.Under Standby status, the transmitter can directly start the measurement procedure 4.Directly trigger emergent shutdown via transmitter
Self-monitoring		Rapid, real-time self-leak monitoring & self-diagnosis of instrument status
Depleted amounts of reagents		Take one measurement per hour for example: • Amount of oxidant: 1 liter per month • Amount of masking agent: 1 liter per month • Amount of catalyst: 1 liter per month (Changes depend on measuring cycles and amounts of reagents.)
Data logger		HMI records measurement data, calibration data and warning data up to 10,000 data sets Download data via USB-A interface
Power supply		Please indicate single-phase power voltage and frequency as ordered 01: 220VAC(-15~+10%)/60Hz      02: 220VAC(-15~+10%)/50Hz
Power		275W Max
Dimensions		163mm × 59mm × 42mm (H×W×D)
Weight		Approx. 92 Kg (without reagents)
Protection		Human Machine Interface: IP65 (NEMA 4X)



Front door opened



Front dimensions of SIA-9100



Top dimensions of SIA-9100

\* The specifications and appearance of the instrument are subject to change without notice.

\* **What's included:** Two 10 L empty bottles for DI water and waste, two door keys, two M6 L10mm screws

\* **Note:** Based on individual customer's need, there is an optional function of requested model for monitoring or operating through wire/ wireless transmission with support of Internet-based devices such as PC, mobile phones and tablet PC.

### Optional Accessories:

1. Oxidant 1L: 0.12 wt% (~150 mg/L), 0.5 wt% (~500 mg/L), 0.9 wt% (~1,000 mg/L or ~10,000mg/L)
2. Catalyst 1L
3. Masking agent 1L
4. COD Standard Solution 1L: 100 mg/L, 200 mg/L, 500 mg/L, 1000 mg/L



**SUNTEX INSTRUMENTS CO., LTD.**

Web site: [www.suntex.com.tw](http://www.suntex.com.tw) E-mail: [suntex@ms1.hinet.net](mailto:suntex@ms1.hinet.net)

13F., No.31, Lane 169, Kangning St., Xizhi Dist., New Taipei City 22180, Taiwan (R.O.C.)

Tel: 886-2-2695-9688 Fax: 886-2-2695-9693

Taichung Branch: 886-4-2319-7996 Kaohsiung Branch: 886-7-334-4103