

Drinking Water Multi-Parameter Analyzer

ATE5400

Features

- All modules (measurement, display, transmission) are integrated into a compact, easy-to-install housing.
- The integrated flow cell ensures stable water flow and accurate data.
- Features self-diagnosis, abnormal data recording, and information upload.
- Optional remote diagnostic system for faster fault troubleshooting.
- 7-inch HD industrial touchscreen for a user-friendly interface.
- RS-485 interface, MODBUS-RTU protocol, bidirectional communication, supports remote commands.
- Long-term data storage (5-minute intervals), up to 10 years, with USB export.
- Easy operation with no complex sample prep or chemicals, reducing contamination risks.

Application

- Water treatment plant production process control
- Water resources and utilities management
- Health supervision
- Drinking water distribution network
- Secondary water supply

Description

ATE5400 series drinking water multi-parameter online analyzer is a new generation water quality monitoring device developed and manufactured by our company. It uses modern sensor technology, automatic control technology, specialized data analysis software, and communication networks to form an online automated water quality monitoring system. The product integrates pH electrode, residual chlorine electrode, temperature electrode (conductivity electrode, low-range turbidity electrode).

ATE5400 can be flexibly installed based on the site conditions, requiring minimal space. With the integration of automation control and communication network technologies, it effectively meets the needs for unattended online monitoring and real-time data transmission of drinking water quality parameters. It is suitable for long-term continuous online monitoring of drinking water distribution networks and secondary water supply, enabling continuous, real-time, and accurate monitoring of water quality and its changes. This makes it an essential online analysis device for water treatment plant production process control, water resources and utilities management, health supervision, and other fields.



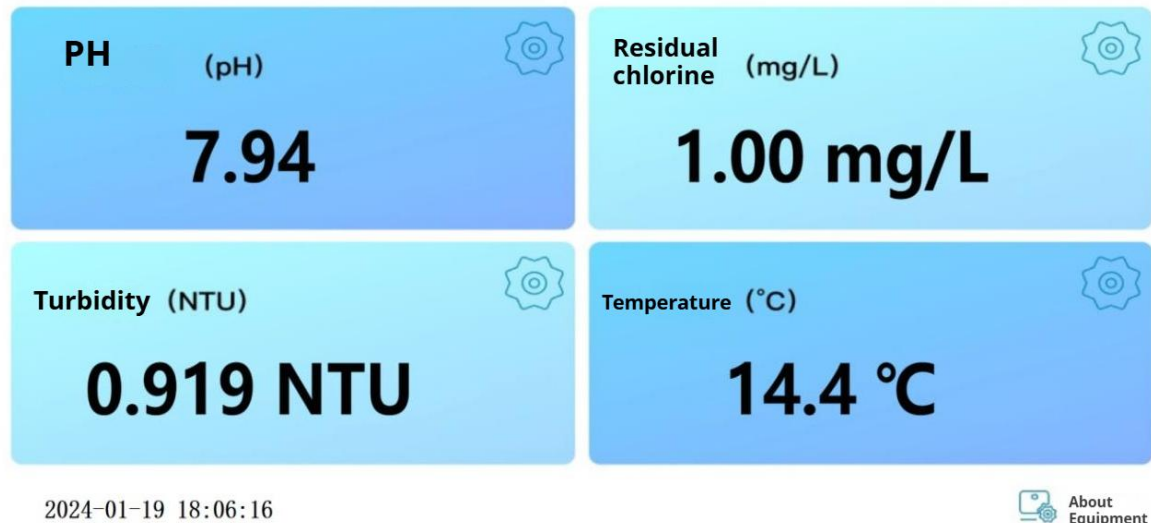
1. Internal structure diagram



2. Stable Flow Ventilation Module



3. Data Interface Display Diagram



4. Parameter

Product name	ATE5400
Installation method	Wall-mounted
Dimensions	620x400x220mm
Data processing	Multi-function terminal industrial computer, capable of data collection, analysis, display, calibration, and data saving
Power supply	AC220V
Water inlet	PU tube with outer diameter $\phi 6$, flow rate 300m/min, pressure 0.1-0.2MPa
Usage range of matching sensor	pH: 0-14; turbidity: 0-20NTU; temperature: 0°C-50°C; residual chlorine: 0-20mg/L; conductivity: 0-20ms/cm
Project	Parameters
Measurement parameters	Residual chlorine
Measurement principle	Glass electrode method
Range	0-14pH
Resolution	0.01
Accuracy	± 0.1
Working conditions	0-50°C, <0.5MPa
Temperature compensation	Automatic temperature compensation
Power supply	12-24VDC
Signal output	RS-485(Modbus/RTU)

Power consumption	0.2W@12V
Protection level	IP68
Project	Parameters
Measurement parameters	Turbidity
Measurement principle	Scattered light method
Range	0-20NTU
Resolution	0.001NTU
Repeatability	≤1%
Power supply	12-24VDC
Power consumption	0.2W@12V
Communication method	RS485, ModBus-RTU protocol
Working conditions	5-45°C, humidity less than 95%, no condensation
Waterproof level	IP68
Casing material	POM
Project	Parameters
Measurement parameters	Residual chlorine
Measurement principle	Constant voltage method
Range	0-20mg/L
Resolution	0.01mg/L
Repeatability	≤2%
Calibration method	Single point calibration
Temperature compensation	Automatic temperature compensation, pH compensation
Signal output	RS485, ModBus-RTU protocol
Response time	<30s
Flow rate	<10L/h
Operating temperature	0-55°C
Power consumption	0.2W@12V
Power supply	12-24VDC
Protection level	IP68
Item	Parameters
Measurement parameters	Conductivity, temperature
Measurement method	Graphite electrode method
Range	Conductivity: 0~20mS/cm Temperature: 0~50°C
Accuracy	≤± 1%

Repeatability	≤1%
Resolution	Conductivity: 0.1uS/cm
Detection limit	1us/cm
Response time	≤30s
Zero drift (24h)	≤± 1%F.S.
Range drift (24h)	≤± 1%F.S.
Temperature compensation accuracy	≤± 1%
Calibration cycle	3 months (or according to on-site working conditions)
Operating temperature range	0~50°C
Protection level	IP68
Project	Parameters
Module	Touch screen
Hardware parameters	Display screen 10.1 ' 1024×600 HD screen
Resolution	1024×600
Color	16.7M
Brightness	450cd/m ²
Backlight type	LED
Touch type	Resistive
Flash memory	4GB
RAM memory	512M
Power consumption	10W@24VDC
Rated voltage	24V, DC±20%,
Withstand voltage	500VAC
Insulation resistance	Over 50MΩ@500VDC
Protection level	Panel meets IP65, body meets IP20
Vibration resistance	10-25Hz (X, Y, Z direction 2G/30 minutes)
Cooling method	Natural wind cooling
Casing material	Engineering plastic ABS (flame retardant grade)
Installation method	Panel installation