



Recorder



Flow



Pressure



Temp



Analyzer



Level

Datasheet

Residual chlorine meter

SUP-TRC/ERC400

Supmea[®]

www.supmea.com

Datasheet

Residual chlorine meter SUP-TRC/ERC400

The residual chlorine meter has a built-in sensor, which has the characteristics of high measurement accuracy, fast response time and low maintenance cost. The residual chlorine meter outputs 4~20mA standard signal and RS485 signal, which can be connected to various regulators, and can be connected to two-position regulators, time proportional regulators, non-linear regulators and classic PID regulators according to requirements, which can be combined into various types. Residual chlorine control system.

Applications

- Secondary water supply
- Tap water
- Pool water
- Water works
- Agricultural drinking water

Features

- The electrode measurement is accurate and the response speed is fast
- LCD with backlight, easy and intuitive operation
- With automatic temperature compensation, pH manual compensation function
- Restore factory function to avoid data loss by misoperation
- Isolated 4-20mA standard signal can realize signal remote transmission
- Range can be switched manually
- A variety of calibration methods are convenient for on-site adjustment



Residual chlorine meter

Parameters

Residual chlorine meter

Display	7 inch touch screen
Protective box size	Dimensions: 400mm×300mm×200mm Window size: 155mm×87mm
Measuring range	Residual chlorine: (0~5) mg/L Temperature: (0.1~40.0)°C
Transmit output	(4~20)mA (optional)
Communication	MODBUS RS485
Load Resistance	≤750Ω
Environment humidity	≤95% no condensate
Power supply	220VAC
Ingress protection	IP43

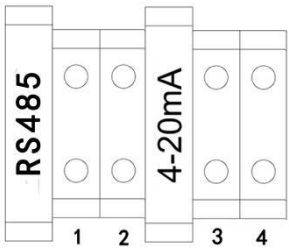
Residual chlorine electrode

Measurement content	HCLO、CLO2
measuring system	Microelectronics MEMS technology, special membrane structure
Measuring range	(0~5) mg/L
Accuracy	When ≤0.1mg/L, the absolute error is ±0.01mg/L; When ≥0.1mg/L, ±5% of the measured value or ±0.02mg/L (whichever is greater)
Resolution	0.01
Polarization time	When using for the first time, first pass water for 2 hours in chlorinated water, and then power on for half an hour.
Response time	Less than 30s after polarization is completed
Minimum conductivity	≥100us/cm, can not be used for ultrapure water
Operating temperature	(0~40)°C (non-condensing)
Temperature compensation	Pt1000 with built-in integrated automatic compensation
Max pressure	4bar
Recommended flow rate	≥0.03m/s in flow cell
pH range	(5~9) pH, below 5 will damage the membrane head
Maximum chlorine concentration	≥5ppm
Power supply	Standard 24V DC±2V; optional 12V DC±2V
Power consumption	1.56W
Digital communication	MODBUS RS485
Cable length	Standard 3 meters, others can be customized
Probe weight	210g
Thread size	NPT 3/4
Connection method	5-pin waterproof aviation plug
Moisture-proof material	PVC and Viton® O-ring seals

Wiring

Residual chlorine meter wiring definition

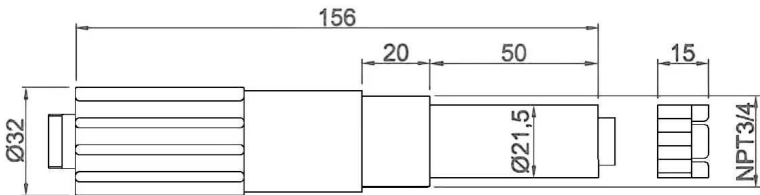
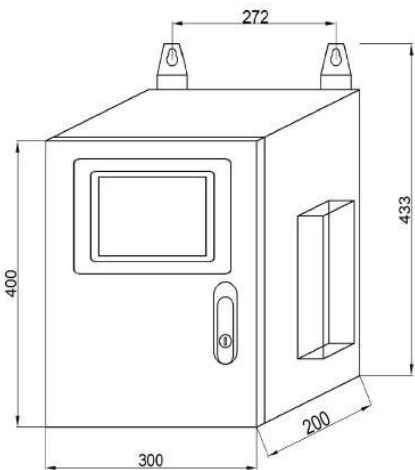
- 1 --- RS485A
- 2 --- RS485B
- 3 --- 4-20 mA +
- 4 --- 4-20 mA -



Sensor Wiring Definition

Core number	1	2	3	4	5
Sensor wire	Red	Black	Yellow	Green	White
Signal	+24VDC	-24VDC	RS485 A	RS485 B	Ground wire

Dimension



Unit: mm

Ordering code

SUP-TRC400 -RT1-O0-D1-I1-V1												Description
SUP-TRC400	-	-	-	-	-	-	-	-	-	-	-	(0~5) mg/L
Type	RT1											No
Transmit output		O0										(4~20) mA
		O1										RS485
Communication			D1									2 relay outputs
Relay output				A2								220VAC(140~240VAC)
Power supply					V1							

SUP-ERC400 -ST1-C1-D1-V1-CS3												Description
SUP-ERC400	-	-	-	-	-	-	-	-	-	-	-	Compact type
Type	ST1											PT1000 temp compensation
Compensation Type		C1										RS485
Communication			D1									24VDC (22~26VDC)
Power supply				V1								12VDC (10~14VDC)
				V3								3m
Power supply					CS3							XXm
					CSXX							