



Recorder



Flow



Pressure



Temp



Analyzer



Level

Datasheet

pH controller

SUP-pH8.0

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**Datasheet****pH controller  
SUP-pH8.0**

pH/ORP controller is one of the intelligent on-line chemical analyzers, which is widely used in the continuous monitoring on pH value or OPR value and temperature of thermal power, chemical engineering and fertilizer, metallurgy, environment protection, pharmacy, biochemistry, food and tap water as well as other solution.

**Applications**

- Sewage Treatment
- Exhaust Gas Treatment
- Dyeing Wastewater
- Strong Acid And Base
- Metal Surface Treatment
- Fertigation System
- Food Processing
- Power Plants

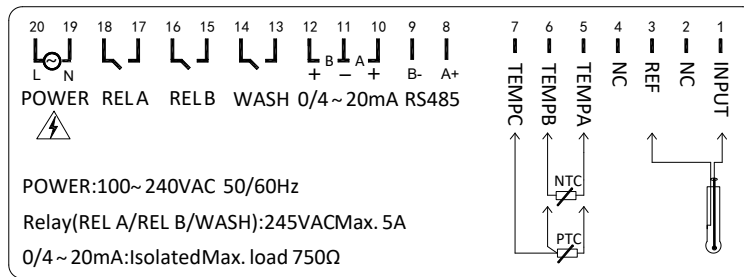
**Features**

- Easy to operate
- Built-in cleaning function
- Color screen display
- 3 warming modes
- RS485 communication
- Historical data records can be checked

**pH controller**

Parameters			
Screen size	4.3 inch		
Installation	Panel mounted		
Dimension	Overall dimension:144mm * 144mm * 115mm Cutout dimension:138mm * 138mm		
Panel thickness	1.0 ~ 5.0mm		
Weight	0.68Kg		
Ingress protection	IP65		
Measured variables	pH/ORP/Temp		
Measurement range	pH	-2.00 ~ 16.00pH	
	ORP	-1999 ~ 1999mV	
	Temp	-10.0 ~ 130.0°C	
Accuracy	pH	pH sensor	±0.02pH
	ORP	Antimony pH sensor	±0.2pH
	Temp	NTC10K	-10 ~ 60°C
			60 ~ 130°C
		PT1000/PT100	±0.3°C
Temperature compensation	NTC10K/PT1000 (PT100 optional) Temperature compensation: manual/automatic		
Operating temperature	0 ~ 60°C		
Storage conditions	-20 ~ 70°C		
Relative humidity	(10 ~ 85)%RH (No condensation)		
Input resistance	≥ 10 <sup>12</sup> Ω		
Language	Chinese/English		
Analog output	1 output (2 output optional) 4-20 mA, maximum loop is 750Ω,±0.2%FS		
Communication protocol	MODBUS-RTU RS485		
Alarm relay	2 channel, Normally open 245VAC 5A Max.		
Automatic Cleaning	Manually clean, set cleaning interval		
Record	100 sets, recording interval can be set through configuration, the recording method is FIFO.		
Power supply	100 ~ 240VAC, 5W Max, 50/60Hz		

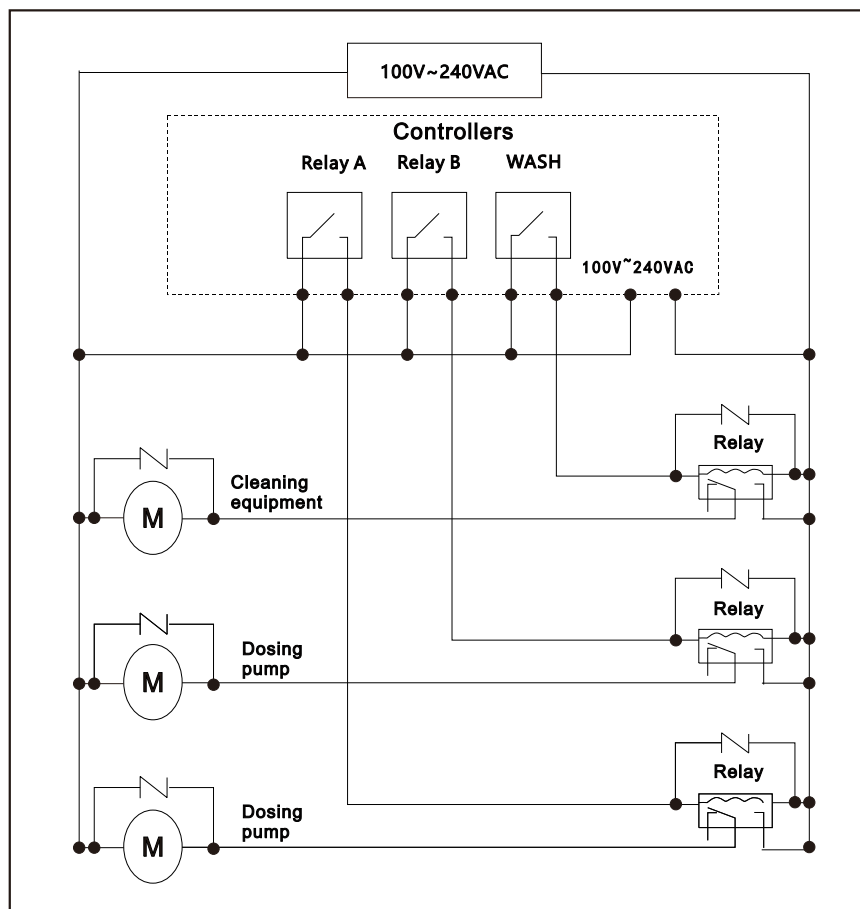
## Wiring



### Definition of the port

- 1、INPUT: pH/ORP/ Antimony electrode measuring terminal
- 2、NC: undefined
- 3、REF: pH/ORP/ Antimony electrode reference
- 4、NC: undefined
- 5、TEMPA: Temperature measurement terminal A
- 6、TEMPB: Temperature measurement terminal B
- 7、TEMPC: Temperature measurement terminal C
- 8、RS485 A+: RS485 communication interface A +
- 9、RS485 B-: RS485 communication interface B -
- 10、0/4 ~ 20mA A+: A Current output+
- 11、0/4 ~ 20mA A/B-: A/B Current output -
- 12、0/4 ~ 20mA B+: B Current output+
- 13/14、WASH: Cleaning device relay
- 15/16、REL B: Alarm relay B
- 17/18、REL A: Alarm relay A
- 19、POWER N: AC220V neutral wire
- 20、POWER L: AC220V live wire

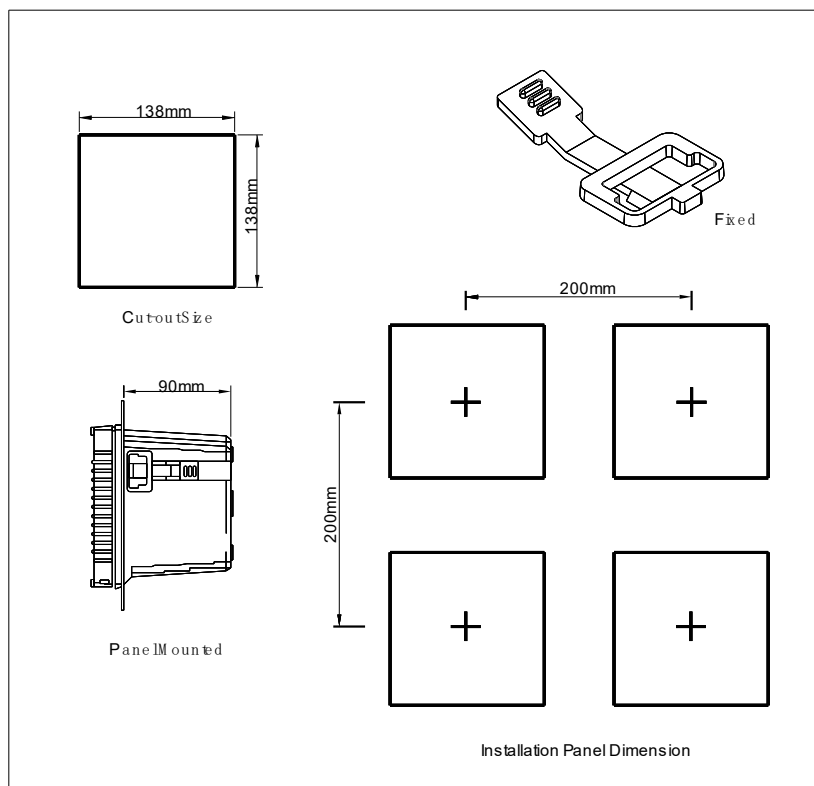
Electrical wiring reference diagram



## Dimension

A 138mm\*138mm installation hole is opened at the instrument cabinet or installation panel (The thickness of the mounting panel is 1.0 ~ 5.0mm).

Insert the controller into the square mounting hole and fasten the holder.



Ordering code

SUP-PH8.0-RT1-O1-D1-A3-V2														Description
SUP-XXX	-	-	-	-	-	-	-	-	-	-	-	-	-	
Range	RT1													(-2~16) pH (-1999~1999) mV
Transmission output	O1													1 way (4 ~ 20) mA transmission output
	O2													2 way (4~20) mA transmission output
Communication		D1												RS485
Relay output			A3											3 relay outputs
Power supply				V2										220VAC (100 - 240) VAC