Conductivity controller
Committed to process automation solutions

Datasheet

SUP-EC8.0

The SUP-EC8.0 is used in industrial measuring of the temperature, conductivity, Resistivity, salinity and total dissolved solids, such as waste-water treatment, environmental monitoring, pure water, sea farming, food production process, etc. The instrument can be panel, wall or pipe mounted. The instrument provides two current outputs. The maximum load is 500Ω. The instrument provides 3 relays. It can pass though a maximum of 5A/250VAC or 5A/30VDC.

Characteristics

- Easy operation

- NEMA enclosure for field mounting and panel mounting

- Automatically Temperature Compensation

- Directly switchable to EC or TDS

- Large LC D display with background lighting

- EC or TDS sensors can be connected thanks to the sensor supply integrated in the output

- Using the setup program: user-friendly programming

- Data logging capacity
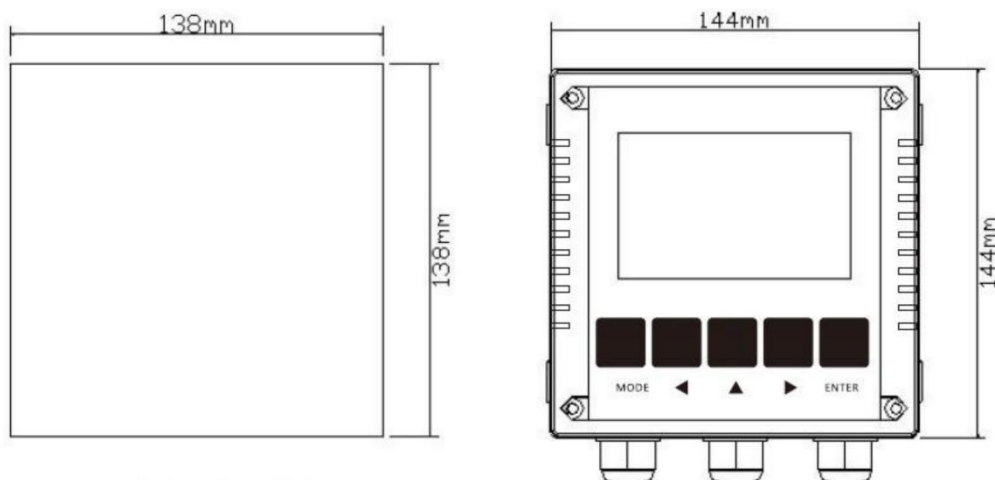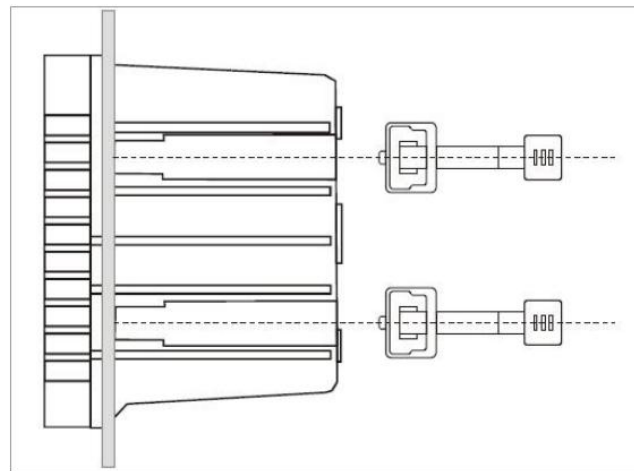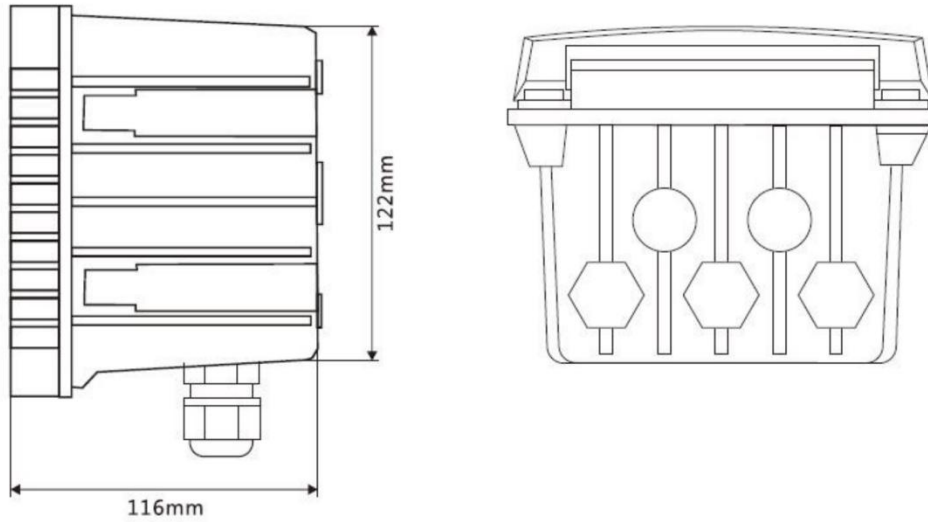
- 4-20mA analog output

- RS485 communication

Parameter

Functions	EC	TDS
Measuring range	0.00uS-2000mS	0-133000 ppm
Resolution	0.01/0.1/1	1
Accuracy	±1%F.S.	±1%F.S.
Temp. compensation	Pt 1000/NTC30K	
Temp. range	-10.0 to +130.0℃	
Temp. compensation range	-10.0 to +130.0℃	
Temp. resolution	0.1℃	
Temp. accuracy	±0.2℃	
Cell constant	0.001 to 20.000	
Ambient temperature range	0 to +70℃	
Storage temp.	-20 to +70℃	
Display	Back light, dot matrix	

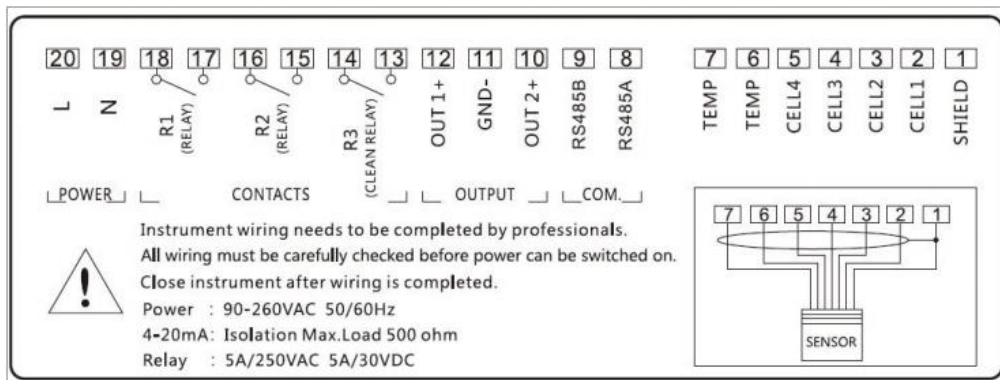| EC current output1	Isolated, 4 to 20mA output , max. load 500Ω
Temp. current output 2	Isolated, 4 to 20mA output , max. load 500Ω
Current output accuracy	±0.05 mA
RS485	Mod bus RTU protocol
Baud rate	9600/19200/38400
Maximum relay contacts capacity	5A/250VAC,5A/30VDC
Cleaning setting	ON: 1 to 1000 seconds, OFF: 0.1 to 1000.0 hours
One multi-function relay	clean/period alarm/error alarm
Relay delay	0-120 seconds
Data logging capacity	500,000
Language selection	English/traditional Chinese/simplified Chinese
Waterproof grade	IP65
Power supply	From 90 to 260 VAC, power consumption < 7 Watts
Installation	panel/wall/pipe installation
Weight	144 series:0.85Kg

Dimension

144 series: The instrument can be panel, wall or pipe mounted installation. Panel Installation: Make a 138x138 mm square cutout and insert the instrument. Screw in the fixed block with the screws and fixed bar.
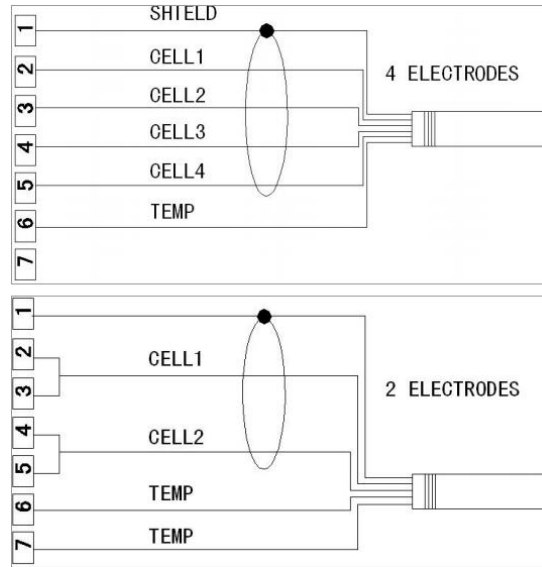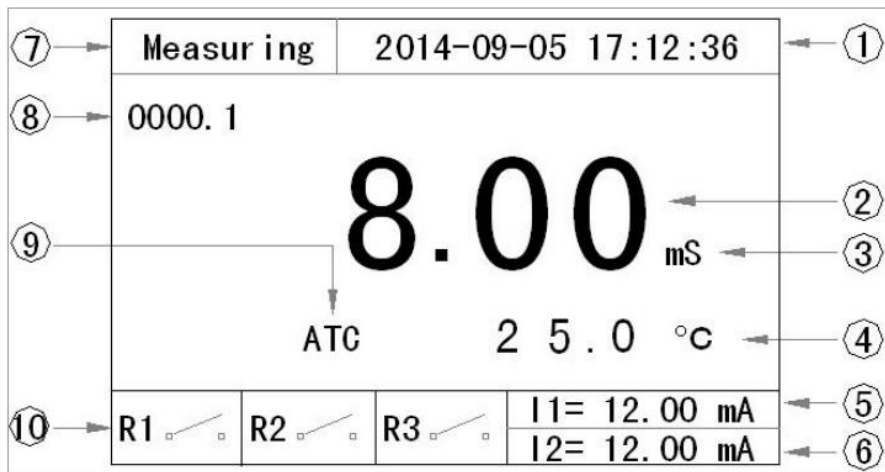
installation figure

Wiring

Connection label

Electrode connection figure

Display

1. Date and time
2. Main display
3. Unit
4. Temperature and unit
5. First current output
6. Second current output
7. Measurement status and Error indicator, there is no display if meter is in keeping mode
8. Count down timer: cycle time/clean time, it also displays the "delay" when relay3 has a delay enabled.
9. Temp. compensation: auto(ATC) or manual(MTC)
10. Relay indicator

Note: If the EC readings are over the range, it will display 99.99/999.9/9999 If the temperature readings are under or over the range, it will display -99.9/999.9.

Ordering Code

Conductivity meter						
SUP-EC8.0		Model				Description
Range	R1					0-20000µS/cm
Cell constant		K1				K=0.01 0.02 ~ 20.00µS/cm
		K2				K=0.1 0.20 ~ 200.0µS/cm
		K3				K=1.0 2.00 ~ 2000µS/cm
		K4				K=10.0 0.02 ~ 20.00mS/cm
Cable Length			L1			5M
			L2			10M
			L3			15M
			L4			20M
			L5			Other Length
Signal Output				S1		4-20ma RS485
Relay					A1	Two (high and low)
Power supply						V1	From 90 to 260 VAC, power consumption < 7 Watts

Ordering Code

Supmea

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