Recorder　Flow　Pressure　Temp　Analyzer　Level

Datasheet

Universal Controller

SUP-DC2000

Supmea®

Committed to process automation solutions

Datasheet

Universal Controller
SUP-DC2000

This product is a general-purpose controller for water quality, suitable for use with various water quality series digital sensors of our company. It is used to monitor water quality parameters including pH, ORP, conductivity, dissolved oxygen, turbidity, sludge concentration and other water quality parameters. Through RS485 or current transmission output to the monitoring room for record keeping.

Applications

- PH sensor
- Conductivity sensor
- Oxygen sensor
- Turbidity sensor

Features

- The isolated transmission output is adopted
- Adopt isolated RS485 communication technology
- With high and low alarm output function.
- With sound and light alarm function.
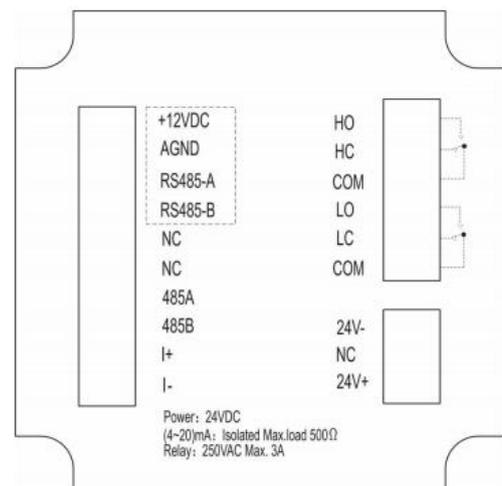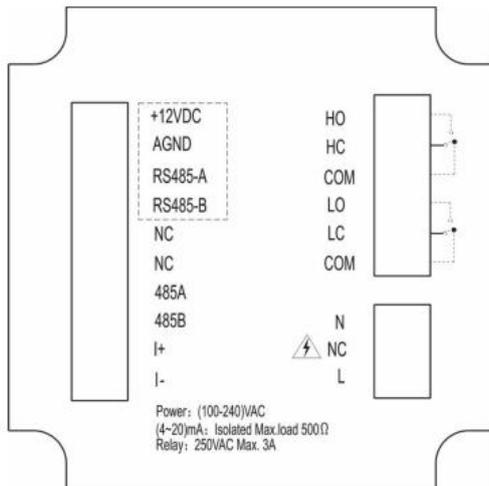- With LCD backlight switch control function

Universal controller

Principle

This product is a general-purpose controller for water quality, suitable for use with various water quality series digital sensors of our company. It is used to monitor water quality parameters including pH, ORP, conductivity, dissolved oxygen, turbidity, sludge concentration and other water quality parameters. Through RS485 or current transmission output to the monitoring room for record keeping.

Parameters

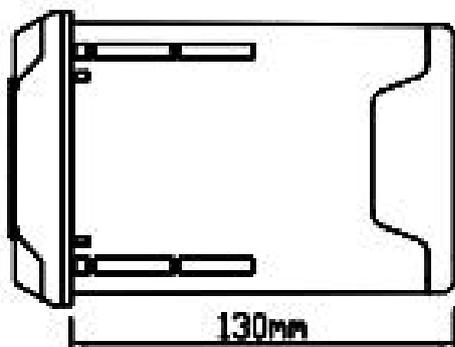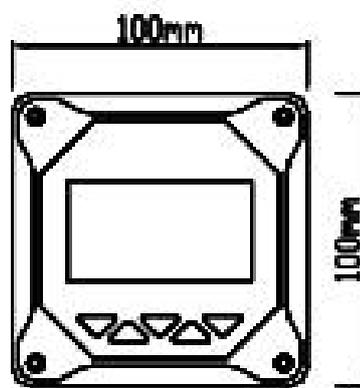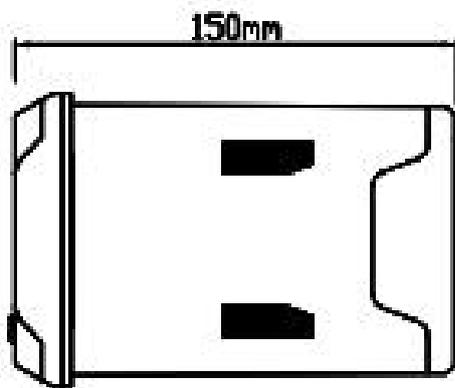|	
Display	2.8-inch monochrome LCD screen, resolution 128*64
Dimensions	100mm×100mm×150mm
Hole Size	92.5mm×92.5mm
Monitoring parameters	pH/ORP/conductivity/dissolved oxygen/turbidity/MLSS
Display range	pH: (0～14) pH ORP: (-2000～2000)mV Dissolved oxygen: (0～40)mg/L Saturation: (0～200)% Conductivity: (0～600)mS/cm Turbidity: (0～4000)NTU MLSS: (0～120000)mg/L
Current output	Isolation type, (4～20)mA can set the corresponding parameter measurement range, load capacity 500Ω, output accuracy ±0.2%FS
RS485 output	Isolated, Modbus-RTU communication protocol
Alarm	Normally open and normally closed, 2 channels, capacity AC250V/3A
Distribution output	12V/125mA
Relative humidity	(10 ~ 85)% (no condensation)
Operating temperature	(0 ~ 60)℃
Input power	AC: (100～240)VAC
	DC: 24VDC (optional)
Storage conditions	Temperature: (-15 ~ 65)℃
	Relative humidity: (5 ~ 95)% (no condensation)
	Altitude: <2000m

Wiring

- 12VDC:12V power supply +

- AGND: 12V power supply -

- RS485-A: Sensor RS485 communication port A

- RS485-B: Sensor RS485 communication port B

- NC: Unidentified

- RS485 A : RS485 communication interface A +

- RS485 B: RS485 communication interface B-

- I+：4-20mA output end+

- I-：4-20mA output end -

- HO：High alarm normally open relay

- HC：High alarm normally closed relay

- COM：relay common terminal

- LO：Low alarm normally open relay

- LC：Low alarm normally closed relay

- COM：relay common terminal

- L:Power port L

- N:Power port N

- 24V+: 24VDC +
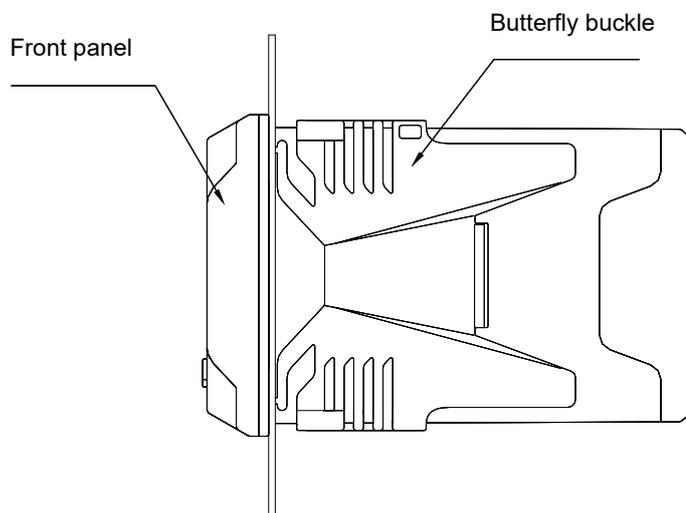
- 24V-: 24VDC -

Dimension

Installation

■ Installation

Installation Precautions

● This product is a tray-mounted type.
● Please install it indoors, away from wind, rain and direct sunlight.
● In order to prevent the internal temperature of this product from rising, please install it in a well-ventilated place.
● Please do not tilt left and right when installing this product, try to install it horizontally (can be tilted back <30°).

Avoid the following places when installing

● Places directly exposed to sunlight and near hot appliances.
● Places where the ambient temperature exceeds 60°C during operation.
● Places where the ambient humidity exceeds 85% during work.
● Near the source of electromagnetic generation.
● Places with strong mechanical vibration.
● Places where the temperature changes greatly and condensation is easy.
● Places with a lot of oil smoke, steam, moisture, dust and corrosive gasesInsert the meter into the mounting hole and fasten the butterfly buckle, as shown:

Schematic diagram of meter installation

Supmea®

Ordering code

SUP-DC2000 -A-B-4-1-EV-P1							Description
SUP-DC2000	-	-	-	-	-	-	
Input	A						RS485
Output		B					4-20mA+RS485
Alarm Output			4				2-channel SPDT
Electrical Interface				1			M16×1.5 cable gland×2+M12×1.5cable gland
Power Supply					E		220VAC
					C		24VDC
Accessories						P1	304SS Back Panel Mounting Bracket