

## PCDO02 Optimal Dissolved oxygen online analyzer



- 2.8 inches 12864 lattice screen.
- Isolating transmitting output, with little interference.
- Isolating RS485 communication.
- DO/SAT/OPP measurement, temperature measurement, upper/lower limit control, transmitting output, RS485 communication.

- Configurable manual and auto temperature offset function.
- Configurable upper/lower limit alarm and delay.
- Configurable hummer and LCD backlight switch.
- Optional language, Chinese and English.
- Air calibration.

### **Caution:**

Confirm that the instrument is not power on before connected with signal wire, to avoid electric shock.

Use double insulation wire to prevent fire accident.

Do not put electric product close to signal terminal, which may cause failure.



Optical Dissolved Oxygen Online Analyzer, an intelligent online chemical analyzer, is widely applied for continuous monitoring and measurement of dissolved oxygen, saturation, oxygen partial pressure and temperature in the solution in the industry of thermal power, chemical fertilizer, environmental protection, metallurgy, pharmacy, biochemistry, food and water, etc.

Continuous monitoring measurement data is connected with the recorder via transmitting output to realize remote monitoring and recording. It can also be connected with RS485 portal via MODBUS-RTU protocol to access computer for monitoring and recording. Application Scope **Application:** 

- Sewage treatment
- Waste water treatment
- Water treatment
- Drinking water
- Surface water: river, lake and sea
- Fishery
- Boiler feed water (trace oxygen measurement)

### **Caution:**

• The quality guaranty period of electrode of conductivity is one year, for the sake of more accurate measurement. After one year upon ex-work, the performance will be influenced whetherto be further used. Then it should be replaced in time.

• Power on the instrument before calibration to preheat for over half an hour.

• During measurement, clean the instrument in distilled water (or deionized water) and dry with filter paper, to avoid inclusions in the test liquid.

• Contact the manufacturer in case of anomaly or damage of the instrument. Do not repair it at your own.



Techinical indicators			
Measurenent variables	dissolved oxygen, saturation, temperature		
Measuring range	0 - 20mg/L,0 - 200%		
Resolution	0.01mg/L,1%		
Repetition:	±0.5%FS		
Measuring range:	0. 45°C		
Resolution			
Output	4~20mA output		
	maximum loop is 750Ω,±0.2%FS		
Correction accuracy:			
Output type	4 - 20mA current transmission output		
Max. loop resistance	750Ω		
Accuracy	±3%FS, 0.1%FS		
OUtput type	4 -20mA current transmission output		
Max. loop resistance	750Ω		
Communication protocol	standard MODBUS-RTU		
	(customizable)		
Power	AC220V±10%,50Hz/60Hz		
Alarm relay:	AC250V、3A		





#### Wiring diagram



#### main monitoring page

### Identification of terminal

- +12VDC:Power supply of dissolved oxygen electrode
- AGND: Power negative of dissolved oxygen electrode
- RS485-A:Dissolved oxygen electrode communication-A
- RS485-B:Dissolved oxygen electrode communication-B
- NC: Null
- ■NC: Null
- RS485(A+):RS485 communication interface A+
- RS485(B-):RS485 communication interface B-
- I(+):4-20mAoutput port+
- ■I(-):4-20mAoutput port-
- HO: High alarm of normal open relay
- HC: High alarm of normal close relay
- ■COM: Common port
- LO: Low alarm of normal open relay
- LC: Low alarm of normal close relay
- COM: Common port
- 220V L:AC220V fire wire
- ■NC: Null
- 220V N:AC220V zero wire



# Wiring connection

Definition of buttons



Sign	Button	Function description
	EXIT	Check related warning status on the "monitoring page"
ESC		Return to previous level page in the up& down level page linked to "menu page"



	RIGHT	Make a recurrent selection of digit of parameters Check the display values of other unit on the "monitoring page"
MENU	MENU	Enter the MENU on the "monitoring page" Exit the MENU on the "menu page"
	DOWN	Select the related menu on the "menu page" Modify the values in the configuration state
ENT	ENTER	Enter the sub-menu or confirm modification on the "menu Page"

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