



Datasheet

Digital analyser monitor

GDH-UM1



Committed to process automation solutions

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Digital analyzer monitor GDH-UM1

The GHD-UM1 Digital Analyzer Monitor is a highly versatile water quality controller engineered to work seamlessly with Global Data Harvest's full range of digital sensors. Designed for flexibility across a wide variety of applications, it enables real-time monitoring of key parameters including pH, ORP, conductivity, dissolved oxygen, turbidity, and sludge concentration.

Built for easy integration into modern control systems, the GHD-UM1 offers 4–20 mA outputs, Modbus RS485 communication, and dual alarm outputs as standard, providing reliable data transmission, process control, and system alerts.

Applications

Can be used with the following instruments:

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

Features

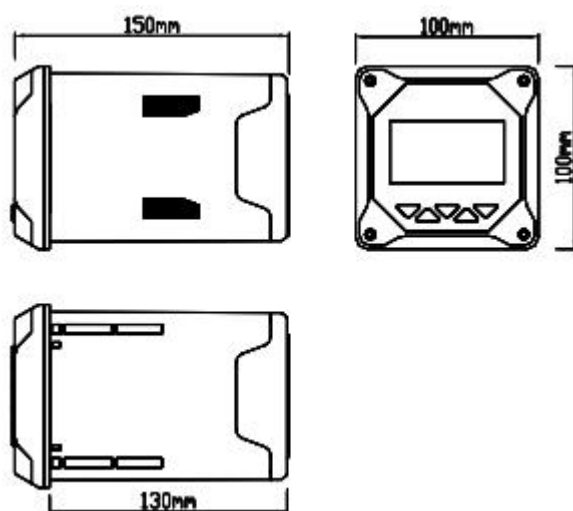
- The isolated transmission output is adopted, which is less affected by interference
- Adopt isolated RS485 communication technology
- With high and low alarm output function.
- With sound and light alarm function.
- With LCD backlight switch control function



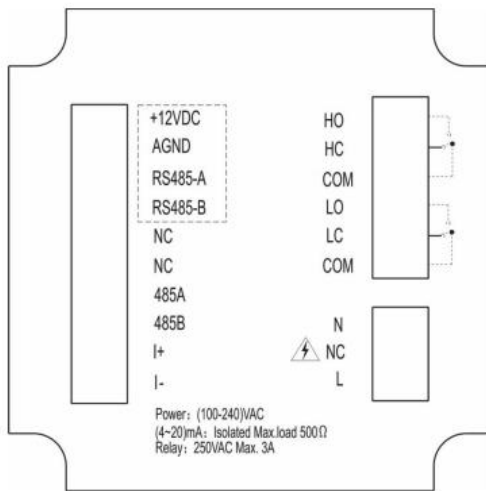
GDH-UM1

Parameters	
Display	2.8-inch monochrome LCD screen, resolution 128*64
Dimension	100mm×100mm×150mm
Hole size	92.5mm×92.5mm
Monitoring parameters	pH/ORP/Conductivity/DO/Turbidity/Sludge concentration
Display range	pH: (0~14)pH
	ORP: (-2000~2000)mV
	DO: (0~40)mg/L
	Saturation: (0~200)%
	Conductivity:(0~600)mS/cm
	Turbidity:(0~4000)NTU
	Sludge concentration:(0~120000)mg/L
Current output	(4~20)mA load capacity 500Ω, output accuracy ±0.2%FS
RS485 output	Isolated, Modbus-RTU communication
Alarm	2 channels, capacity AC250V/3A
Distribution output	12V/125mA
Relative humidity	(10 ~ 85)% (no condensation)
Working temperature	(0 ~ 60)°C
Input	AC: (100~240)VAC
	DC: 24VDC(Optional)
Storage conditions	Temperature:(-15 ~ 65)°C
	Humidity(5 ~ 95)% (no condensation)
	Height:<2000M
Protection level	IP54

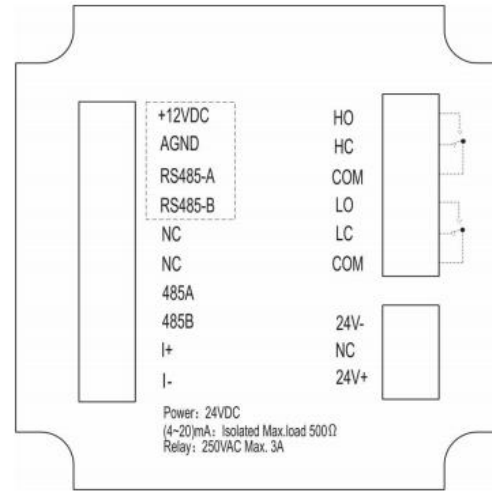
Dimension



Wiring



220VAC wiring diagram



24VDC wiring diagram

- 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 -

Ordering code

GDH-UM1-A-B-4-1-E														Description
GDH-UM1	-	-	-	-	-	-	-	-	-	-	-	-	-	Measure range: pH: (0~14)pH ORP: (-2000~2000)mV DO: (0~40)mg/L Saturation: (0~200)% Conductivity:(0~600)mS/cm Turbidity:(0~4000)NTU (0~120000)mg/L
	Input	A												RS485
	Output	B												4-20mA+RS485
	Alarm Output		4											2 Channels SPDT
	Electrical Interface			1										M16×1.5 Cable Gland× 2+M12×1.5 Cable Gland
	Power Supply				E									
				C										24VDC
Accessories					P1									304SS Back Panel Mounting Bracket