JNC 第四代銅離子計 Copper Sensor

CU485

[Features]



- IoT Cu^{2+} analyzer: RS-485 + Wi-Fi web interface, no meter or app needed.
- Scan the QR code to join device Wi-Fi and open its web page.
- Firmware updates (OTA) from the web page, no tools needed.
- Optional auto-clean: built-in air pump, adjustable schedule.
- Guided calibration in a phone browser with standard solution.
- AI diagnostics: status alerts, electrode fouling and aging check.
- All-in-one: IoT transmitter and sensor built in, ready on power-up.
- IP68 (CNS 14165) corrosion-resistant body; no guard tube needed.
- Rugged isolated cable; power and IoT lines surge-isolated.
- Isolated power and RS-485 prevent on-site interference.
- Temperature compensated; temp. per Taiwan EPA NIEA W218.51C.
- Ion-selective electrode measures free Cu^{2+}, not total copper.
- Stores calibration data: calibrate first, then install on site.
- 3-point calibration with standards or samples of known value.
- Holds last reading in calibration/cleaning; status readable.
- Last 3 calibration records (date/slope/points) via Web & RS-485.

[Applications] Wastewater, groundwater, aquaculture, rivers and lakes.

[Model Selection] CU485-Code 1-Code 2-Code 3

Code 1	Function	Code 2	Connector	Code 3	Cable / Hose Length
N	No auto-clean	C	Quick plug	3N	3 m + bare wire
				3C	3 m + quick plug
				10N	10 m + bare wire
				10C	10 m + quick plug
A24	Auto-clean, DC 24V pump	F	Cable gland	20N	20 m + bare wire
				20C	20 m + quick plug
				xN	x m + bare wire
				xC	x m + quick plug

C: Quick plug



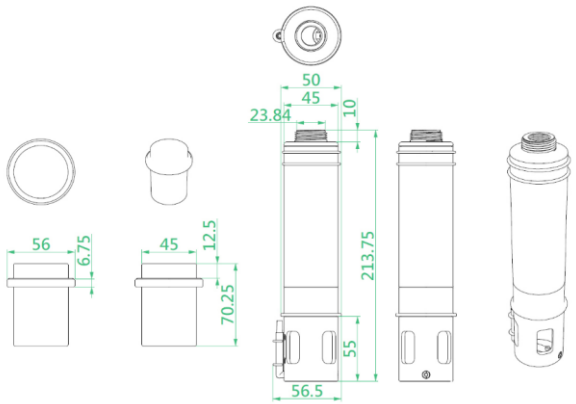
F: Cable gland



[Specifications]

Copper		Temperature	
Range	0~10000 mg/L (custom) Slope 70~130%	Sensor	NTC30K
		Range	-10~120°C, ATC
		Accuracy	±0.2°C
Accuracy	±5% of reading ±0.5 mg/L	Resolution	0.1°C
Resolution	0.01 mg/L	Repeatability	0.1°C
Repeatability	±3% of reading ±0.5 mg/L	Others	
Conditions	Operating temp.: 5~50 ℃	Top Thread	3/4" NPT thread
		Base Thread	M42 thread
Response	T90 ≤ 120 s	Housing	PP, food grade, acid/alkali-proof
		Electrode	PVC
Interface	RS-485 Modbus RTU Wi-Fi web page, no app needed QR code opens the web page (192.168.1.80)	Size	ø50*L213.9mm
		Weight	≤340 g
		Power	Cleaning: DC 24V (opt.) No cleaning: DC 9~36V
Approvals	CE (EU) FCC (US)	Consumption	Cleaning: 6.8 W No cleaning: 0.8 W
Origin	Taiwan	IP Rating	IP68 (CNS 14165)
Technical			
Principle	The sensing tip detects Cu^{2+} potential changes, converted to concentration with compensation for accurate data.		
Data Res.	16-bit (0.001% F.S)	Surge Prot.	DC 8000V
Power Iso.	DC 1500V	Comm. Iso.	RS-485 2500Vrms
Protection	Polarity, overload, shorts	Installation	Submersion, tee or insertion

[Dimensions] Unit: mm



[Calibration Notes]

※Optional Sample-CU on-site sample calibration

Ion-selective electrode: the most economical online method, no reagents. Each electrode is factory-calibrated per ISO 9001.

For best accuracy, check a site sample by colorimetry and calibrate with it. JNC's optional service dilutes the sample 10x and 100x for a 3-point calibration (low/medium/high).

Item	Model
Cu calibration	Sample-CU