JNC

光學化學需氧量(RS485 型)

UV Chemical Oxygen Demand (RS485 Type)

COD1500

[Features]



- Principle: UV absorption; organics absorb 254 nm UV light.
- UV254 LED source, long life and low drift; filtered for stability.
- Measures COD, BOD, TOC, turbidity and temperature.
- Reagent-free COD measurement with no secondary pollution.
- Built-in automatic turbidity compensation resists interference.
- RS-485 digital interface with standard Modbus RTU
- Sample-based calibration allows on-site adjustment.
- Low power draw; internal circuitry designed against interference.
- Compact, self-cleaning against biofouling; interval adjustable.
- IP68 rated, CNS 14165 tested for long-term submersion.
- Principle: complies with EPA method NIEA W518.51C
  Dissolved organics absorb 254 nm UV light; the absorption gives the COD value, while an 850 nm beam measures SS with auto turbidity and colour compensation.

[Applications]

Aquaculture, wastewater plants, surface water, waterworks, reservoirs and marine monitoring.

[Model Selection]

COD1500-Code 1-N-N

Code 1	Sensor Cable	Code 1	Sensor Cable
10N	10 m + Bare Wire	10C	10 m + Quick Conn.
Value N	Length + Bare Wire	Value C	Length + Quick Conn.

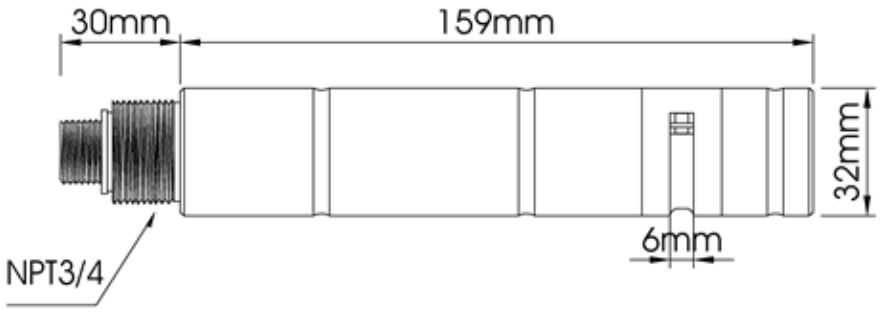
※Optional Sample-COD service for on-site sample calibration

※RS485 Type: Code 2 and Code 3 are fixed at N

[Specifications]

COD1500 Specifications					
Power	DC 9~36V, 2W				
Dimensions (mm)	ø 32x189				
Material	SUS 316L Stainless Steel				
Protection	IP68 (CNS 14165)				
Operating	Temp.: 0~50℃, Pressure: ≦1MPa				
Interface	RS-485 Modbus RTU				
Origin	Taiwan				
Measurement					
	COD	BOD(calc.)	TOC(calc.)	Turbidity	Water Temp.
Range	0~1500mg/L	0~3000mg/L	0~600mg/L	0~4000NTU	0~50℃
Accuracy	±5%	±5%	±5%	±5%	±0.5℃

[Dimensions] Unit:mm



[Electrode Notes]

Optical COD measurement is an alternative to the dichromate method, the most economical option with no added reagent cost, enabling continuous online monitoring. Every JNC electrode is calibrated with standard solution under an ISO 9001 procedure before shipment.

To remove background interference, take an on-site sample and use the dichromate method to confirm the concentration, then run an on-site sample calibration for a more accurate reading.

JNC offers (optional) on-site dichromate-method sample calibration; in practice an on-site sample and a 10x dilution are used, giving a two-point calibration at low (10x dilution) and high (on-site sample).

Item	Model
COD dichromate calibration	Sample-COD

[Features]



- Principle: UV absorption; organics absorb 254 nm UV light.
- UV254 LED source, long life and low drift; filtered for stability.
- Measures COD, BOD, TOC, turbidity and temperature.
- Reagent-free COD measurement with no secondary pollution.
- Built-in automatic turbidity compensation resists interference.
- Dual RS-485 and Wi-Fi interfaces; RS-485 runs standard Modbus
- Sample-based calibration allows on-site adjustment.
- Low power draw; internal circuitry designed against interference.
- Compact, self-cleaning against biofouling; interval adjustable.
- IP68 rated, CNS 14165 tested for long-term submersion.
- Principle: complies with EPA method NIEA W518.51C
  Dissolved organics absorb 254 nm UV light; the absorption gives the COD value, while an 850 nm beam measures SS with auto turbidity and colour compensation.

[Applications]

Aquaculture, wastewater plants, surface water, waterworks, reservoirs and marine monitoring.

[Model Selection]

COD1500-Code 1-Code 2-W

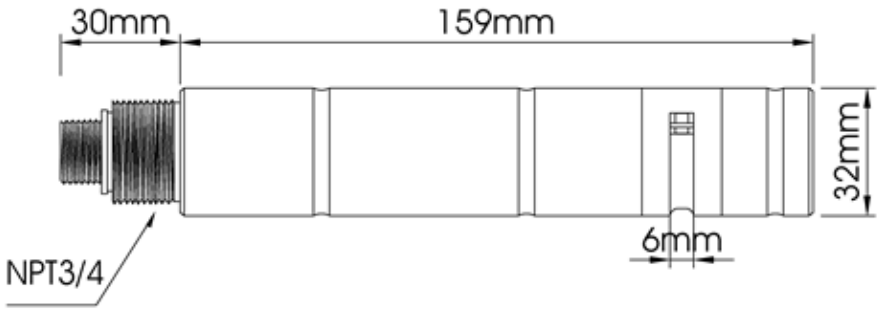
Code 1	Sensor to Wi-Fi Box	Code 2	Wi-Fi Box to Host
10N	10 m + Bare Wire	3N	3 m + Bare Wire
		3C	3 m + Quick Conn.
10C	10 m + Quick Conn.	10N	10 m + Bare Wire
		10C	10 m + Quick Conn.
Value N	Length + Bare Wire	20N	20 m + Bare Wire
		20C	20 m + Quick Conn.
Value C	Length + Quick Conn.	Value N	Length + Bare Wire
		Value C	Length + Quick Conn.

※Optional Sample-COD service for on-site sample calibration

[Specifications]

COD1500 Specifications					
Power	DC 9~36V, 2W				
Dimensions (mm)	ø 32x189				
Material	SUS 316L Stainless Steel				
Protection	IP68 (CNS 14165)				
Operating	Temp.: 0~50℃, Pressure: ≦1MPa				
Interface	RS-485, Wi-Fi web				
Origin	Taiwan				
Measurement					
	COD	BOD(calc.)	TOC(calc.)	Turbidity	Water Temp.
Range	0~1500mg/L	0~3000mg/L	0~600mg/L	0~4000NTU	0~50℃
Accuracy	±5%	±5%	±5%	±5%	±0.5℃

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Item	Model
COD dichromate calibration	Sample-COD