

## KT-300 Moisture in Oil Transmitter

### Product profile

KT-300 is a fast, reliable and accurate online detector for water activity (aw) in oil and temperature (T). It is very suitable for integration in OEM application with its rugged housing and excellent performance. KT-300 is ideal for online monitoring of moisture in lubrication, hydraulic or insulation oil, which is significant for the long-term performance and preventive maintenance of plant and machinery.



### Major features

- ◆ Continuous measurement of water activity in oil and temperature
- ◆ Professional calculation of moisture content in ppm for transformer oil
- ◆ Accurate and reliable, robust design under hostile environments
- ◆ Convenient local & remote calibration
- ◆ Excellent pollution & pressure tolerance
- ◆ Compact, easy for integration
- ◆ Analog and Digital Signals Output

### Technical Parameters

#### Water activity

Measurement range	0 ... 1 aw	
Accuracy	0 ... 0.6	± 0.02 aw
	0.6 ... 0.9	± 0.03 aw
	0.9...1	±0.04 aw
Resolution	0.001 aw	
Response time (typical)	< 1 min	

#### Water in oil

Measurement range	0...100ppm, 500ppm, 1000ppm, 2000ppm or customized
Accuracy	±10% or 10ppm (choose the higher one)

#### Temperature

Measurement range	-40 ... 120 °C
Accuracy (at +25 °C)	± 0.2 °C
Working temperature	-40 ... +80 °C
Storage temperature	-40 ... +80 °C
Oil temperature permitted	-40 ... +120 °C

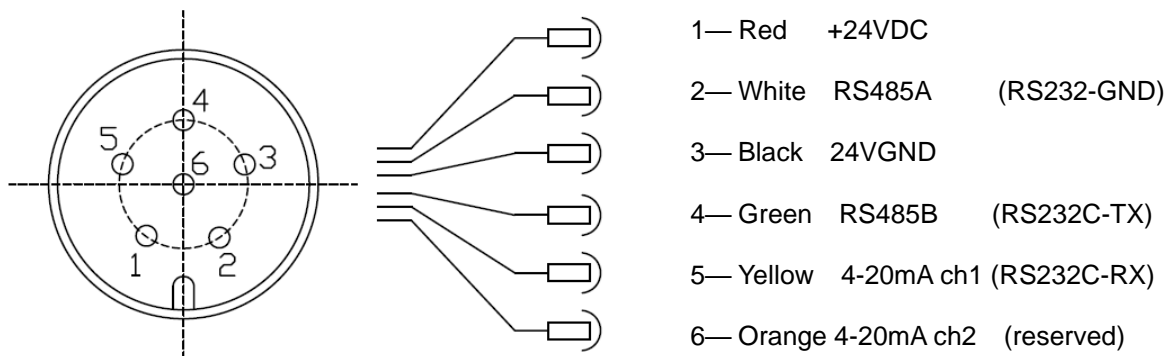
#### Output

Digital signal	RS485 MODBUS RTU
Analog signal	4~20mA, resistive load 500Ω

#### Others

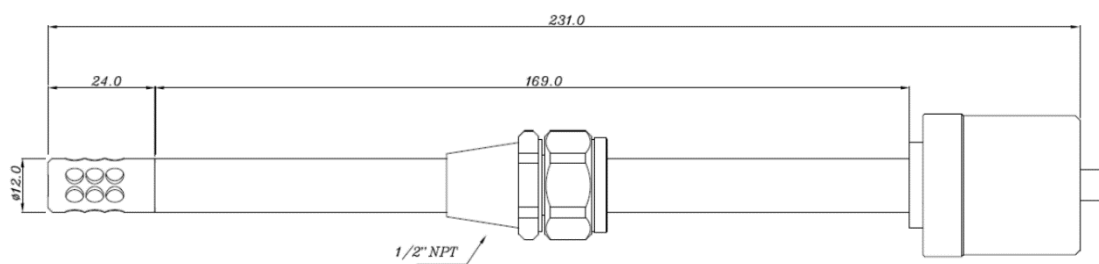
Housing material	316 stainless steel
Weight	200g (transmitter), 270g(package)
Package size	172×117×53 mm carton
Ingress Protection	IP66
Mechanical connections	G 1/2" ISO or 1/2" NPT
Pressure range	Max 100 bar (confirm with Kongter for other ranges)
Resistance load	200 ... 500 Ω
Supply voltage	DC 9V-36V(RS485 communication), DC15V-36V(@4-20mA)
Supply current	<5mA+load current
Cable specification	M8*1, 6 pin
Cable length	2 m
Standard applied	CE certified, EN61326-1, EN61000-3, EN61010 class B

## Connector Definition



NOTE: Info in bracket is wire definition for RS232 communication.

## Structure Dimension (mm)



## Option & Parts

Stainless steel filter

USB-RS485 converter

USB-RS232 converter

Seal washer: ISO G1/2"

Connecting cable: 5m, M8 screw thread, 90°bend angle

10m, M8 screw thread, 90°bend angle

2m, M8 screw thread, with LED light

Display and control unit: KT-200D (optional)

## Order info

KT-300 Moisture in Oil and Temperature Transmitter							
Measurement parameters	aw + T	A					
	ppm + T <sup>1)</sup>	B					
	aw + ppm + T <sup>1)</sup>	C					
Signal output	4-20mA + RS485		1				
	0-20mA + RS485		2				
	0-5V + RS485		3				
	RS232		4				
Analog output channel 1	0 ... 1 aw			D			
	0 ... 100 ppm			E			
	0 ... ___ ppm			F			
Analog output channel 2	-40 ... 120°C				5		
	___ ... ___°C				6		
Mechanical connector	1/2" NPT					H	
Cable length	2 meters						7
	3 meters						8

1) ppm is only applicable to mineral transformer oil. If you need to measure ppm value in other oil, please contact us.

*Example for order:* KT-300 B1E5H7

Measurement parameters: ppm + T

Signal output: 4 - 20mA + RS485

Ppm range: 0 ... 100 ppm

Temperature range: - 40 ... 120°C

Mechanical connections: 1/2" NPT

Cable length: 2 meters

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