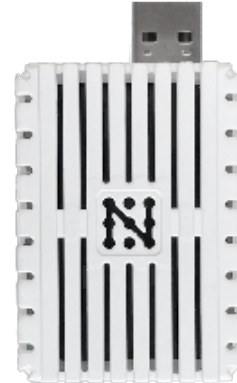




4 Gases Density Transmitter via USB

UA58-KFG-U

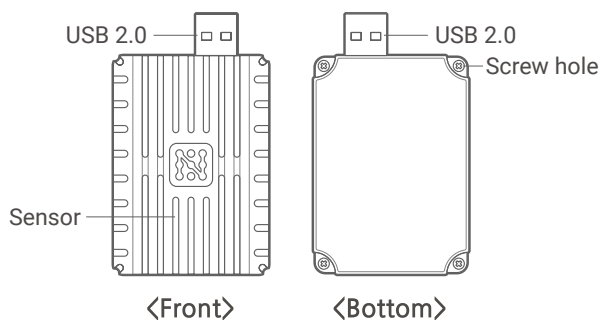
- Real-time Four Channel Gas Transmitter
- Compact Size Sensor for Indoor Air Quality
- CO, O₂, H₂S, CO₂ density Support
- NDIR for CO₂ and ElectroChemical for Others
- Operating On Windows / Linux / MacOS
- AT Command Support



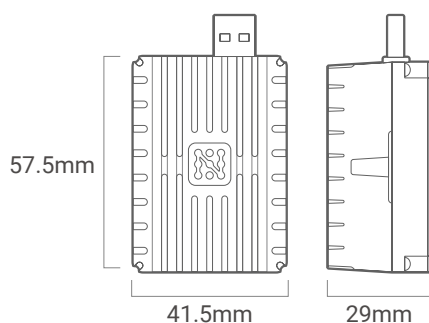
The UA58-KFG-U device has an electrochemical gas(Carbon monoxide, Oxygen, Hydrogen sulfide) sensor and NDIR gas(Carbon dioxide) inside. It transmits measured density information of the four gases(CO, O₂, H₂S, CO₂) in real-time via the USB connector.

The UA Series is automatically recognized as a serial port on the operating system and accessed using the AT command. Multiple USB connections of the UA device could compose the multi-channel sensor. The optional RN17X model helps the UA series for you to setup remote web monitoring system. Cost-effective monitoring system Radionode365 is also available. With Radionode365, you can utilize all aspects of remote monitoring.

Hardware



Dimensions



⚠ CAUTION!

- Volatile organic compounds (VOCs) should be avoided in applications where electrochemical sensors are used because they either dissolve in the electrolyte or adsorb onto the sensor's housing.
- Long term exposures and high concentrations may affect the performance characteristics
- Sudden changes in temperature/humidity cause short-term transient signals
- Avoid contact with conductors.
- Static electricity can cause distorted values.

Contact Information

- www.radionode365.com
- master@dekist.com



4 Gases Density Transmitter via USB

UA58-KFG-U Specifications

Sensor Channel Info.	<ul style="list-style-type: none"> • CH1: CO (Carbon monoxide) • CH2: O2 (Oxygen) • CH3: H2S(Hydrogen sulfide) • CH4: CO2(Carbon dioxide)
Gas Sensor Type	Electrochemical Cell & NDIR Optical sensor
Body Material	PC(Polycarbonate)
Measurement Range	<ul style="list-style-type: none"> • CO: 0~1000ppm • O2: 0~25% • H2S: 0~100ppm • CO2: 400~15000ppm
Measurement Unit (Selection using SW)	<ul style="list-style-type: none"> • CO: ppm • O2: % • H2S: ppm • CO2: ppm
Measurement Cycle	1.6 sec
Sensor Resolution	<ul style="list-style-type: none"> • CO: 0.5ppm • O2: 0.1% • H2S: 0.5ppm • CO2: 1ppm
Sensor Accuracy (Repeatability)	<ul style="list-style-type: none"> • CO: <3% of measured value • O2: <2% of measured value • H2S: < 2% of measured value • CO2: ±50ppm+5% of measured value
Baseline Drift	CO: -10~10ppm
Long-term Drift	<ul style="list-style-type: none"> • CO: < 10% signal loss/year • O2: < 5% signal loss/year • H2S: < 2% signal loss/month • CO2: NONE
Gas Response Time	<ul style="list-style-type: none"> • CO: T90 < 50 secs • O2: T90 < 10 secs • H2S: T90 < 60 secs • CO2: T90 < 30 secs
Warming up Time	< 3mins after power-on
Operating Condition	<ul style="list-style-type: none"> • Temperature: -10 ~ 50°C • Humidity: 15 ~ 90% R.H(non condensing)
Lifetime ¹⁾	less than 24 month @ discontinuous measurement
Cross-Sensitivity	<ul style="list-style-type: none"> • CO: H2, NO, C2H4 • H2S: H2, CO
Power Consumption	5V (Max 635mW)
Calibration Certificate	Individual Certificate.
Calibration Method	<ul style="list-style-type: none"> • CO, O2, H2S: Two point calibration • CO2: Zero calibration
USB Port	USB 2.0 Type A Plug
Output Signal	USB digital, CDC Device (AT Command)
LED	Device Status Indicator <ul style="list-style-type: none"> • BLINK RED & GREEN: Warming-up • RED KEEP ON: USB Connection Failed • BLINK GREEN: Measuring
Software Support	<ul style="list-style-type: none"> • Calibration Software Calibrator that compensates measuring error. Download: www.radionode365.com

1) Gas sensors have a longer life when measured discontinuously than when measured continuously.

Application

- Industrial safety Monitoring
- Air Ventilation System

Product Components

Model	Component
UA58-KFG-U	<ul style="list-style-type: none"> • UA58-KFG-U (1EA) • Calibration Cab (1EA) • USB Extension Cable 1.5m (1EA) • Calibration Certificate (1EA)

Optional Accessories

Type	Model Number	Spec.
Sensor data transmitter via Ethernet	RN171 WC	<ul style="list-style-type: none"> • Supports cloud monitoring • Supports MODBUS TCP/ HTTP data transmission • Power: PoE 48V, IEEE802.3af/at, DC6V, 1.9W
Sensor data transmitter via WiFi	RN172 WC	<ul style="list-style-type: none"> • Supports cloud monitoring • Supports MODBUS TCP/ HTTP data transmission • Power: DC6V, 2.4W