

# MICMETA-TVOC GAS DETECTOR

Product Model: Micmeta-TVOC

The Micmeta-TVOC gas detector is compact, light weight, small size, easy to use, no expertise required gas detectors. It's IECEx, ATEX, CNEX certificated and the explosion proof grade is Ex ia I Ma, Ex ia IIC T4 Ga which is applicable to the explosive gas mixture zone 0, zone 1, and zone 2 of the factory with grades IIA , IIB , and IIC and temperature group T1~T4 as well as coal mines. Moreover, it's the only multi-gas detector with a rating of IP68 for unmatched water protection. So customer can be confident it will stand up to challenging conditions like harsh weather.



## Small size, lightweight and durable

Durable, the instrument can effectively resist a 1.5 meters drop

IP66/IP68 rating ensures maximum protection against dust and water

Passed the EMC anti-static interference test and can work normally in the walkie-talkie environment

With 2 buttons, easy to use.

Bright, wide-angle visual alarm bars

With back clip, ergonomic and wearable design — doesn't weigh you down

### **Explosion-proof circuit design, safe and reliable**

IECEX, ATEX, Chinese explosion-proof certificated

Explosion proof grade reaches Ex ia I Ma, Ex ia IIC T4 Ga and detectors can be used in coal mines

### **Multiple security protection**

Self-test of sensors, battery status, circuit integrity and audible/visual alarms on startup

The man down alarm function has upgraded the safety of underground operators

Password protection function prevents non-operators from modifying menu parameters

With safety reminder function, sound and light vibration alarm function, let operators work without worries

The high and low alarm latched function allows the operator to better capture the sudden change of the gas concentration value

Support to restore the factory setting by one key, avoid misoperation trouble

### **Simultaneous measurement of multiple gases, multiple numerical display**

The instrument can detect 1-4 gases at the same time

Real-time value, TWA, STEL, MAX, MIN multiple numerical display

### **Powerful function, more user-friendly operation**

Optional Bluetooth and Lora function, data can be transmitted to the mobile phone or PC in real time

Compatible with DKM-MicMeta docking station for automated bump tests and calibration

Remind bump test and calibration when overdue on startup

With rechargeable lithium polymer battery, extended 18-hour battery runtime

Unique modifiable ID identification function, convenient for users to allocate and manage the instrument

Support PPM and mg/m<sup>3</sup> gas unit switch, the concentration value is automatically converted by the system

## Application

Industrial hygiene, Oil and gas, Fire ground “Toxic Twins” detection, Environmental, Chemical, Pharmaceutical  
Telecommunications, Multi-gas leak detection in industries such as chemical, food and beverage, oil and gas (downstream)

## Specification

<b>Sampling method</b>	Diffusion
<b>Gas type</b>	TVOC
<b>Measure range</b>	0-10PPM、0-100PPM、0-500PPM、0-1000PPM、0-2000PPM
<b>Resolution</b>	0.01PPM、0.1PPM、1PPM
<b>Response time</b>	≤60S (T90)
<b>Precision</b>	≤±5%FS or ±10% (depends on the specific sensor)
<b>Language</b>	Chinese/English
<b>Automatically test and calibrate after power-on</b>	Including auto-test, calibration, auto-zero, maximum value (MAX), minimum value (MIN), STEL, TWA value
<b>Unit</b>	PPM and mg/m <sup>3</sup> can be switched and displayed by one key, and the concentration value is automatically converted by the system
<b>Display</b>	Segment code LCD display
<b>Calibration platform</b>	Modification, function testing and calibration operations can be performed on DKM-MicMeta docking station (optional)
<b>Data record</b>	1000 sets data records and 100 sets events records
<b>Alarm</b>	95dB buzzer (@30cm), vibration alarm and flashing red bars and alarm status indication on the screen, alarm latched; diagnostic alarm and battery under voltage alarm, man down alarm, alarm set points for all sensors are user adjustable.
<b>Battery</b>	3.7V rechargeable lithium battery, battery capacity 2300mA
<b>Working hours</b>	Standby time 18h, charging time <6h

<b>Wireless transmission</b>	Bluetooth transmission function (optional), Lora transmission function (optional)
<b>Explosion-proof grade</b>	IECEX: Ex ia IIC T4 Ga, Ex ia I Ma, ATEX II 1G Ex ia IIC T4 Ga, Ex ia I Ma CNEX : Ex ia IIC T4 Ga
<b>Certification (EU regulations)</b>	2004/108/EC (EMC) 94/9/EC (ATEX) CE
<b>Protection grade</b>	IP66/IP68
<b>Working temperature</b>	-20°C~55°C
<b>Humidity</b>	0-95%RH (non-condensing)
<b>Environmental pressure</b>	86~106Kpa
<b>Size</b>	113*60*32mm (length * width * height)
<b>Weight</b>	200g (with lithium battery)