IAS-FS-Lite Series

Portable Measurement Intelligent Analysis

Lite Compressed Air Analysis - Flow



Product Overview

IAS-FS-Lite is a portable flow measurement kit for compressed air systems. Built-in 4G module enables remote monitoring.

True wireless solution, set-and-forget installation and setup, plug and play. The plug-in pitot flowmeter can be installed online without shutdown and can be adapted to different pipe diameters (optional: plug-in thermal mass flow meter). Extremely

high sensitivity, the lower limit of gas measurement can reach 5 Nm/s. Innovative online auto- calibration function and professional anti-condensation technology

4G Module For Remote Monitoring

Extreme lower limit of measurement

Easy Installation Plug and play

Measuring Range

Inch	DN	ID (mm)	Min Flow (Nm^3/h)	Max Flow (Nm^3/h)
1	25	25	8.8	530
1 1/4	32	32	14.5	868
1 1/2	40	40	22.6	1357
2	50	50	35.3	2120
2 1/2	65	65	59.7	3583
3	80	80	90.5	5428
4	100	100	141.4	8482
5	125	125	220.9	13253
6	150	150	318.1	19085
8	200	200	565.5	33929
10	250	250	883.6	53014
12	300	300	1272.3	76340

* For more pipe sizes and flow ranges, please consult sales

Technical Data

Flow

Measuring Range	5 … 300 Nm/s
Accuracy	±(1.5% RD + 0.3% FS) [1% RD Option]
Medium	Dry / wet air and non-corrosive gases
Reference Conditions	20 °C, 1 bar(a) – ISO 1217 (Configurable)

Pressure

Measuring Range	0 … 1.7 MPa(a)
Accuracy	±0.5% FS

Temperature

Measuring Range	-40 … +150 °C
Accuracy	±0.5 °C

Output

4 … 20 mA Output (Standard)	Flow rate / Temperature / Pressure (Configurable)
Pulse (Standard)	Consumption / Alarm
Digital Output (Standard)	Modbus RTU (RS485)
Wireless Communication (Choose one of three)	Bluetooth (Default) Wi-SUN (Option) IoT-4G (Option)
Connector	2 × 5pin M12, Female

Operating Environment

Battery Box Operating Temperature	-20 … +60 °C
Medium Temperature	-40 … +150 °C
Operating Pressure	0 … 1.7 MPa(a)

Display & Data Log

Display	2.8" IPS LCD with capacitive touch
Data Log	Max. 10,000,000 values

Power

Charging Battery	100 ~ 240 VAC 50 ~60 Hz

Others

Process Connection	G1/2"(ISO 228-1)
EMC	Compliant with IEC 61326-1
Weight	4.3 kg
Dimension	558 × 261 × 135 mm (L×W×H)

* The above are the technical data of pitot tube flow meter. For thermal mass flow meter, please consult sales

Order Information

Model	Description
IAS-FS01-Lite	Lite Compressed Air Audit Suit - Flow, pole length 250mm, flow rate 5...300 Nm/s, built-in 4G-IoT module
IAS-FS02-Lite	Lite Compressed Air Audit Suit - Flow, pole length 400mm, flow rate 5...300 Nm/s, built-in 4G-IoT module

* For more order information plase consult sales

https://yua-instruments.com/

A：Room R2–B, Gaoxin Industrial Park, No. 206 Gaoxin South 7th Road, Yuehai Street, Nanshan District, Shenzhen, Guangdong, China

M：sales@yua–instruments.com

IAS-DP-Lite Series

Portable Measurement

Intelligent Analysis

Lite Compressed Air Analysis - Dewpoint



Product Overview

IAS-DP-Lite is a portable dewpoint measurement kit for compressed air systems. Built-in 4G module enables remote monitoring. True wireless solution, set-and-forget installation and setup, plug and play. Just connect the gas through the Φ6 mm quick
connector to start measuring

It can integrate a variety of the most advanced humidity sensors: FIXINST-P polymer film capacitive sensor, FIXINST-A ultra-fast response aluminum oxide sensors with innovative moisture sensitive materials and processes, FIXINST-Q ultra-low dewpoint
sensitivity dual-resonance QCM sensor. It provides IAS-DPx the ability to accurately measure a wide range of dewpoint from
-110 ... +60 °Ctd

MEMS-based pressure sensor can monitor dewpoint and online pressure simultaneously. FixInst's patented sensor materials and processes provide measurements with high sensitivity and ultra-fast response speed. Up to 10+ points of dewpoint calibration
and multi-point temperature compensation provide measurement accuracy up to ±2 °Ctd (see technical data sheet).
Resistant to condensation, particulate pollution, oil vapor and most chemicals

Product Advantages

4G module for
remote monitoring

High accuracy
Ultra-fast response

Easy Installation
Plug and play

Technical Data

Measuring Range

Dewpoint	
IAS-DP01-Lite	- 60 … +60 °Ctd
IAS-DP02-Lite	-80 … +20 °Ctd
IAS-DP03-Lite	-110 … +20 °Ctd
Temperature	-40 … +100 °C
Pressure	0 … 1.7 MPa(a) (Option)

Operating Environment

Battery Box Operating Temperature	-30 … +70 °C
Storage Temperature	-40 … +80 °C
Relative Humidity	0 … 95 %RH
Sample Gas Flow Rate	> 1 L/min
Pressure	0 … 1.7 MPa(a)

Accuracy

Dewpoint (Air or Nitrogen)	
+20 ... -60 °Ctd	±2 °Ctd
-60 ... -110 °Ctd	±3 °Ctd
Temperature (Customizable)	
0 ... +50 °C	±0.3 °C (Standard)
-40 ... 0 °C & +50 ... +100 °C	±0.5 °C (Standard)
Pressure Accuracy	
Accuracy @23 °C	±0.3 %FS
Pressure drift with temperature	±0.001 MPa/10 °C

Power

Charging Battery	100 ~ 240 VAC	50 ~60 Hz

Others

Process Connection	6 mm Stainless steel quick connectors
Sensor Filter	Stainless steel sinter filter (Filtration class 30~45 μm)
EMC	Compliant with IEC 61326-1
Dimension	410×335×145 mm(L×W×H)
Weight	4.4 Kg

Response Time

Dewpoint 63% [90%], Reference: 20 °C, 1bar(a), 4L/min	
-50 → +20 °Ctd	20 sec [40 sec]
+20→ -50 °Ctd	1 min [3 min]
Pressure	< 1 sec

Order Information

Model	Description
IAS-DP01-Lite	-60 ... +60 °Ctd, Lite Compressed Air Audit Suit-Dewpoint, Pressure range 0 … 16 bar(g), built-in 4G-IoT module
IAS-DP02-Lite	-80 ... +20 °Ctd, Lite Compressed Air Audit Suit-Dewpoint, Pressure range 0 … 16 bar(g), built-in 4G-IoT module
IAS-DP03-Lite	-110 … +20 °Ctd, Lite Compressed Air Audit Suit-Dewpoint, Pressure range 0 … 16 bar(g), built-in 4G-IoT module

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A：Room R2–B, Gaoxin Industrial Park, No. 206 Gaoxin South 7th Road, Yuehai Street, Nanshan District, Shenzhen, Guangdong, China

M：sales@yua–instruments.com

IAS-PM01-Lite Series

Portable Measurement Intelligent Analysis

Lite Compressed Air Analysis Kit - Power



Product Overview

IAS-PM01-Lite is a portable power measurement kit for compressed air systems. Flexible Rogowski coil can be easily installed even in small spaces. Universal current up to 1000 A, no need to match different current transformers according to on-site
working conditions. It can measure power, electric energy, current, voltage and power factor, etc. Each sensor connector has a unique set-and-forget socket, eliminating the need for any complicated and professional wiring skills

- 4G module for remote monitoring
- Rogowski coil Easy installation
- Set-and-forget operation and configuration

Technical Data

Voltage Input	
Voltage Input	80 … 620 VAC (P-P)
Current Input	10 ~ 1000 A
Frequency	45 ~ 65 Hz

Operating Environment	
Storage Temperature	-40 … +85 °C
Humidity	5 … 95% RH @ 50°C (non- condensing)

Accuracy	
Voltage	0.2 %
Current	0.5 % (10~1000 A 10 A accuracy not guaranteed for currrent below 10 A)
Power Factor	±0.005
Active Power	IEC62053-22 Class 0.2
Active Energ	IEC62053-22 Class 0.2S

Others	
Wiring Methods	3 PH3 W
Weight	4.2 kg
Size	410 × 335 × 145 mm (L×W×H)

EMC			
Electrostatic Discharge	Level IV (IEC61000-4-2)	Conductivity Resistance	Level III (IEC61000-4-6)
Radiation Immunity	Level III (IEC61000-4-3)	Magnetic Fields Immunity	0.5mT (IEC61000-4-8)
Rapid Transient Immunity	Level IV (IEC61000-4-4)	Conducted & Radiated Emissions	Class B (EN55022)
Surge Immunity	Level IV (IEC61000-4-5)		

Order Information

Model	Description
IAS-PM01-Lite	Lite Compressed Air Audit Suit – Power Meter, built-in 4G-IoT module