sisco

Product information

intelligent wireless differential pressure transmitter

intelligent wireless differential pressure transmitter adopts the three-in-one form of communication+power supply+sensor. It can be installed and used without considering other factors. It is equipped with NB-IoT module. It is an intelligent instrument with low power consumption and wireless communication function. Combined with big data platform, it can realize online multi-functional monitoring in a wide range.
Range: 0 ～ 2.5MPa (see range selection table for details)
Network format: NB-IoT
Battery life: ≤ 10 years
Accuracy: 0.25% FS, 0.5% FS
In addition, we can also provide customized products to meet the application needs of customers in a short time according to their applications.

Typical applications

▲Industrial Internet of Things
▲Intelligent monitoring of drainage and water supply network
▲Intelligent monitoring of fire water system
▲Environmental monitoring of integrated pipe gallery
▲Smart medicine
▲Smart park, etc

Instructions

series differential pressure transmitter can measure differential pressure according to different models. It is applicable to differential pressure measurement of liquid or gas and process industry. The operator is responsible for checking whether the equipment is suitable for the operating conditions of the application. If you have any questions, please contact our sales department to ensure the correct application of the transmitter. The company does not assume any responsibility for the impact caused by improper selection.
The user must ensure that the measured medium is compatible with the contact material of the transmitter.

⚠ Warning!

Improper use can cause danger!

Icon description

⚠ Danger! - A dangerous situation that could result in death or serious injury.
⚠ Warning! - A potentially hazardous situation that could result in death or serious injury.
! Be careful! A potentially hazardous situation that could result in minor injury.
☞Reminder! - A potentially hazardous situation that could result in personal injury.
⚠ Tips! - Tips and information to ensure trouble free operation of the equipment.
User
⚠ Warning! This information is applicable to technicia

Product features

-Low power processor is adopted, and the minimum sleep current is <80 μ A. Average emission current <150ma;
-Integrated battery, easy to replace, without field wiring;
-Complete and rigorous background protocol, providing simple API interface, and convenient access to historical data through web, PC, android app and other applications;
-Users can configure parameters through PC and app, which is convenient and fast;
-Support data storage function, support telecom operator platform and specially developed data platform;
-Embedded watchdog, no crash;
-If the BTS fails to contact, it will automatically start the sleep function and automatically access the network after resuming communication;
-Remote transmission, realizing wireless remote transmission of collected data to the designated server;
-LCD liquid crystal display wakes up by magnetic attraction, and no key operation is required;
-IP66 dustproof and waterproof;
-High precision, anti-interference and maintenance free.

Product Overview

wireless differential pressure transmitter is a high-precision intelligent instrument powered by lithium-ion battery and with wireless communication function. Its main application field is for various occasions for measuring differential pressure, including harsh corrosive media environment. The power, signal strength, pressure information of pipe network, alarm information and other data of the equipment are sent to the monitoring center regularly through the wireless network, and the monitoring center stores, analyzes, queries, and processes the alarm information. Realize wireless signal transmission and information exchange, without on-site wiring, save labor and construction costs, and help users realize timely and efficient supervision of the pipe network.

Technical parameter

Measuring medium: liquid or gas (compatible with contact material)

Pressure mode: differential pressure

Medium temperature: - 40~85 ℃

Accuracy class: 0.25% FS (ratio of differential pressure range to rated range ≥ 1:2.5)

0.5% FS (ratio of differential pressure range to rated range < 1:2.5)

Meter head display accuracy 0.5% FS, digital tube (LED) display

Note: reference conditions: temperature 15~25 ℃, atmospheric pressure 86~106YkPa, humidity 45~75% RH.

Temperature compensation: - 10~70 ℃

Temperature drift: ± 0.01% FS/℃ (within the temperature compensation range) ± 0.05% FS/℃ (outside the temperature compensation range)

Stability: ± 0.1% FS/year

Protection grade: IP66

Display form: LCD

Durability: 10X10^6(cycles from lower range to upper range)

Overall weight: ≈ 2.5kg

Range

Rated range (MPa)	0.035	0.1	0.25	1	2.5
Differential pressure range (MPa)	0～0.01 to 0～0.035	0～0.02 to 0～0.1	0～0.05 to 0～0.25	0～0.2 to 0～1	0～0.5 to 0～2.5
Unilateral maximum static overpressure (MPa)	0.175	0.5	0.75	3	5

Protocol parameters

Network system: NB IOT

Upload information: data, battery power, signal strength

Sending interval: 15min ~ 24h/ time (2h/ time by default)

Sending time: ≈ 12s/ time

Transmission power consumption: ≈ 0.5ma/ time

Acquisition frequency: 1 ~ 30 times in the transmission interval (30 times by default)

Acquisition time: ≈ 1s/ time

Acquisition power consumption: ≈ 0.002ma/ time

Battery parameters

Working power supply: 3.6V 19Ah *2

Battery life: depends on acquisition and transmission frequency (ignoring environmental and time factors)

Annual sleep power consumption is 0.7Ah

For example, the transmission interval is 1h, the acquisition frequency is 30 times, and the battery life is ≤ 3.3 years

For example, the transmission interval is 2h, the acquisition frequency is 30 times, and the battery life is ≤ 6 years

Environment condition

Ambient temperature: - 40~85 ℃
Ambient humidity: 0%~95% RH (no condensation or condensation)

Overall material

Diaphragm: 316L stainless steel (in contact with the measured medium)
Process connection: 304 stainless steel (contact with the measured medium)
Shell: die-cast aluminum
Seal: nitrile rubber O-ring

Mechanical stability

Seismic performance: 10g (20... 2000Hz) in accordance with IEC60068-2-6 standard
Impact resistance: 500g/ms in accordance with IEC60068-2-27 standard

Explosion proof instructions

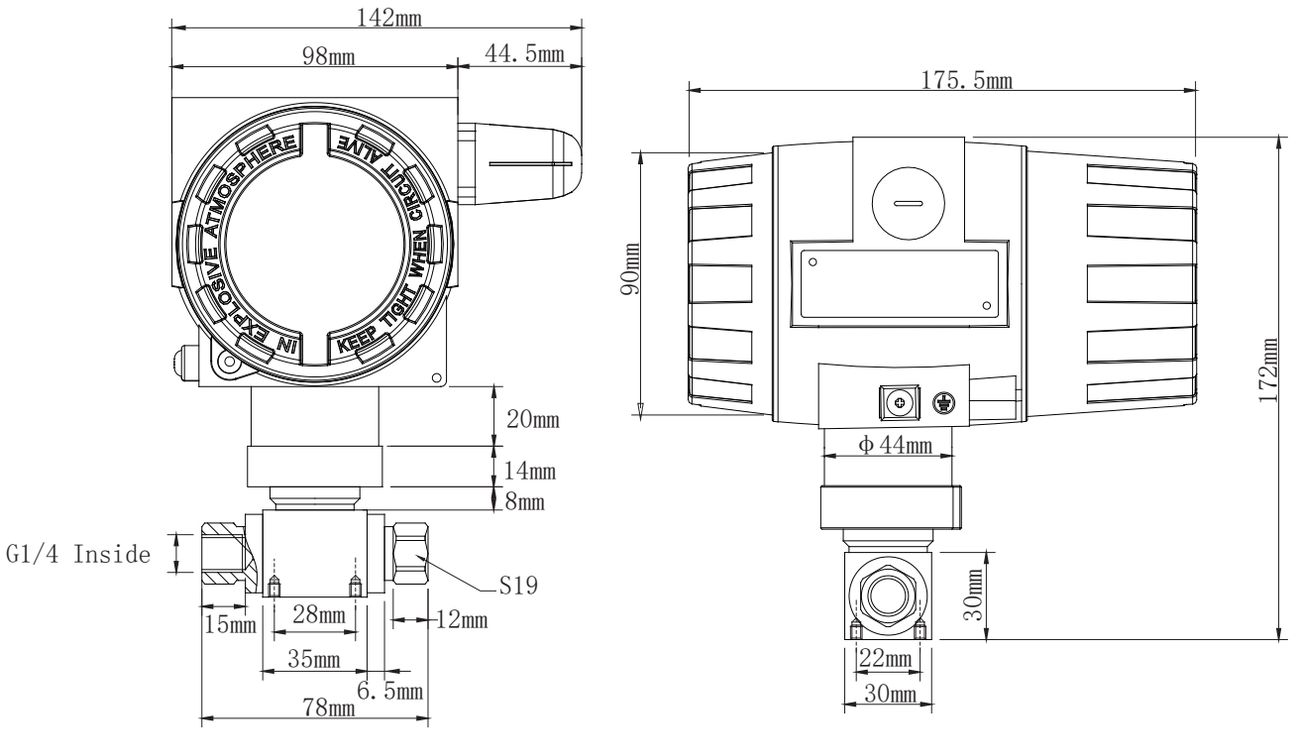
Explosion proof type

Compliant with standards GB/T 3836.1-2021, GB/T 3836.2-2021, GB/T 3836.31-2021, GB/T 4208-2017
Explosion proof mark: Ex db Ⅱ C T6 Gb
Explosion proof certificate number: CCRI 22.1623X

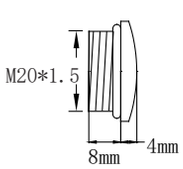
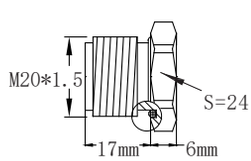
Explosion proof dust type

Compliant with standards GB/T 3836.1-2021, GB/T 3836.2-2021, GB/T 3836.31-2021, GB/T 4208-2017
Explosion proof mark: Ex tb IIIC T80 ℃ Db
Explosion proof certificate number: CCRI 22.1623X

Appearance and size



Blocking head

Applicable standard type	Suitable for explosion-proof type and explosion-proof dust type
	

Ordering instructions

⚠ Warning!

When ordering the differential pressure transmitter, users should pay attention to selecting appropriate specifications according to the differential pressure, temperature and environmental conditions of the medium.

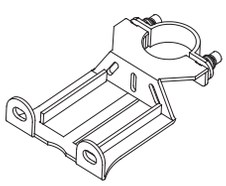
Ordering information

Model/range/connection mode/accuracy class/customization

Enclosure(To be purchased separately)

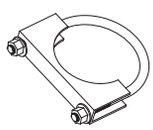
Mounting bracket

ZJ03 mounting bracket



Main purpose: transmitter installation

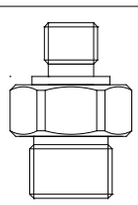
Zju01u card



Main application: pipe support

Adapter

ZB11 adapter



Main purpose: switching