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SM35AWB-F Wireless Load Displacement Transducer

1、Description

SM35AWB-F wireless load displacement transducer is designed for the well power diagrams test of pumping units. It is a high-performance wireless sensor product integrating load and acceleration displacement measurement (optional), low-power embedded single-chip microcomputer, and low-power wireless digital communication technology. It is one of the important front-end acquisition devices in the construction of the Internet of Things for digital oil and gas production in oil and gas fields. By being used in conjunction with acceleration sensors and angular displacement sensors, it conducts periodic online synchronous measurement of the suspension point load and smooth rod displacement of the pumping unit. Through the local wireless data communication network for remote transmission, it realizes the remote measurement of the power diagram data characterizing the working conditions of the pumping unit well.

The high-reliability design adapted to industrial environments, as well as its features of high precision, simple installation, convenient maintenance, environmental friendliness and durability, have won the recognition of users. It has not only been promoted and applied in major domestic oil fields such as Shengli, Daqing, Huabei, Changqing, Xinjiang and Qinghai, but also partially applied in overseas oil companies.

2、Characteristics

- Automatic collection
- Extended measurement
- Multiple power supplies
- Wireless format
- Dense collection and low-power design
- Reliable installation
- Remote maintenance

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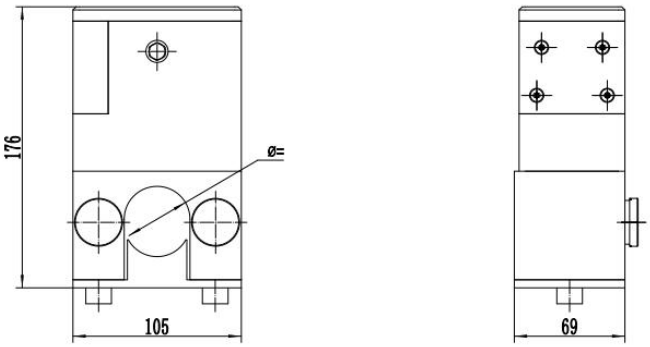
Dimensions（In mm. 1mm=0.03937 inches）



Circuit Diagram：

two-wire system: EXC+: red EXC-: black

Specification：

Type	Technical parameters
Nominal load range	0-150KN
communication protocol	ZigBee &WAI-PA
Class precision	0.5%FS
stability	±0.1%FS/year
transmission distance	≥300m
Power supply	Lithium - thionyl chloride high energy disposable battery 3.6V/38Ah
Operating temperature	-40 ~ +85℃
Allow overload	150%F.S
insulation resistance	≥5000MΩ
Protection type	IP68 (IEC60529)