

SMD33WX Wireless Hydraulic Load-Displacement Integrated Sensor



Product Introduction

- Standard Zigbee wireless signal eliminates the need for conduit wiring, significantly reducing construction costs.
- Features a hydraulic lifting I-beam frame, planar load-bearing structure, microcontroller data acquisition system, high-precision instrumentation amplifier, efficient DC/DC conversion circuit, along with A/D conversion, data redundancy coding, and RF modulation units;
- Specifically designed for wellhead frames (commonly known as “donkey triplets”) to enable continuous pumping tests during performance curve acquisition;
- Real-time acquisition of pumping stroke, stroke rate, rod load, and performance curve data;
- Low-power design meets the requirements for high-density data collection at frequent intervals during performance curve and oil measurement operations.

Technical Indicators

Number	Type	Technical parameters
1.	Nominal load range	0~120KN 0~8m
2.	Power supply	4.2 VDC 2800mAh lithium battery
3.	Signal	Zigbee
4.	Linear	≤1%F.S

5.	Repeatability	$\leq 1\%F.S$
6.	lag	$\leq 1\%F.S$
7.	Output smoothness	$\leq 1\%$
8.	Operating Temperature	$-40\sim +70^{\circ}C$
9.	Insulation Resistance	2000 M Ω
10.	communication protocol	ZigBee PRO 2007, Transmission Distance (Open Line of Sight) \geq 100m
11.	Protection type	IP65