

PS200

Multi-channel signal conditioning & acquisition module



The PS200 Series Multi-Channel LVDT Signal Conditioning and Data Acquisition Instrument is a high-performance, multi-channel synchronous demodulation and acquisition module specifically designed for high-precision dynamic displacement, vibration, and micro-deformation measurement. Standard configurations include 4, 8, and 16 channels, with the flexibility to network multiple units for expansion to 128 synchronized channels. Fully compatible with all ABEK full-bridge LVDT and half-bridge LVDT sensors.

Featuring an all-proportional low-drift measurement architecture, DDS digital frequency excitation, independent 24-bit Σ - Δ ADCs, and individual signal conditioning for each channel, the PS200 delivers high-precision displacement measurement with inherently low noise, minimal drift, and exceptional immunity to interference—all built right into the hardware.

The PS200 is equipped with standard 100M Ethernet and supports a wide range of mainstream protocols, including MODBUS/TCP, MODBUS/RTU, and TC-ASCII. It further enables high-speed active data pushing and real-time waveform viewing through a built-in virtual oscilloscope interface.

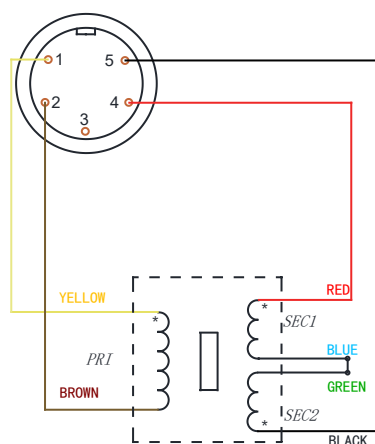
Purpose-built for the harshest real-world conditions—including industrial sites, aerospace test and control, and automated production lines with strong EMI, multi-station setups, strict synchronization needs, and round-the-clock operation—the PS200 delivers unwavering performance in dynamic displacement measurement, micro-deformation sensing, high-frequency vibration analysis, and closed-loop position feedback. With a powerful combination of high precision, high speed, high reliability, and effortless system integration, it is the ideal displacement acquisition solution for advanced precision inspection and real-time online control scenarios.

The PS200 is accompanied by dedicated PS200 Series DAS Data Acquisition System software, which supports real-time waveform display, multi-channel data monitoring, peak/valley/process value capture, and data logging and export, enabling intuitive observation of displacement and vibration processes. The software offers three waveform display modes: Continuous Mode, Scroll Mode, and Strip Chart Recorder Mode. Additionally, an SDK development package and driver library are provided, supporting multiple development environments including C/C++, LabVIEW, C#, and Python, facilitating seamless integration into automated measurement and control systems, production line inspection platforms, and test and validation software. The system meets the full-spectrum usage requirements from on-site debugging to long-term online monitoring.

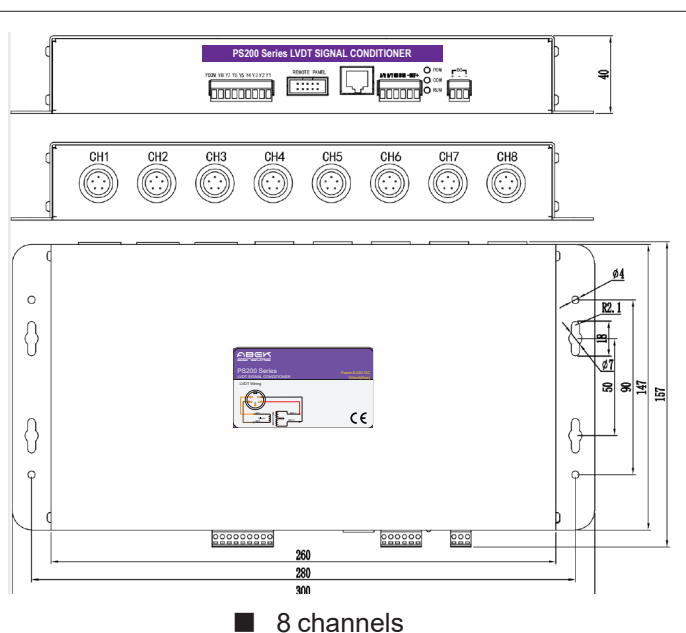
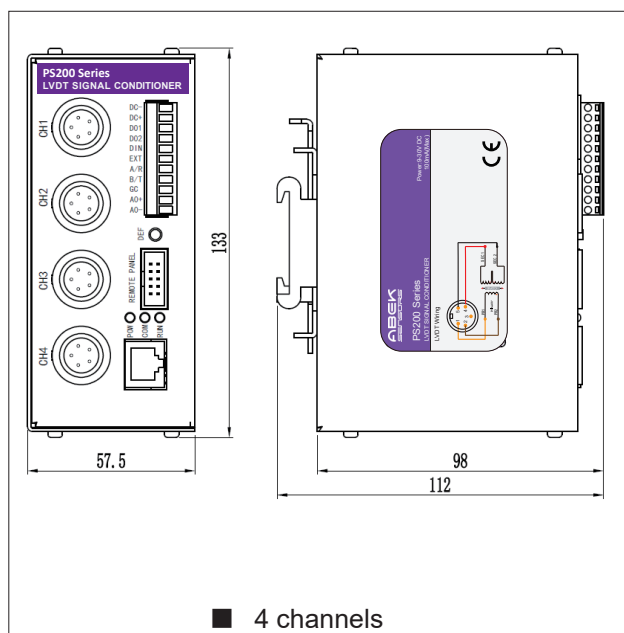
Specifications

Power supply: 9-30V DC;
Supply current: 800mA(MAX);
Channels: 4, 8, or 16 channels available
Connector: 5-pin connector
Operating Temperature: -10 to +55 °C
Operating Humidity: 35 to 85% RH (non-condensing)
Installation Site: Indoor use only, altitude below 2000 m
Response Frequency: 2400 Hz/channel (max)
Output Interface: 100M Ethernet with MODBUS/TCP support

LVDT Wiring Definition



Dimensions



Interface Definition

Terminal Description

DC-	Power supply ground (negative)
DC+	Power supply positive, 9-30 V DC (24 V DC nominal)
DO1	Digital output 1 (optional function)
DO2	Digital output 2 (optional function)
DIN	Digital input
IND	Reserved; not internally connected (NC)
A/R	RS485-A / RS232 Rx (receive)
B/T	RS485-B / RS232 Tx (transmit)
GC	RS232 signal ground (do not connect when using RS485)
AO+	Analog output positive (optional)
AO-	Analog output negative (optional)

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