

DL-DAQ-502 Technical Specification

Distributed Multi-Parameter Signal Testing and Analysis System

Distributed multi-parameter signal acquisition system for scattered field measurement points, supporting synchronized quasi-dynamic strain, pressure, force, load, displacement, temperature, and voltage acquisition with 8 or 16 channels per module, 24-bit conversion, RS485 module networking, Ethernet computer communication, and NTP synchronization.

System Category	DL-DAQ
Signal Type	Distributed multi-parameter DAQ
Measurement Range	Strain, pressure, force, load, displacement, temperature, and voltage
Sampling / Response	Up to 5 kHz in 8-channel configuration
Communication	RS485 module network and Ethernet computer communication
Protection / Enclosure	Field enclosure required by project
Power Supply	External DC power with optional PoE switching
Installation	Distributed field module installation

Key Features

- Supports multi-parameter acquisition for field tests with scattered measurement points.
- 8-channel configurations support higher sampling rates up to 5 kHz.
- RS485 module networking and Ethernet communication support scalable system layouts.
- Technical basis may reference GB/T 6587 environmental requirements.

Typical Use Cases

- Field structural testing requiring synchronized strain, force, pressure, displacement, temperature, and voltage channels.
- Distributed civil and mechanical tests where local modules reduce cabling.

Deployment Notes

- Confirm signal type per channel, sampling target, module count, and synchronization needs.
- Plan cabinet power, RS485 cable routes, Ethernet uplink, and PoE switching if used.
- Do not reuse supplier certification pages or original branded report covers.

Technical Highlights and Standards

- 8 or 16 channels per module
- 24-bit conversion
- Up to 5 kHz sampling

- Multi-parameter inputs
- NTP synchronization
- GB/T 6587 reference

Branding, supplier names, phone numbers, email addresses, physical addresses, logos, customer lists, prices, and original supplier model identifiers have been intentionally excluded from this public specification.