DL-DAQ-603 Technical Specification

Distributed Network Dynamic Signal Acquisition System

Distributed network dynamic signal acquisition system for large-structure strength and vibration testing, supporting strain, force, pressure, displacement, velocity, acceleration, IEPE acceleration, acoustic, and voltage inputs, modular Ethernet and PoE expansion, IEEE 1588 synchronization, 24-bit A/D conversion, bridge self-check, TEDS support, and long-duration synchronized dynamic recording.

System Category	DL-DAQ
Signal Type	Distributed dynamic DAQ
Measurement Range	Strain, force, pressure, displacement, velocity, acceleration, IEPE, acoustic, and voltage inputs
Sampling / Response	Dynamic synchronized acquisition
Communication	Ethernet / PoE with IEEE 1588 synchronization
Protection / Enclosure	Industrial enclosure required by project
Power Supply	Ethernet / optional PoE
Installation	Distributed network module installation

Key Features

- Distributed Ethernet architecture supports large channel-count dynamic testing.
- IEEE 1588 synchronization supports synchronized modules with sub-microsecond timing.
- Multiple input types support structural strength and vibration analysis.
- Technical basis may reference GB/T 6587 and IEEE 1588.

Typical Use Cases

- Large structure dynamic stress, strain, and vibration testing.
- Mechanical, automotive, aerospace, and electronic product performance testing.

Deployment Notes

- Confirm input type, module count, PoE/network topology, synchronization, and sampling requirements.
- Plan grounding, shielding, TEDS configuration, and bridge self-check for mixed signal systems.
- Remove original customer cases, user lists, and purchase dates from public materials.

Technical Highlights and Standards

- Distributed Ethernet modules
- 24-bit A/D conversion
- IEEE 1588 synchronization

- PoE expansion
- TEDS support
- 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.