

# DL-SE-301 Technical Specification

## Three-Component Short-Period Seismic Instrument

Three-component short-period seismic instrument with electromagnetic force-balance structure, 0.5 to 50 Hz observation band, 2000 V/(m/s) sensitivity,  $1 \times 10^{-8}$  m/s resolution, greater than 130 dB dynamic range, IP67 protection, and 12 VDC power.

System Category	DL-SE
Signal Type	Short-period seismic
Measurement Range	+/-0.1 m/s full-scale velocity output
Sampling / Response	0.5 to 50 Hz observation band
Communication	Analog seismic output to recorder
Protection / Enclosure	IP67
Power Supply	12 VDC
Installation	Floor or vault installation

### Key Features

- Three-component integrated structure supports regional and engineering seismic observations.
- 0.5 to 50 Hz observation band and high sensitivity support short-period seismic monitoring.
- High dynamic range and IP67 protection support tunnel, mine, slope, and reservoir-induced seismic applications.
- Analog output should be paired with compatible seismic recording equipment.

### Typical Use Cases

- Regional seismic networks and reservoir-induced seismic monitoring.
- Tunnel, mine, slope, and mobile emergency seismic observations.

### Deployment Notes

- Install on a stable base and confirm orientation, leveling, grounding, and cable protection.
- Match sensor sensitivity and output range to recorder input settings.
- Confirm environmental protection for vault or field installations.

### Technical Highlights and Standards

- 0.5 to 50 Hz observation band
- 2000 V/(m/s) sensitivity
- $1 \times 10^{-8}$  m/s resolution
- >130 dB dynamic range

- IP67 protection
- 12 VDC power

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.