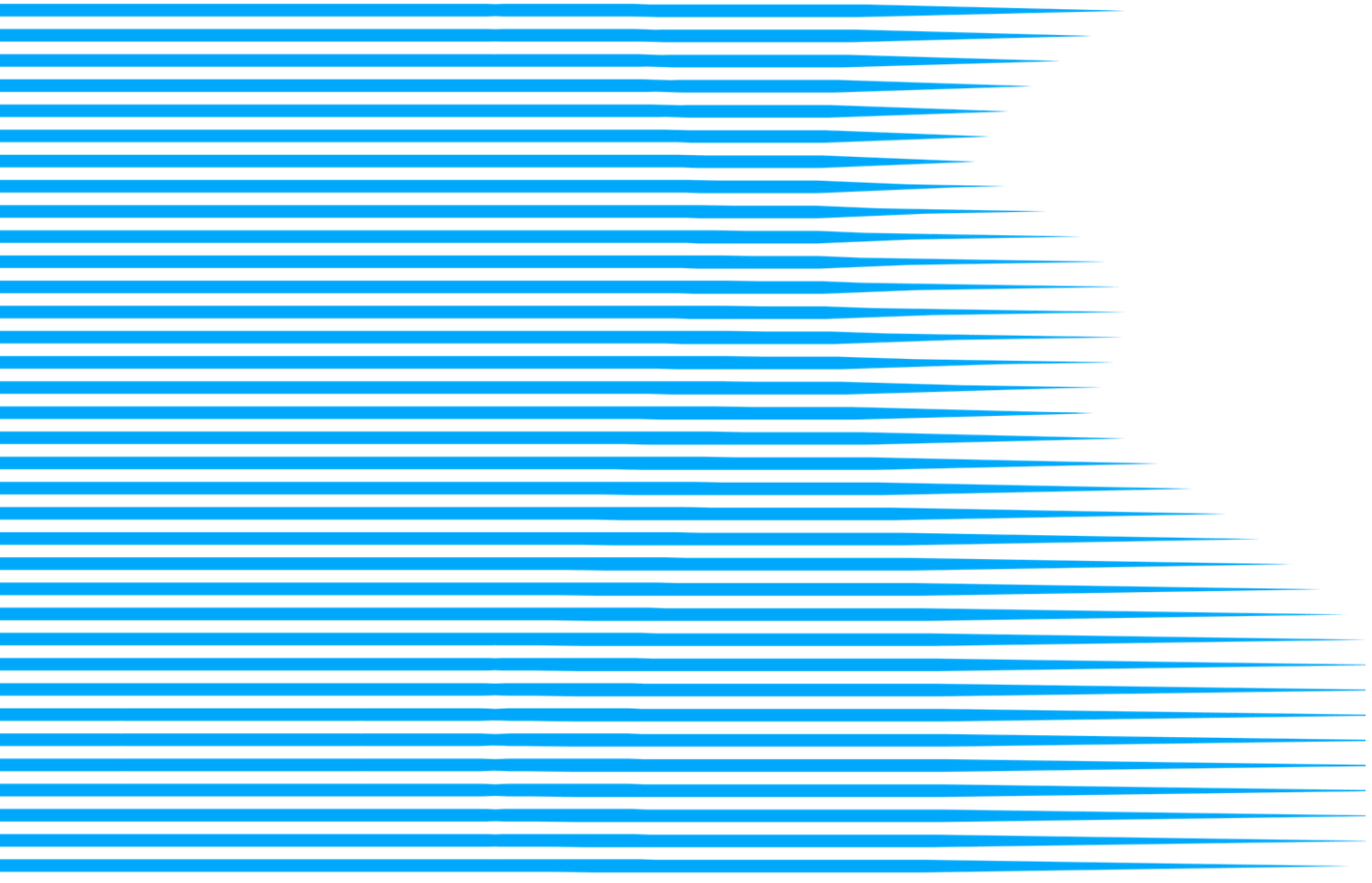
Introducing
Loadsensing G7



September 2025

Integrated Sensor Intelligence

Low-power accelerometer in all G7 devices

Detects seismic activity or ground movement

Enables event-driven applications

Integrated Sensor Intelligence

Built-in temperature and humidity sensors

Detection of enclosure sealing or locking quality

Includes internal node temperature in readings

Seamless Connectivity and Configuration

Bluetooth enabled

USB-C standard connector

Extended Battery Life

25 years
of battery autonomy

Minimize battery replacement

Enable higher-frequency
reporting periods

New Operational Modes

01 Standard Operation Mode

02 Trigger Mode

03 Event Detection Mode - only in tiltmeter

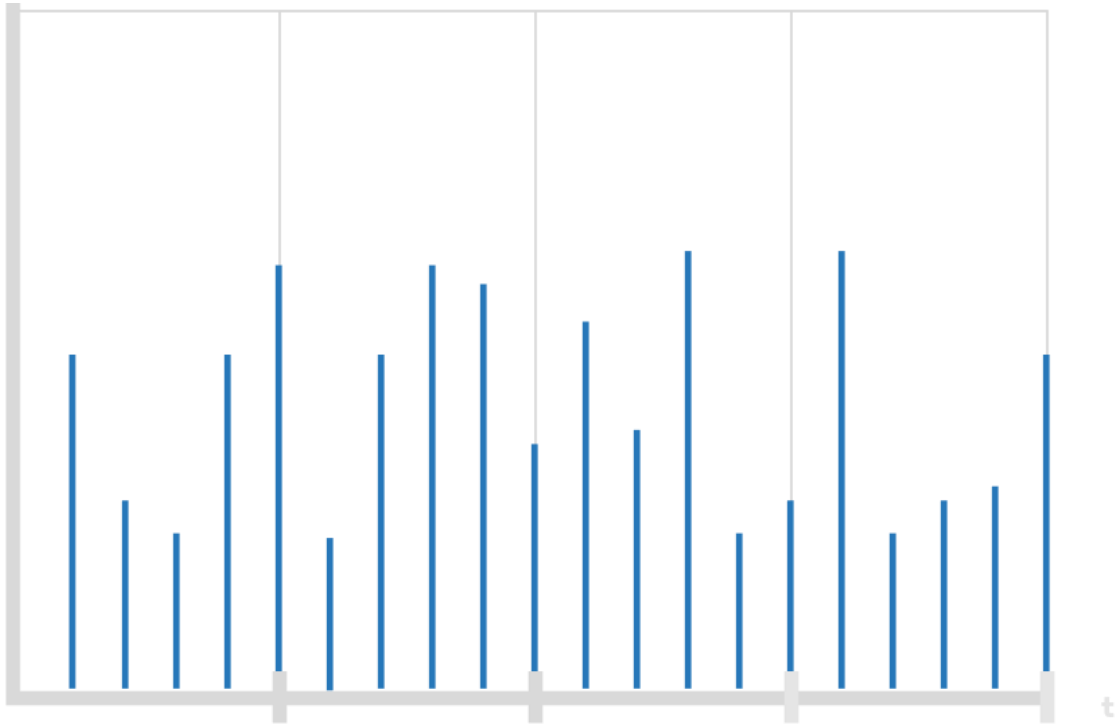
Periodic Mode

Readings at regular intervals

Ideal for consistent, long-term data collection.

Sensors take periodic measurements based on the reporting interval you've configured—ideal for consistent, long-term data collection.

Main benefit: longer lifetime for consistent monitoring



Trigger Mode

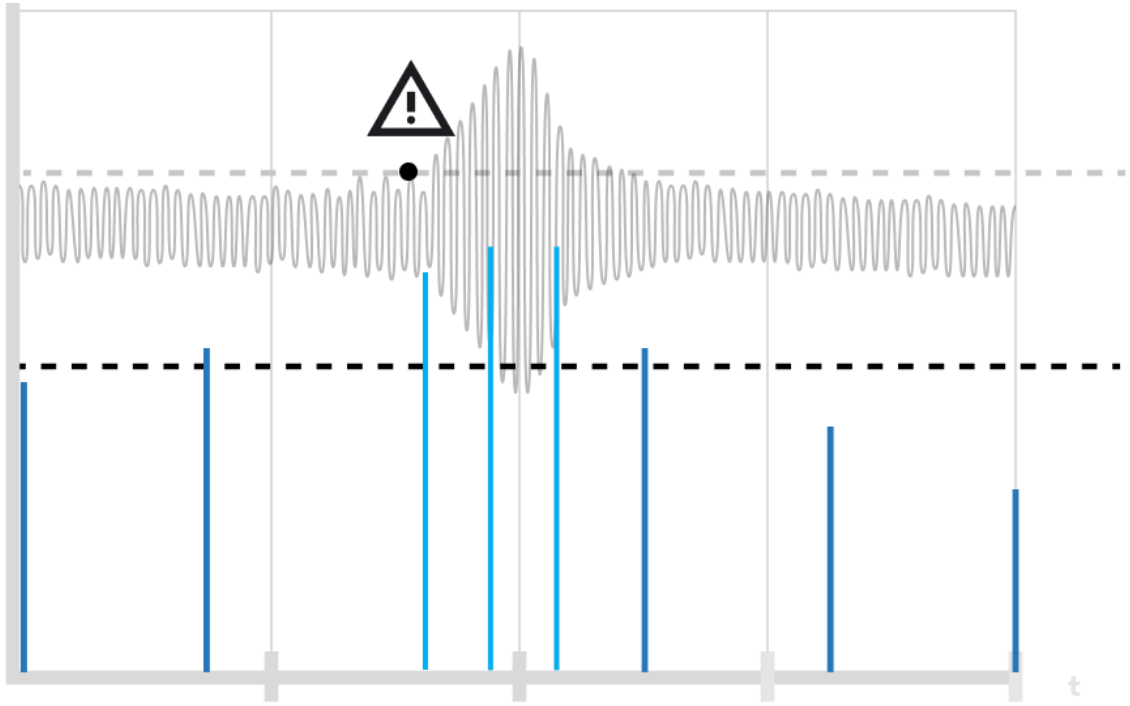
Activated by acceleration or tilt

Readings are taken only when specific conditions are met.

Suitable for human and natural events like earthquakes, train passages, or when tilt exceeds set thresholds.

Data is collected after external actions relevant to the measured parameters.

The Trigger Mode reduces unnecessary transmissions and typically has little impact on battery life.



Event Detection Mode

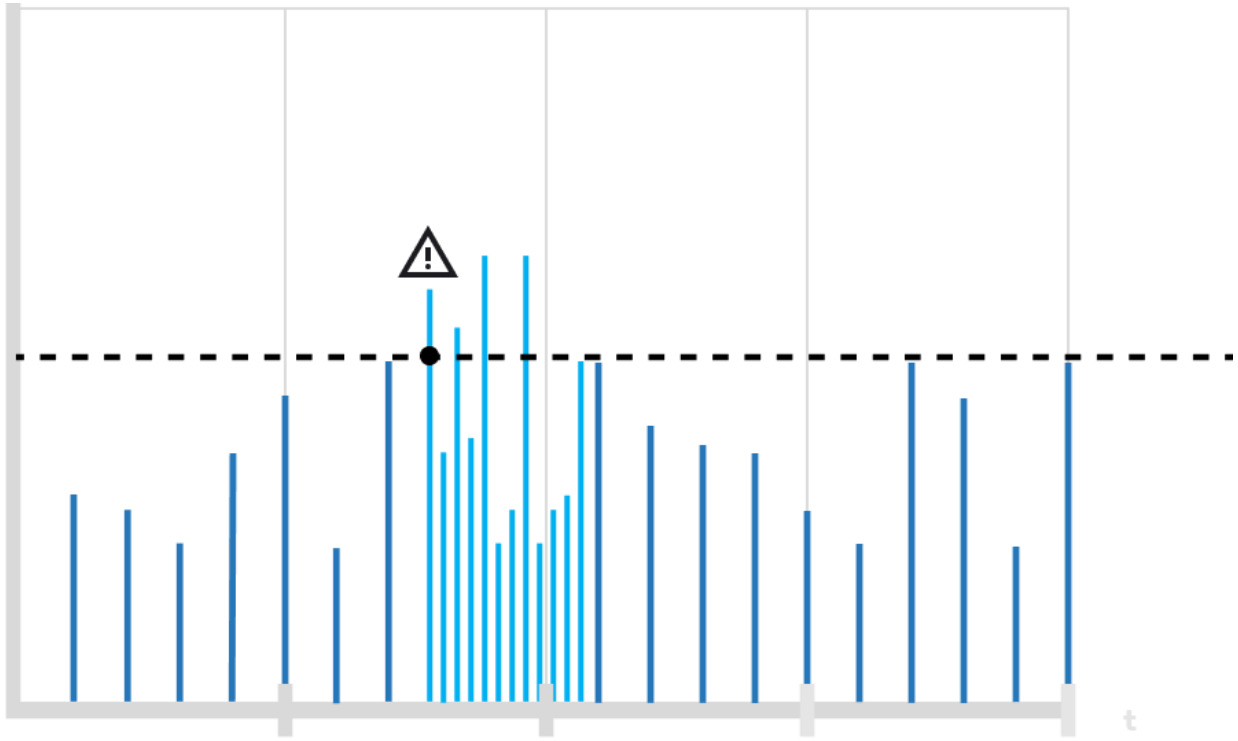
Tiltmeter Only

Built for early warning

Ensuring rapid detection of critical changes in real time.

Tilt is measured at high frequency (3.9 Hz) and continuously checked against axis-specific thresholds.

Main benefit: fast response <2 s



G7 Operational Modes at glance

	Standard Mode	Triggered Mode	Event Detection Only for tiltmeter
How it Works	Periodic readings based on a configured reporting period	Activates sensor readings based on tilt, acceleration or angular velocity exceeding set thresholds	Continuously measures tilt at 3.9 Hz and checks against axis-specific thresholds
Data Frequency	Regular intervals (from 30s to 24h sampling rate)	Regular intervals and Trigger mode configurable	Regular intervals and Alert mode configurable
Use Case	Long-term structural or environmental monitoring	Sensor data gathered for event-based monitoring purposes	Early warning and time-critical change detection