pALERT
F330

pALERT F330 is the latest model of Sanlien vibration family and complied USGS Class A force balance accelerograph standard. Joining MEMS and Quartz sensor technology, pALERT F330 embeds a tri-axial force balance accelerometer with a new designed 24-bit digitizer, elevating its performance to better than 130dB. pALERT F330 inherits the features from pALERT family, such as Pd algorithm for on-site early warning, along with PGA and STA/LTA trigger modes to capture natural vibration signals. pALERT F330 also keeps AUX port for direct control signal output for industrial usage on disaster mitigation. Besides being a scientific instruments, pALERT F330 can play significant roles for emergency shutdown, structural monitoring, or national seismic observation. Modbus streaming and Seedlink protocol are both available in pALERT F330. Recording data formats can be opted in CSV or miniSEED. International intensity standards are supported in pALERT F330 for real-time display on its LCD screen, including MMI US, KMA Korea, JMA Japan, CWB Taiwan, and CAE China.

Along with SanDAS (Sanlien Data Acquisition Software) software, pALERT F330 is an ideal strong-motion accelerograph for regional array in seismic observation, bridge or dam integrity monitoring, and building damage assessments.

Features

Edge Computing Capability

High Dynamic Range (>130dB)
>130 dB

Event Recording & Continuous Recording

SeedLink Protocol

Pd Algorithm

Modbus Protocol
Modbus

Best Suited

Seismic Hazard Control

Vibration Monitoring

Infrastructure Life-cycle Assessment

Application

1. Earth Early Warning (EEW)

2. Structural Health Monitoring (SHM)

3. Bridge and Dam Monitoring

4. National Strong-motion Array

Specification — pALERT F330

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Sensor Type	Tri-axial Force Balance Accelerometer
Trigger Algorithm	Pd, PGA, STA / LTA
Measuring Range	±2g, ±4g (Selectable)
Bandwidth	DC ~ 200 Hz
Instrument Noise (USGS CPSD method)	> 130 dB (above 1 Hz with ±2g full scale)
	> 124 dB (above 1 Hz with ±4g full scale)
Instrument Noise (RMS Dynamic Range)	> 135 dB (Full Scale RMS sine wave to RMS noise, 0.01--500Hz band)
Sampling Rate	100 SPS, 200 SPS, 500 SPS, 1000 SPS (With Anti-Aliasing LPF)
Embedded Filter	LPF, HPF
Resolution	24-bit
Data Format	CSV / miniSEED
Storage	32GB microSD Card (Expandable)
Time Synchronization	NTP (GPS model available upon request)
Display	OLED (2 lines x 20 characters)
Power Supply	10 - 30 VDC
Power Consumption	3W
Operating Temperature	-20 °C ~ 75 °C
Waterproof	IP67
Dimension (L x W x H)	210 x 175 x 113 mm