

COMPLETE WIRELESS VIBRATION MONITOR FOR THE INFRA SYSTEM

INFRA C22 Ex

Wireless Triaxial Vibration Monitor for explosive atmosphere

The INFRA system is used to monitor construction activities, blasting, train traffic, road traffic, vibration in buildings etc.

Package includes an explosion proof enclosure designed for C22.

- Full functionality of C22 (for additional information see separate data sheet INFRA C22)
- For explosive atmosphere
- International approval for use in an explosive environment
- European approval for use in an explosive environment ATEX zone 1/21
- Configured for wall mount or ground mount
- Suitable for use in e.g. refineries and petrol processing plants



* The INFRA C22 is bought separately

INFRA C22 measures according to the following national and international standards:

DIN 4150-3 Anlage	1 – 315 Hz	SN 640 312a	5 – 150 Hz
ISEE Seismograph	2 – 250 Hz	Acceleration	5 – 300 Hz
AS 2187.2-2006	2 – 250 Hz	SS 4604866 Spräng	5 – 300 Hz
Arrêtè	1 – 150 Hz	SS 025211 Schakt	5 – 150 Hz
ICPE	1 – 150 Hz	SS 025211 Schakt	2 – 150 Hz
IN 1226	1 – 150 Hz	NS 8141:2013 Byggverk	3 – 400 Hz
SBR-A	1 – 100 Hz	NS 8141:2001 Byggverk	5 – 300 Hz
SBR-B, RMS 125 ms	20 mm/s 1 – 80 Hz	NS 8176 Komfort, RMS 1s	20 mm/s 1 – 80 Hz
Toronto bylaw 514	1 – 100 Hz	SS 4604861 Komfort, RMS 1s	20 mm/s 1 – 80 Hz
Toronto bylaw 514	2 – 250 Hz	SS 4604861 Komfort, RMS 1s	700 mm/s ² 1 – 80 Hz
Turkey Mining and Quarry	2 – 250 Hz	OfM 9/1997 dB	55-117 dB 1 – 80 Hz
BS 7385	1 – 300 Hz	ÖNORM S 9020	1 – 315 Hz

Technical Data

MEASURING

The unit has built in digital signal processing, which processes all incoming data in real time according to the selected standard. The unit measures maximum values for each interval and at the same time, it records time history data when the vibration level exceeds the user pre set threshold.

SAMPLING

The geophone signals are sampled at 4096 Hz using a high resolution A/D converter for a wide dynamic range. When a preset trigger level is exceeded a time history is recorded.

RECORDING

Recording time is up to 2 minutes, with up to 5 seconds pre-trig time.

POWER SUPPLY

Internal Lithium-Ion batteries that easily can be changed.

MEASURING RANGE

Frequency range 1 Hz - 500 Hz. The Geophones have a calibrated sensitivity within +- 2%. Maximum vibration level is 250 mm/s (10 in/sec) dependent on the selected standard.

SENSOR ELEMENT

The sensor elements are rugged high quality velocity sensing geophones with long term stability and wide dynamic range.

IDENTITY

The serial number of the unit and important metadata always follows the recorded data. This makes it possible to trace data to a certain unit.

MEMORY

Micro SD industrial memory card. 1 GB in standard configuration.

DATA TRANSFER

All data is buffered on the memory card and is sent when the next cellular communication takes place. If cellular communication is not possible, data is kept for transfer at a later time.

DATA AND SERVICE MESSAGES

Data and service messages are sent via INFRA Net for maximal flexibility.

Product specifications and descriptions in this document are subject to change without notice.

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CALIBRATION

The unit has an internal memory for identity, calibration factors, calibration date etc.

USER INTERFACE

With a keyboard and display settings can be changed. The display also shows battery status, signal strength, and the latest events.

REMOTE OPERATION

Settings can be changed remotely using INFRA Net.

MECHANICAL & ENVIRONMENTAL

Housing Material: Marine grade copper free aluminium

Dimension: 300 x 200 x 220 mm (5.8 x 5.0 x 3.5 in)
(Including antenna cover, excluding connector and standoffs.)

Ingress Protection class: IP66
ATEX protection concept: Ex-d
ATEX Gas group IIB+H2

Weight: 16.0 kg (35.3 lbs) incl 2 batteries
Operating temperature: -20 to +40 °C (-4 to +104 °F)

CE APPROVAL

EMC: 2014/30/EU
LVD: 2014/35/EU
RoHS: 2011/65/EU (2015/863)
ATEX: 2014/34/EU

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