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. refinaries and petrol processing plants

* The INFRA C22 is bought separately

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

<table>
<thead>
<tr>
<th>Standard</th>
<th>Frequency Range (Hz)</th>
<th>Standard</th>
<th>Frequency Range (Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIN 4150-3 Anlage</td>
<td>1 – 315</td>
<td>SN 640 312a</td>
<td>5 – 300</td>
</tr>
<tr>
<td>ISEE Seismograph</td>
<td>2 – 250</td>
<td>Acceleration</td>
<td>5 – 300</td>
</tr>
<tr>
<td>AS 2187.2-2006</td>
<td>2 – 250</td>
<td>SS 4604866 Spräng</td>
<td>5 – 150</td>
</tr>
<tr>
<td>Arrêtè</td>
<td>1 – 150</td>
<td>SS 025211 Schakt</td>
<td>2 – 150</td>
</tr>
<tr>
<td>ICPE</td>
<td>1 – 150</td>
<td>NS 8141:2013 Byggverk</td>
<td>3 – 400</td>
</tr>
<tr>
<td>IN 1226</td>
<td>1 – 150</td>
<td>NS 8141:2001 Byggverk</td>
<td>5 – 300</td>
</tr>
<tr>
<td>SBR-A</td>
<td>1 – 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBR-B, RMS 125 ms</td>
<td>20 mm/s 1 – 80 Hz</td>
<td>NS 8176 Komfort, RMS 1s</td>
<td>20 mm/s 1 – 80 Hz</td>
</tr>
<tr>
<td>Toronto bylaw 514</td>
<td>1 – 100</td>
<td>SS 4604861 Komfort, RMS 1s</td>
<td>700 mm/s² 1 – 80 Hz</td>
</tr>
<tr>
<td>Toronto bylaw 514</td>
<td>2 – 250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS 7385</td>
<td>1 – 300</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 40 seconds, with 1 second pre-trig.

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.

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

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

Technical Data

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

Sweden
info@sigicom.se
www.sigicom.se

France
info@sigicom.fr
www.sigicom.com

UK
info@sigicom.co.uk
www.sigicom.com

USA
info@sigicom.us
www.sigicom.com

© Copyright Sigicom 2018
Doc. nr DS089_D1870-EnD