SCS Syscom Cloud Software
scs.syscom-instruments.com

SCS (Syscom Cloud Software) is the cloud software developed by SYSCOM for the management, visualization and reporting of data coming from ROCK, MR3003 and MR3000 instruments.

Applications	■ **Civil Engineering**
	Construction site monitoring
	Traffic and railway monitoring
	Blasting monitoring
	■ **Strong motion**
	Building monitoring
	Dam monitoring
	Monitoring of Structures (Tunnels, Bridges,...)

SCS Syscom Cloud Software

The SCS is a cloud software able to manage, visualize and create reporting of data coming from ROCK, MR3003 and MR3000 instruments. Fully designed by Syscom and dedicated to vibration monitoring, the SCS is operating like a Software as a Service (SaaS) platform, providing all the benefits of such model.
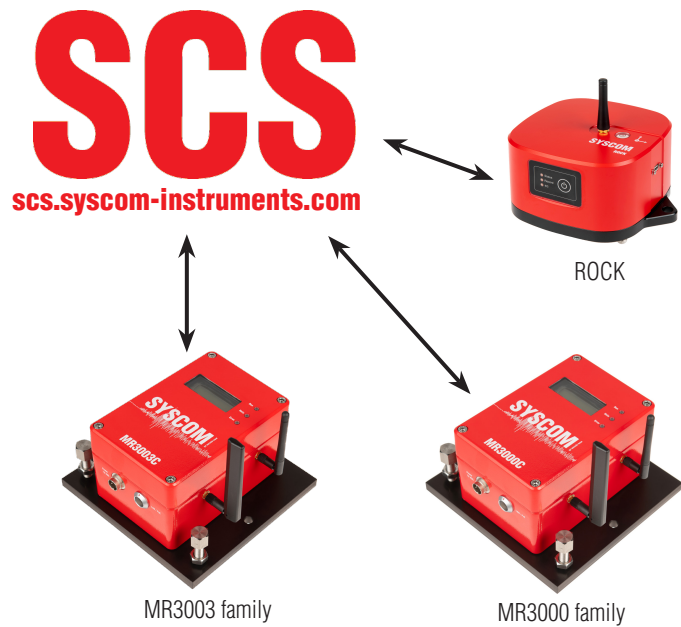
Its main features include plug & play M2M communications, management by projects, visualization of events/continuous background monitoring and automatic reporting.

Moreover, it has post-processing capabilities such as data integration/differentiation, Fast Fourier Transform (FFT), 1/3 octave analysis and graphical comparison with widely spread standards (DIN 4150-3, SN 640312, RI 8507 and many others).

The data are hosted on a dedicated Swiss server, and the transfer is protected with the SHA-256 secure hash algorithm, to ensure the highest data safety.

The SCS can provide three different accessibility levels to the data, to let the supervisor assign a specific access to different people involved in the project, for easy data sharing.

Due to its simplicity and reliability, the SCS is the ideal software to manage all the projects involving ROCK/MR3003/MR3000 devices.

SCS
scs.syscom-instruments.com

ROCK

MR3003 family

MR3000 family

Data management

Pay per use	No software to be installed or purchased
Direct access with a browser
Easy data export in different formats
Pay per use only
Reliable	Swiss hosted server
SHA-256 secure hash protection algorithm
Data always available, even with idle devices
Data archiving
3 accessibility levels	Administrator: full access
Read/write: full access to a single project
View only: only data visualization

Automatic data reporting and notifications

Standard regulations	Among others: DIN 4150-3 (Germany) - SN 640312 (Switzerland), Circulaire du 23/07/1986 (France), BS 5228 and BS 7385-2 (UK) - RI 8507 and OSMRE (USA) - Others on request
Automatic reporting	Selectable report content for event & background
Standard & blasting report templates
Reports automatically sent by SCS
Project-based contact list
Notifications	Automatic alarm and state-of-health notifications
Project-based contact list
Log information

PROJECT INFO

- Main info on the project
- Remote device parametrization
- Creation of access links (read/write, view-only) for other people
- FTP settings

Recent activities & notifications

- Recent activities on the project
- Recent alarms
- Recent automatic reports
- Recent State of Health notifications

PROJECT DEMO

INFO

Edit | Set reporting | Set notifications

DESCRIPTION
demo Barth

Company: Syscom
Location: -
Address: -
Customer: -
Operator: Barth
Date:

RECORDERS LIST
- mr3003-22010070
- Rock-20020105

LOGS > see all
Device parameters modified – 1...
Device turned on using a token ...
Device added to project – 11.01...

REPORTING > see all
Event report - 13.01.2022 13:...
Event report - 13.01.2022 13:...
Event report - 13.01.2022 13:...

SHARING
View only
Read / Write
FTP Forward

ALARMS > see all
Alarm 1 – 13.01.2022 13:39:41 – ...
Alarm 1 – 13.01.2022 13:39:39 – ...
Alarm 1 – 13.01.2022 13:39:27 – ...

STATE OF HEALTH > see all
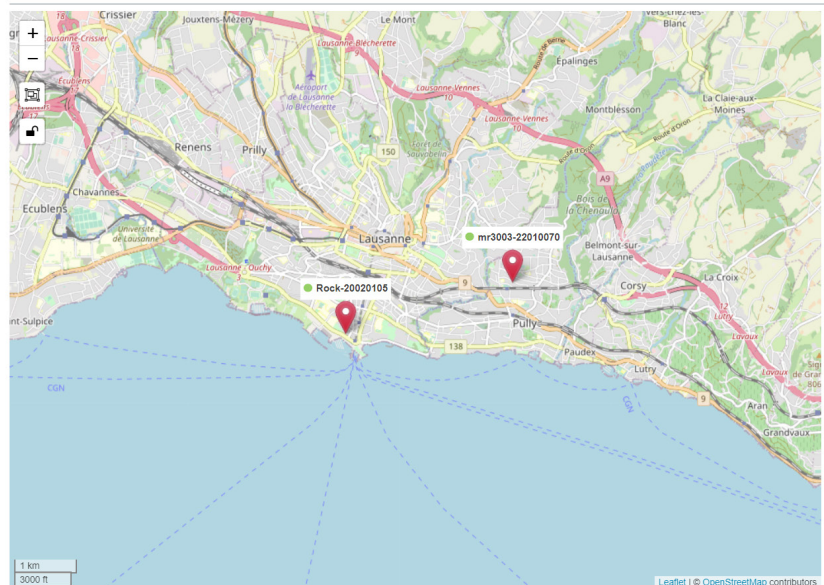No state of health since one week

MAP

- Each instrument can be positioned at its exact location
- The view can be blocked
- Link to Event and Background sections
- The map can be inserted in periodic background reports

PROJECT DEMO
Recorders list
Rock-20020105
mr3003-22010070

mr3003-22010070
Rock-20020105

1 km
3000 ft
Leaflet | © OpenStreetMap contributors

EVENT RECORDING

- Listed in a table
- Event and peak information
- Norm comparison
- Export in binary or ASCII format
- PDF reports

Time-domain calculations

- Vector sum
- Calculation of displacement and acceleration (or velocity)

Frequency-domain calculations

- FFT
- Zero-crossing frequency
- 1/3 octave MAX and RMS

PROJECT DEMO 0000012E.SCS - 12.01.2022 08:01:59

All axes | X | Y | Z | Data | VSUM | Freq | Report | Norm comparison | Export
Hide | Previous | Next

X [mm/s]

Y [mm/s]

Z [mm/s]

08:01:59.600 08:01:59.800 08:02:00.000 08:02:00.200 08:02:00.400 08:02:00.600 08:02:00.800 08:02:01.000 08:02:01.200 08:02:01.400
time [h:m:s]

Device name Rock-20020105
Serial number 20020105
Date 12.01.2022 08:01:59.473
Duration 00:00:02.023
Trigger time 12.01.2022 08:02:00.473
Sampling rate 1000 Hz
Max amplitudes
X: 0.997 mm/s
Y: 1.21 mm/s
Z: 9.76 mm/s
VSUM: 9.82 mm/s
Dominant frequencies
X: 64 Hz
Y: 64.5 Hz
Z: 64 Hz
RMS values
X: 0.0693 mm/s
Y: 0.101 mm/s
Z: 0.737 mm/s

BACKGROUND RECORDING

- Continuous values on the 3 channels of the background information recorded
- Selectable data period interval
- Superposition of time histories coming from different devices
- Comparison line can be added to show the reference threshold
- Time period and peak information
- Export in BMR or ASCII format

Periodicity of PDF reports

The reports about the background recording can be generated and sent on a daily, weekly or monthly basis.

PROJECT DEMO

All axes | X | Y | Z | Peak | RMS | Report | Add limit | Export
Related events

Period | 1d | 1w | 1m | 3m | 6m | from 06.01.2022 14:40 to 13.01.2022 14:40 | Amplitude | Auto | 2 | mm/s

X [mm/s] limit

Y [mm/s] limit

Z [mm/s] limit

7. Jan 8. Jan 9. Jan 10. Jan 11. Jan 12. Jan 13. Jan
time [h:m:s]

mr3003-22010070 | Rock-20020105

Start date 09.09.2021 11:18:52
End date 13.01.2022 14:40:02
Evaluation for Rock-20020105
Peak max
X: 45.936 mm/s
Y: 34.124 mm/s
Z: 125.37 mm/s
Peak max date
X: 13.01.22 13:39:32
Y: 13.01.22 13:39:32
Z: 13.01.22 13:39:32

POOL SECTION

- List of projects
- Indication of active/idle devices in each project
- Possibility to add/remove devices
- Possibility to pair/unpair devices
- Device activation for a limited time or indefinitively, with a manual stop

POOL

Drag and drop devices from IDLE POOL to PROJECTS and vice versa.

PROJECTS

MEETING

| ● Rock-18430005 | unlimited | ∞ | ON | × |

PROJECT TEST

● mr3000-18500223		-	0d left	+	∞	OFF	×
● mr3000-bla	Next fee in 11 days	-	unlimited	+	∞	ON	×
● MR3000C	Next fee in 28 days	-	unlimited	+	∞	ON	×

TESTETS

No device in this project

IDLE POOL

+ Add a device

| <mr 23232323> | no day left | Pair |
| | | Delete |

Turn on MR3000 device will cost 1 token for 30 days connectivity. Only turned off paired devices can be moved.

Major features

■ Compatible with MR3003, MR3000 and ROCK devices

■ Open architecture with non-corruptible data

■ Management by project

■ Pay per use only

■ 3 levels of accessibility (Admin-User-Viewer)

■ Data visualization and processing

■ Multiple format data export

■ Comparison with different standard norms

■ Automatic user-defined reporting

■ Alarm and state-of-health notifications

■ Remote parametrization of devices

Tutorial videos available at:
https://www.syscom.ch/videos

Technical Specifications

Accessibility

Compatible intruments	ROCK, MR3003, MR3000
Browser requirements	Any browser, internet access required
SCS access	https://scs.syscom-instruments.com/, with username and password

Device pairing

| **MR3003/MR3000** | Token-based for MR3003/MR3000 devices. One token enables connectivity for one MR3003/MR3000 to the SCS for 30 days. Tokens can be purchased in the SCS. One token per device is free. |
| **ROCK** | Automatic. Please refer to ROCK datasheet. |

Project management

Project information	Active and archived projects, paired/idle instruments, alarms, device state of health, log information, automatic reports
Project-based settings	Standard regulations for data comparison, template for automatic reports, notifications, contact list
Access levels	Administrator (full access), Read/write (project-settings access), View only (project-view access)

Data visualization

Event recording	Time history on the three channels, Vector Sum, FFT, norm comparison
Background recording	Continuous peak values on the three channels, selectable data interval, superposition of time histories from different devices
Standard regulations	Comparison of multiple events with the selected thresholds
Data import/export	Proprietary formats XMR/BMR/*.SCS and ASCII

Data reporting

| **Event recording** | Time histories, VSUM, FFT, 1/3 octave band analysis, norm comparison, user-defined comments |
| **Background recording** | Selectable sending periodicity, user-defined comments |

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