

Dam Monitoring System

For evaluating the structural dynamics induced by seismic ground motion

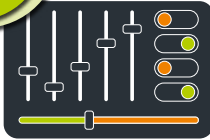


1.



Monitor

2.



Control

3.



Analyze

SEMEX **ENGCON**

VIBRATION MONITORING SOLUTIONS



Certified to DIN EN ISO 9001:2008

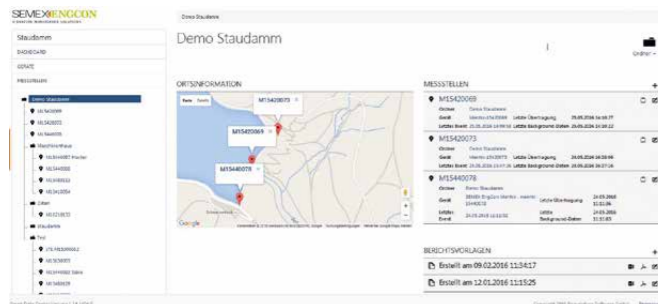
MENHIR



MENHIR is a robust and highly reliable seismic monitoring device that operates in network topologies to monitor seismic strong motion and quickly analyzes their impact on dam structures.

MENHIR is configurable as master and as slave, such that no further equipment is required for network operations.

SmartDataCenter, a server based cloud application, manages effectively the dam instrumentation, provides full control, analyzes data and generates reports.



Technical Features

- Tri-axial acceleration sensor (MEMS, FBA)
- Embedded UPS
- Optional FO-Interface for immune data transfer over long distances
- Optional Sub-1 GHz and cellular data transmission
- „Common-Trigger“ and „Common-Alarm“-Function
- Response Spectrum Analysis
- Continuous State of Health monitoring
- GPS-Receiver
- Power-Relay-Output
- RS-485 Bus for attaching additional geotechnical sensors
- IP65 Enclosure (optionally IP67)
- Status Display

Dam Monitoring System

MENHIR allows for versatile instrumentation of all kind of dams and precisely acquires ground at all critical structural points being immediately transmitted to the control room for structural health analysis.

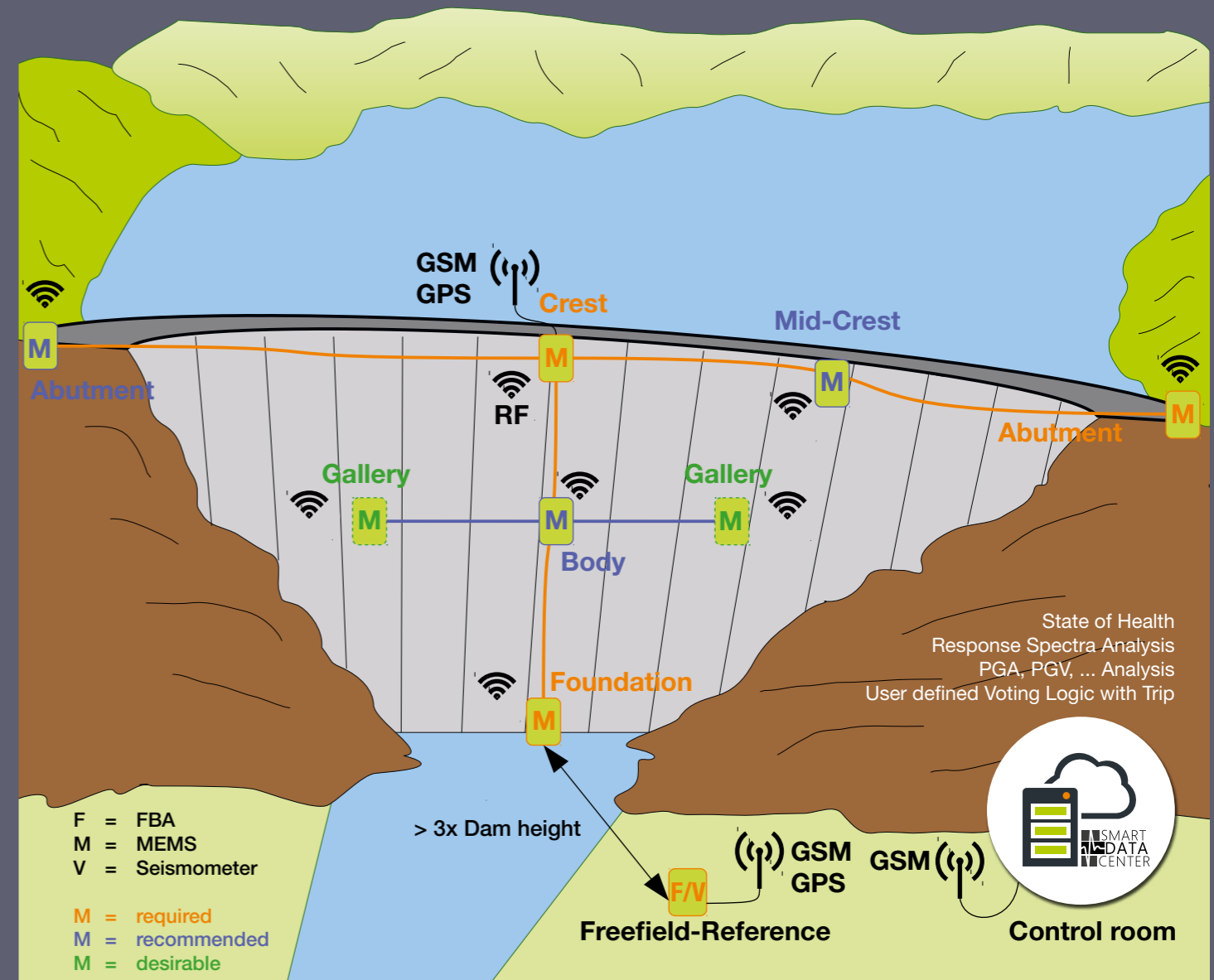
The cloud-based application „SmartDataCenter“ manages all instruments and analyzes the data according to the specific requirements leading to a reliable analysis of the structural state of health of the dam.

MENHIR can be equipped with the following tri-axial sensors:

	MEMS	FBA	Seismometer
Measuring Range	±2g or ±4g	±2g or ±4g	±5 mm/s or ±2.5 mm/s
Bandwidth	0 - 200 Hz	0 - 100 Hz	0,1 - 100 Hz
Dynamic Range	>110 dB	> 140 dB	> 130 dB

Please refer to the MENHIR data sheet for detailed technical specifications.

Structure of the Monitoring System




SEMEX-EngCon GmbH

Pforzheimer Str. 202D
76275 Ettlingen, Germany

Fon: +49-(0)7243-5148254
Mail: info@semex-engcon.com

SEMEX  **ENGCON**
VIBRATION MONITORING SOLUTIONS

www.semex-engcon.com

Certified to DIN EN ISO 9001:2008  AIRCERT