PMIOT-FISSUR

Connected crack and displacement monitoring kit

Keep track of crack movement

PMIOT-FISSUR, the connected kit for remotely monitoring cracks and joints in your structures, with measurements and alerts brought together in PMI-CloudView.

The PMIOT-FISSUR kit

A configurable solution for monitoring the opening and closing of cracks and joints.

1 Measure displacement

A sensor selected to suit the required measurement stroke and site conditions.

2 Monitor your structures remotely

Automatic data acquisition and transmission over your selected network.

3 Visualise data and receive alerts

Charts, historical data and custom thresholds in PMI-CloudView.

Displacement measurement	
Technologies	POT / LVDT / INDUC
POT	Stroke up to 1,000 mm
LVDT	Stroke up to 500 mm
INDUC	Stroke up to 800 mm
Range	Selected to suit the sensor

Data acquisition and networks	
Measurement points	1, 4 or 6 sensors (1CH / 4CH / 6CH)
Networks	LoRaWAN / 4G-LTE / NB-IoT / Wi-Fi
Data transmission	1 to 144 transmissions/day depending on configuration
Monitoring	PMI-CloudView

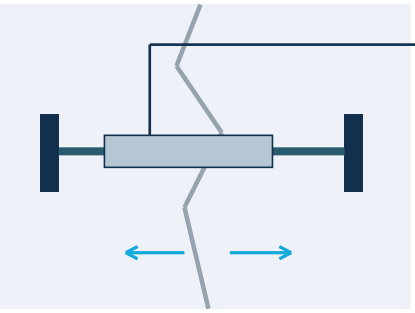
Total stroke per sensor, depending on the selected model. Network and transmission rate depend on configuration.

PM Instrumentation - 47 Avenue de l'Europe - 92400 Courbevoie - France
www.pm-instrumentation.com | contact@pm-instrumentation.com | 0146919332

From the sensor to online data

PMIOT-FISSUR combines displacement measurement, autonomous data acquisition and remote monitoring in a configurable solution. It tracks the opening and closing of cracks and joints to monitor changes in structures over time.

1. Measure



Displacement sensor

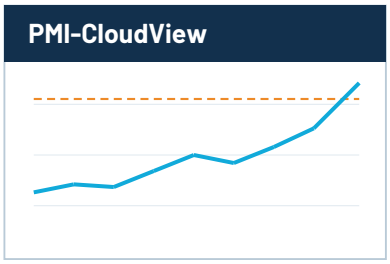
Installed across the crack or joint.

2. Transmit

PMIOT-STAND-1CH

Automatic data acquisition and transmission.

3. Monitor



Charts and alerts

Historical data, thresholds and online access.

System overview for the 1CH kit. 4CH and 6CH versions are also available.

A solution tailored to your site

Monitor remotely

Automatic measurements and data access through a web interface.

Choose your configuration

Select the technology, stroke, number of sensors and network to suit your needs.

Track changes

Compare measurements over time and monitor thresholds.

Put your data to work

Access historical data, export results and share them with monitoring teams.

Applications: buildings, civil engineering structures, structural joints and construction site monitoring.

Options on page 3 • Ordering code on page 4 • Monitoring and documentation on page 5

PM Instrumentation - 47 Avenue de l'Europe - 92400 Courbevoie - France
www.pm-instrumentation.com | contact@pm-instrumentation.com | 0146919332

Configure your PMIOT-FISSUR

The kit is configured according to the displacement to be monitored, the site environment and the number of measurement points. The models below illustrate the technologies available in the PM Instrumentation range.

1. Select the measurement technology

Code	Technology	Selection guide	Total stroke[1]
POT	Potentiometric	Cost-effective solution for standard applications	Up to 1,000 mm
LVDT	LVDT	For LVDT measurement requirements, including small displacements	Up to 500 mm
INDUC	Inductive	For harsh environments and demanding site conditions	Up to 800 mm

Sensor examples: LFM or LTP for POT; HE-750 for LVDT; LIPS 101 series for INDUC. Other sensors in the range may be selected to suit the application.

[1] Total stroke per sensor, selected from the available ranges. A ±25 mm measurement range corresponds to a total stroke of 50 mm. Performance and protection depend on the selected model.

2. Select monitoring and transmission options

Kit configuration	Available options
Measurement points	1CH: 1 sensor • 4CH: 4 sensors • 6CH: 6 sensors
Communication	LoRaWAN / 4G-LTE / NB-IoT / Wi-Fi, depending on network availability
Transmission rate	1 to 144 transmissions/day, depending on configuration and monitoring needs
Power and autonomy	Internal battery; extended battery life or solar power options
Local storage	Backup storage on MicroSD, depending on the selected option
Installation	Wall or pole mounting, weather protection and cables
Monitoring	PMI-CloudView or a customer server, depending on the project

Battery life depends on the sensor, transmission rate and communication conditions. The channel count corresponds to the number of single-channel displacement sensors.

Detailed sensor and acquisition node specifications are available through the links on page 5.

PM Instrumentation - 47 Avenue de l'Europe - 92400 Courbevoie - France
www.pm-instrumentation.com | contact@pm-instrumentation.com | 0146919332

PMIOT range ordering code

The ordering code identifies the system family, measurement technology, range, number of channels and network. The fields below are detailed for the **FISSUR** configuration.

Example ordering code

PMIOT	FISSUR	POT	0100	1CH	LTE

PMIOT
Platform for connected measurement systems.

Family
FISSUR: cracks / displacement; VIBRA: vibration;
INCLINO: inclination; STAND: autonomous node.

Technology - FISSUR
POT: potentiometric; LVDT: linear variable differential transformer;
INDUC: contactless inductive.

Total stroke - FISSUR
4-digit value in mm: 0010, 0050, 0100...
POT: up to 1000; LVDT: up to 0500; INDUC: up to 0800.

Number of channels
1CH: 1 sensor; 4CH: 4 sensors; 6CH: 6 sensors.
One measurement channel per displacement sensor.

Network
LORA: LoRaWAN; LTE: 4G/LTE;
NBI: NB-IoT; WIFI: Wi-Fi.

The stroke applies to each sensor. The technology and range units for other families are defined in their respective datasheets.

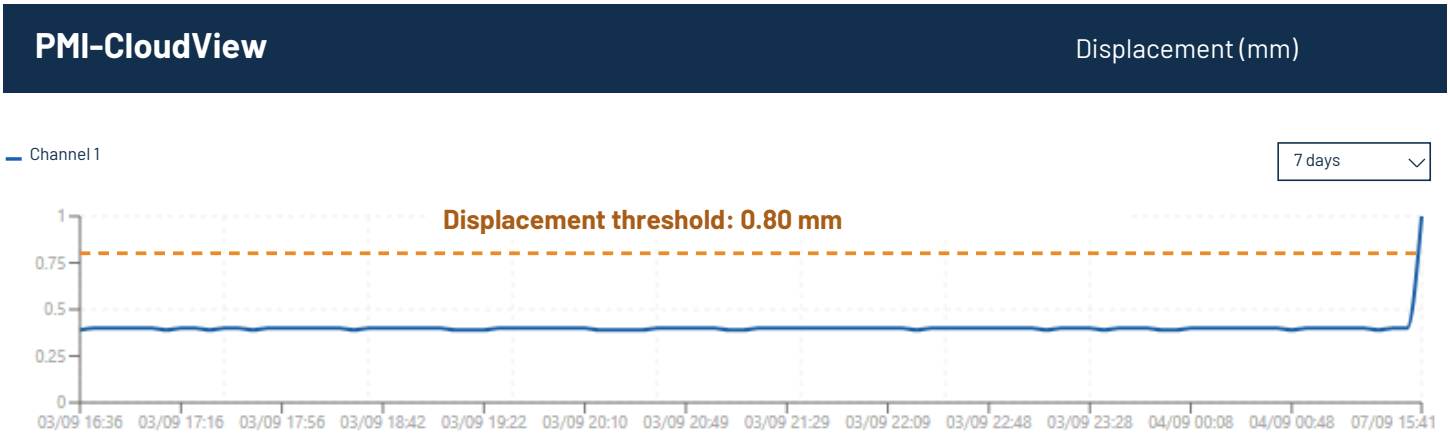
Configuration examples	Code description
PMIOT-FISSUR-POT-0100-1CH-LORA	100 mm total stroke; 1 acquisition channel; LoRaWAN
PMIOT-FISSUR-LVDT-0050-4CH-LTE	4 sensors, each with 50 mm stroke (±25 mm); 4G/LTE
PMIOT-FISSUR-INDUC-0200-6CH-NBI	6 sensors, each with 200 mm stroke; NB-IoT

Mixed configurations: specify the technology and stroke for each channel when ordering.

PM Instrumentation - 47 Avenue de l'Europe - 92400 Courbevoie - France
www.pm-instrumentation.com | contact@pm-instrumentation.com | 0146919332

Monitor with PMI-CloudView

View incoming measurements, historical data and displacement thresholds through a web interface. Dashboards are tailored to the structures and measurement points being monitored.



Monitoring example. Data and the 0.80 mm threshold are illustrative.

History and comparison

Charts, analysis periods and comparison of measurement points.

Thresholds and notifications

Configurable alerts; email and SMS notifications depending on configuration.

Export and sharing

CSV export, API and multi-user access depending on the project.

Access to measurements

Updated as data is received, with retention tailored to the project.

Component documentation

Refer to the selected component's datasheet for its full specifications.

PMIOT-STAND	PMIOT-STAN acquisition node	Open PDF
LFM / POT	Compact potentiometric sensor	Open PDF
LTP / POT	Potentiometric sensor, stroke up to 1,000 mm	Open PDF
HE-750 / LVDT	LVDT sensor	Open PDF
LIPS 101 / INDUC	P101 / X101 sensors	Open PDF

Explore all PMI-CloudView features

PM Instrumentation - 47 Avenue de l'Europe - 92400 Courbevoie - France
www.pm-instrumentation.com | contact@pm-instrumentation.com | 0146919332