

# SURFACE JOINTMETER

*Model RTF 1D/3D*

**ROCIEST**  
**TELEMAC**

## APPLICATIONS

The RTF surface jointmeter (also crackmeter or fissurometer) is used to measure displacement at joints and cracks in structures and rock masses. Typical applications include:

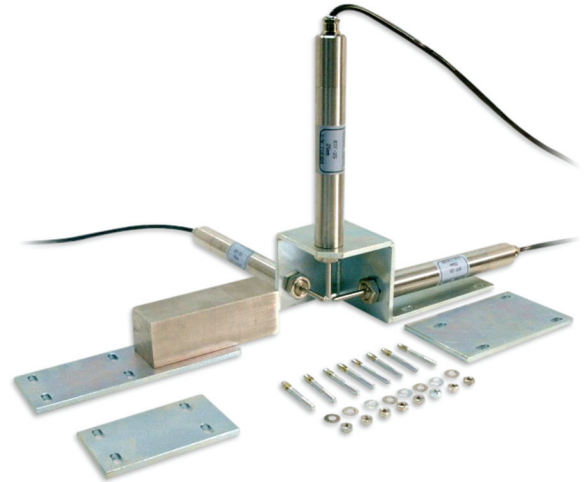
- Measuring fault movements in rock
- Determining crack and joint movement in concrete and masonry structures

## DESCRIPTION

The RTF surface jointmeter consists of a vibrating wire, potentiometer, LVDT or fiber optic displacement transducer and a set of mounting brackets.

The sensor is housed in a rugged cylindrical enclosure which end is fitted with a spring-loaded rod. The bracket containing the transducer(s) is mounted on one side of the discontinuity and the bracket fitted with the reference surface(s) is mounted on the opposite side of the discontinuity. The spherical tip of the spring-loaded rod rests against the reference surface.

The RTF surface jointmeter is available in either uniaxial (RTF 1D) or triaxial (RTF 3D) versions. The 3-D version allows simultaneous measurements in three orthogonal planes.



Model RTF 3D

## FEATURES

- Rugged, waterproof up to 2 MPa, stainless steel sensor enclosure
- Easy installation
- Reusable
- Vibrating wire, potentiometer, LVDT or fiber optic transducers
- Adaptable to uneven surfaces

## SPECIFICATIONS

TRANSDUCER	VIBRATING WIRE	POTENTIOMETER	LVDT (DC)	FIBER OPTIC
Ranges <sup>1</sup>	25, 50, 100, 150, 200, 250 mm	10, 25, 50, 100, 150, 250 mm	5, 25, 38, 50 mm	20 mm
Accuracy <sup>1</sup>	0.2% F.S.	±0.5% F.S.	±0.5% F.S.	±0.1% F.S.
Resolution	0.02% F.S.	0.01 mm	0.01 mm	0.002 mm
Operating temperature	–20°C to +80°C	–20°C to +80°C	–20°C to +80°C	–40°C to +80°C
Thermistor	3kΩ (see model TH-T)	—	—	—
Readout unit	MB-6T(L)	PALMETO P5	ACCULOG-iX	FTI-10, UMI
Data acquisition system	SENSLOG	SENSLOG	SENSLOG	DMI, BUS
Cable	IRC-41A(P)	IRC-41A(P)	IRC-41A(P)	CFO-3STD
Sensibility	<0.02% F.S.	—	—	—

1. Other ranges and accuracies available upon request.

## ACCESSORIES

- Brackets
- Protective cover<sup>1</sup>
- Installation template<sup>1</sup>
- Cable splice kit
- Readout instruments

1. Available for RTF 1D only

## ORDERING INFORMATION

**Please specify:**

- Model
- 1D or 3D version
- Transducer type
- Electrical cable length
- Accessories