

LANDSLIDES WARNING SYSTEM

Warning systems have been developed for real-time monitoring of landslides, faults and rock masses movements.

Data provided by the instruments (displacement transducers and "shift tester") are collected by dataloggers. If the monitored parameters reach the warning level the datalogger sends alert SMS or activates sirens or revolving lights.



Warning system consists of different components such as:

Displacement meter (cable-extension or rod): electromechanical devices with position switch. They can be mounted across cracks or joints.

Long range displacement meter: basically composed of a rotary potentiometer connected with a stainless steel cable by a spring. The free end of the measuring cable is grouted by a fixing plug in the rock mass.

Surface "Shift tester" tiltmeter: consists of a mechanical tiltmeter equipped with a shock absorber. Based on pendulum principle, it is designed to measure the tilting of the rock mass.





Surface "Shift tester" dial indicator: mechanical displacement meter with analog indicator pointer and spring system. It is designed to immediately measure any movements.

Radio module (Data transmission): allows signal transmission from instruments to data acquisition system.



Data acquisition system: consists of a multi-channels datalogger, with GSM/GPRS modem.



INSTRUMENTS - TECHNICAL SPECIFICATIONS

	DISPLACEMENT METER ON/OFF SWITCH	LONG RANGE DISPLACEMENT METER	SURFACE "SHIFT TESTER" TILTMETER	SURFACE "SHIFT TESTER" DIAL INDICATOR
				
Product code	FSM0CA020000 (a filo) FSM0AC080000 (ad asta)	ESTF0200MA00	INSOSHIFT000	FSM0SHIFT000
Range	Adjustable	240 mm/turn	up to 1 mm/m	
Device activation	5 kg		0-360° horizontal plane	0±10 mm
Sensitivity		0.03 mm	Adjustable from 1 to 10 mm/m	0.01 mm
Output signal		4-20 mA		
Operating temperature	- 40°C to +70°C	- 20°C to +100°C	- 20°C to +80°C	- 20°C to +80°C
Dimensions	150x120x60 mm (Enclosure)	400x250x160 mm		
Diameter	2 mm (Steel cable) 8 mm (Steel rod)			
	Cable length 5 m	ON/OFF switch available	Support plate and installation equipment	Support plate and installation equipment

DATA TRANSMISSION - TECHNICAL SPECIFICATIONS

	RADIO MODULE	DATA ACQUISITION SYSTEM
		
Product code	UAD0200TX000	UAD2000RX000
Channels	3 + battery	Customized
Frequency range	2.4 GHz	GSM/GPRS
Power	10-60 mW	
Memory	256 kbyte	
Operating temperature	- 20°C to +80°C	- 20°C to +80°C
	Equipped with solar panel 5 W and rechargeable battery	Equipped with solar panel 15 W and GPRS modem

ACCESSORIES

Siren
Traffic light
Revolving light
Road barrier
Webcam

Product specifications described herein are subject to change without notification.

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