



Trigger Tape Datasheet

Flood detection sensor

General Description

Trigger Tape is a leak detection device used to interface SMT's Moisture Detection Sensor (MDS) to third party alarm monitoring control systems or security systems.

The Trigger Tape unit provides a digital 5V output and a dry relay alarm contact indicating the presence of water on the Moisture Detection Sensor.

The Moisture Detection Sensor comes in copper and stainless steel versions and is equipped with an adhesive backing allowing it to be easily adhered to any pipe or surface you wish to monitor.

For analog measurements, the MDS can be interfaced to SMT's A2 and A3 series data loggers.

Applications

- Flood monitoring alarm systems
- Interface to security systems
- Leak detection systems

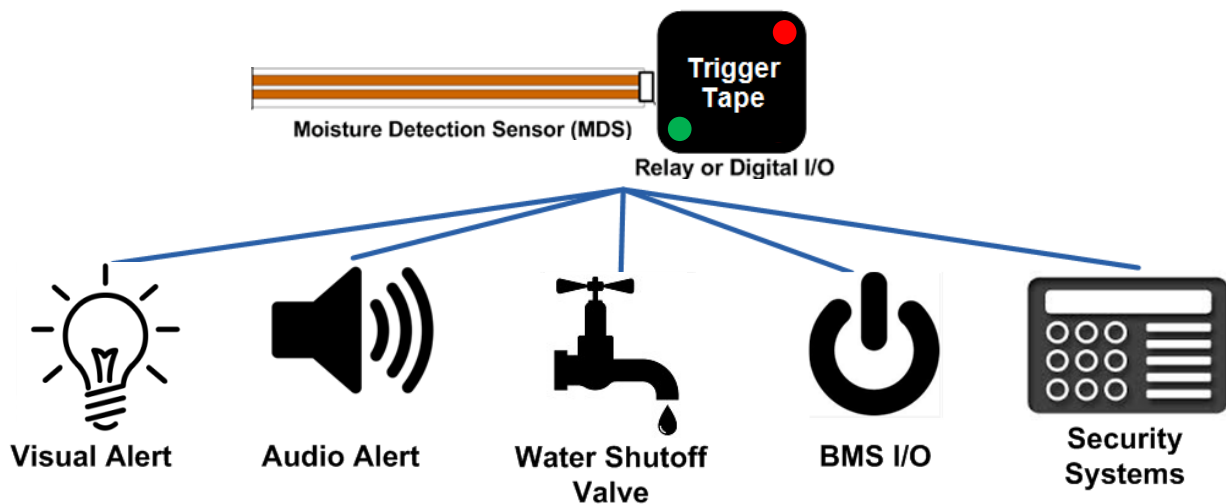
Features

- Custom lengths of either copper or stainless steel moisture detection sensors available.
- 0 or 5V digital output
- Normally open dry relay alarm contact. Normally closed version available.
- Green LED indicates unit is powered
- Red LED indicates the alarm level has been triggered
- Powered by 8-24VDC power. Not polarity sensitive.

Ordering Information

No MDS, Relay=NO	TI-01-00-NO
Copper MDS, Relay=NC	TI-01-CU-XX-NC
Stainless Steel MDS, Relay=NC	TI-01-SS-XX-NC
Copper MDS, Relay=NO	TI-01-CU-XX-NO
Stainless Steel MDS, Relay=NO	TI-01-SS-XX-NO

NC=Normally Closed NO=Normally Open
XX=Tape Length (feet)



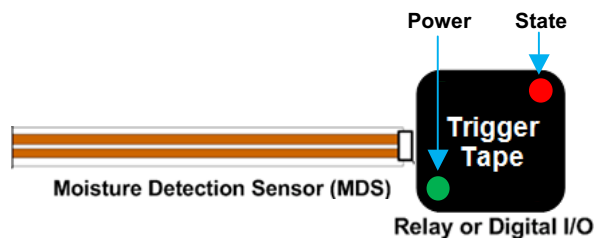
Trigger Specifications

Electrical Performance	
Voltage supply	8V to 24VDC
Nominal output (VO)	Low: < 1V High: 5V
Dry relay contact	Maximum V: 24VDC @ 1A
Alarm trigger level	Between 10KΩ to 20KΩ
Current Draw	Standby: 6mA Triggered: 32mA

Environmental	
Operating Temperature	-40° to 50°C / -40° to 122°F
Storage Temperature	-25° to 70°C / -13° to 158°F
Humidity	5% to 95% RH non-condensing
Electrostatic Discharge (ESD)	8kVdc air, 4 kVDC contact (exposed inputs)
Tape Application Temperature	-10° to 40°C / 14° to 104°F

Mechanical	
<u>Standard Enclosure</u>	
Case Dimensions	45mm (L) x 30mm (W) x 15mm(H)
Weight	15g
<u>Tape</u>	
Width	20 mm / 0.8"
Thickness	0.95 mm / 0.04"
Element	Copper (CU) or Stainless Steel (SS)
<u>Interface</u>	
LEDs	Green – Power ON Red – Water Detected

Safety	
Safety Requirements	SELV Separated Extra Low Voltage



Connections



Input	Function
V	Voltage Output
R ¹	Relay (Green)
R ²	Relay (White)
-	Ground/Negative (Black)
+	Supply Voltage (Red)



Firmly insert stripped wire into hole. To release, insert small screwdriver into slot under hole and gently pull on the wire.

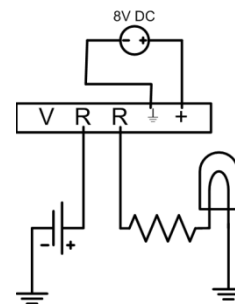


Remove cover on adhesive backing to affix trigger tape to any surface.

Optional access ports are available for units with custom tape lengths.

Example:

Connect power to LED via Relay.



- Internal Diode Bridge allows power and ground to be connected in either direction.
- Relay is also not polarity dependent
- A higher voltage supply may be required for longer distances to account for resistance in cable runs. CAT5 cable or standard control wire cable can be used.
- Using a 24V 2.1A supply you can have 300 units connected with 10 units triggered.

Specifications are subject to change without notice