Integrated Monitoring Solutions for Today's Technology Facilities

AT1-M²

Modular Zone Leak Detection

FEATURES
Fail-safe Circuitry
12-24 Volt Ac or DC Power Capability
Form "C" Relay Output (1A/120VAC)
Braided Water Sensing Cable
Updated Micro Electronics
Sensing Cable Supervision
Self Contained System
Design Flexibility
Simple Installation
Multiple Mounting Options
Patent Pending

RECOGNIZED COMPONENT
INFORMATION TECHNOLOGY EQUIPMENT
51914
CONFORMS TO UL STD 1950

GENERAL
The DiT, Inc. AT1-M² is a Modular Zone Water Detector module used with DiT, Inc. modular zone (AT1-XXM²) sensing cable. The AT1-M² can be operated with 12-24 AC or DC voltages. For application flexibility, form "C" relay points are provided to connect to a DiT MPR, GMP or similar monitoring system. A galvanized steel enclosure is standard. The AT1-XXM² sensing cable is designed to absorb moisture and activate the alarm signal when enough water is present to complete the electrical circuit.

OPERATION
The AT1-M² can be used with any "contact-closure" monitoring panel or system. The "dry" contact points may be wired normally open or normally closed, allowing wiring flexibility to handle most installations. A single module can provide control for up to 100 feet of sensing cable.

The AT1-M² modules include fail-safe circuitry to signal an alarm condition for an internal malfunction or loss of power to the sensor. The integrity of the leak detection system is assured by the continuous self-testing of the sensing cable. Should the cable be damaged or disconnected from the module, the relay contacts will close to send an alarm signal. The alarm output contacts are reverse acting. The N.O. contacts will close during normal operation.

The contacts will change states and signal an alarm condition if:
1) A leak is detected
2) An internal malfunction occurs
3) Power is lost to the sensor

The AT1-XXM² sensing cable can be mounted anywhere a leak may occur. In under floor applications, DiT's hold-down clips allow quick and simple installation of the cable. The clips also allow for easy removal and change of the cable as field conditions dictate. The braided design permits direct connection of the ribbon to area piping eliminating the expensive wrapping required of other systems.

MOUNTING
Module
The module mounts directly on the floor or sub-floor. Two ¼" mounting holes are provided (one on each flange) for anchoring to the floor.

The module provides two 1/4" mounting holes to attach to a 4X4 electrical handy box.

Sensing Cable
Hold-down clips (AT1-C) should be used to mount the sensing cable to the under floor surface. The adhesive on the clips may be used to mount directly to the floor. On some sub-floor surfaces, contact cement may be required to mount the hold-down clips securely. On piping, the cable can be mounted directly with nylon wire ties to hold the cable in place.

Adding Cable Length
All sensing cables are manufactured with connectors which allow additional cable length to be added without any additional connectors. Up to 100 feet of ribbon can be connected to each module.

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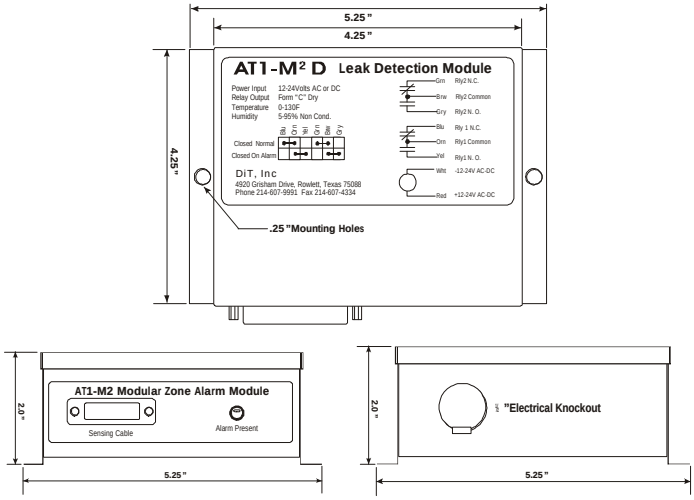
Made in USA America

Dimensions

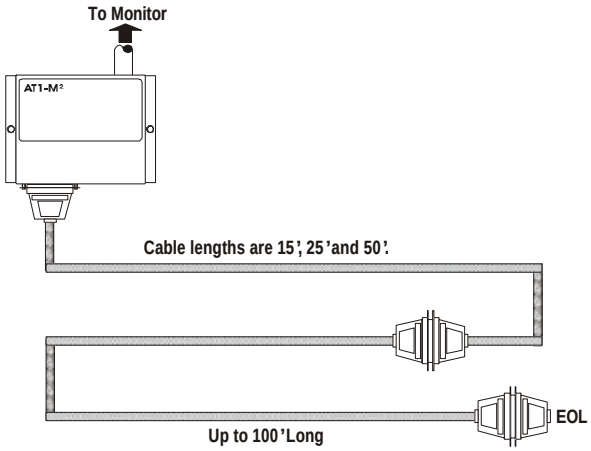


AT1-M² Module Wire Connections (Non-Powered)

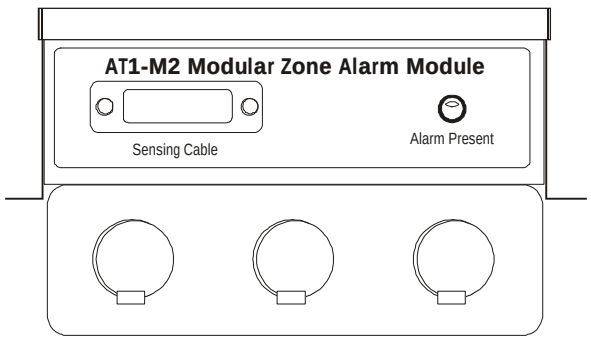
Red	Positive Power
White	Negative Power
Orange	Relay Common
Yellow	Normally Open
Blue	Normally Closed
Brown	Relay Common
Grey	Normally Open
Green	Normally Closed

Use 18-22 gauge stranded wire. For detailed mounting and wiring instructions, see DiT, Inc.'s Water Detection Installation Manual.

Sensing Block Diagram



Mounting to Electrical Handy Box

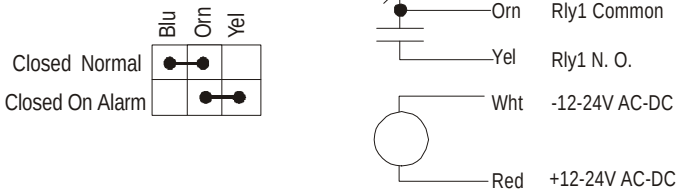


4 X 4 Electrical Handy Box

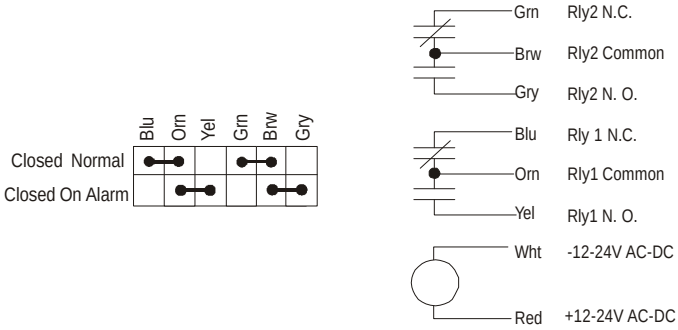
SPECIFICATIONS

Model Number	**AT1-M²(D)**
Power	12-24 Volt AC or DC/50mA
Alarm Output	Form "C" 1Amp@120VAC 1 Set Form "C" Standard 2 Sets Form "C" w/D Model
Environmental	32-125F/0-95%Rh
Size	5.5"L x 4.25"H x 1.75"D
Weight	1.0 lbs.
Sensing Cable	Model # AT1-XXM2 (XX = Length)
Lengths	15', 25' or 50' Available
Width	.33" Round

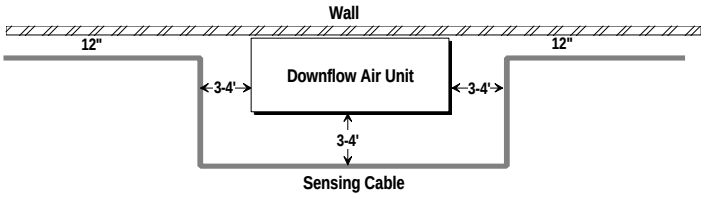
Wiring for AT1-M²



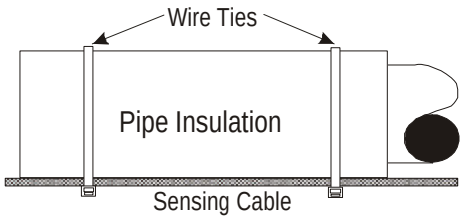
Wiring for AT1-M²D



Sensing Cable Clearances



Pipe Applications



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