

THE ROOF MONITORING AND ALARM SYSTEM

SENTECK DMD-1000

Answers to Five Top Technical Questions About SENTECK DMD-1000

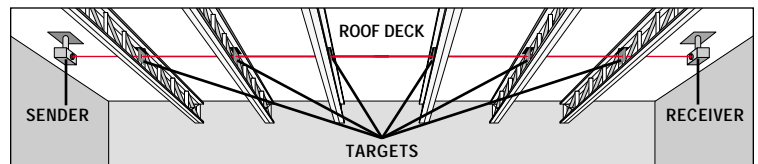
- Senteck DMD-1000 is designed, manufactured, and installed in accordance with OSHA and FDA regulations. No protective gear or devices are required.
- Ambient light does not affect the performance of Senteck DMD-1000.
- “False alarms” are not problematic. Senteck DMD-1000 features an optical time delay from 1 to 26 minutes to avoid alarms caused by temporary beam interruption, for example, a bird or lifted ceiling tile.
- Power failures trigger an alarm to notify building managers of the power failure.
- No outside service is required to reset Senteck DMD-1000 after an alarm. The system automatically resets after the beam obstruction has been removed. (Manual resets can be installed at the customer’s request.)

A unique Factory-Mutual-approved life safety device

Senteck DMD-1000 is a Factory Mutual life safety device that guards against catastrophic roof failure. Designed specifically to continuously monitor loads on flat or low-sloped roofs, Senteck DMD-1000 is a recent addition to in the FM category that includes smoke detectors, fire alarms, and sprinkler systems. But Senteck DMD-1000 does something these other life safety devices can’t do: it cuts facility maintenance costs.

By accurately gauging truss deflection, it helps building managers avoid or reduce costs associated with snow removal, drain clearing operations — and the related roof repairs that demand attention each spring. In fact, under severe winter conditions, Senteck DMD-1000 often pays for itself in one season. Then, it continues to serve as a cost-avoidance, cost-reduction tool for the life of the building.

AN INSTALLED SENTECK SYSTEM



The Senteck DMD-1000 consists of a reflectorless laser and a receiver mounted to the roof deck, and a series of optical targets attached to the top of the bar joists at the mid-point of the span. If a joist sags under load to a point where corrective action is needed, the laser beam is interrupted and the receiver activates an alarm panel, which pinpoints the problem location(s). System options include 24-hour dial paging and direct off-site monitoring.



Technical Information

DMD 1000

SENSORS

Power transformer:	120 VAC to 24VDC plug in module (see panel)
Power consumption:	SVA Max. / device 24VDC at 15mA DC Max (receiver) 25mA DC (emitter)
Response time:	10 milliseconds on / off
Repeatability:	Independent of signal strength; 1 to 1.6 MS
Ambient Light Tolerance:	10,000 foot candles of sunlight
Light Source:	GaAs infrared LED (Galium Arsenide. 880 nanometers)
Receiver:	Silicon Phototransistor
Ambient Operating Temperature:	-40C to +70C (-40F to +158F)
Enclosure:	Epoxy encapsulated Exceeds NEMA 6P (IEC IP 67) standards
Lense Material:	Acrylic – quad ring sealed
Weight:	Five (5) ounces

ANNUNCIATOR PANEL

Operating System:	Intelligent Analogue with Data Storage (addressable) Lightning, ground fault and inductive noise protected
Battery Backup:	Two (2) Standard — 15 amp hour sealed lead acid batteries with intelligent charging module (minimum of 24-hour battery time for a 500,000 sq.ft. building and minimum of 72 hours on a 42,000 sq.ft. building)
Operating Temperature:	0C – 49C (32F – 120F)
Alarm Types:	<ul style="list-style-type: none">• Normal condition (green LED) Trouble — power, transformer, signal, cable break• Supervisory (amber LED & audible)• Alarm — verification inherent (red LED & audible)
Modular Construction:	All modules are "plug and play"
Password Protected:	Allowances for two (2) separate access level passwords — a third level is maintained by SRS
Historical Data:	Up to 400 incidents stored, including data, time, area, and type of alarm

WIRING

Devices:	"Class A" (fire alarm) utilizing supervised redundant loop system with Plenum rated cable (16 gage)
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Note: All components are FDA and OSHA approved.

SAFE ROOF SYSTEMS, INC.

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