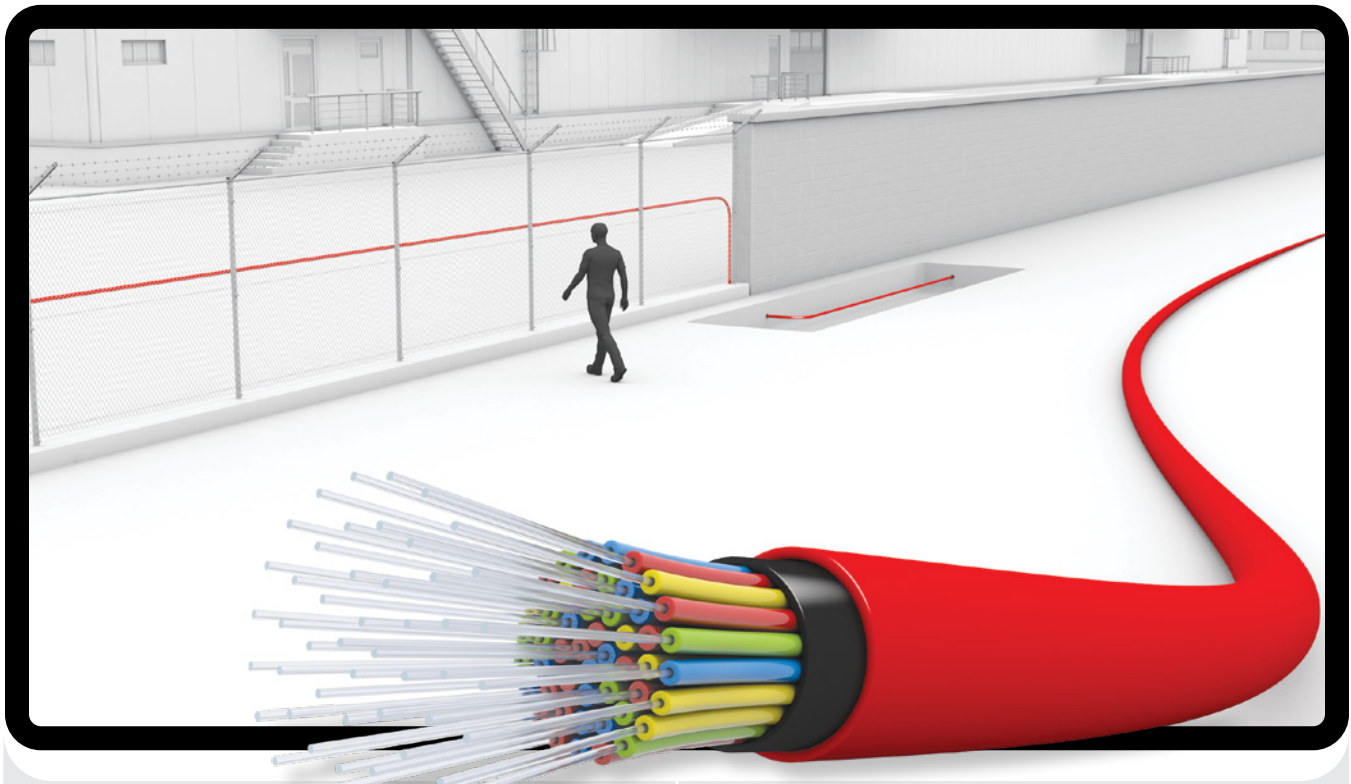


INTREPID™ MicroFiber

DISTRIBUTED ACOUSTIC SENSING (DAS) FIBER OPTIC SYSTEM



INTREPID™
MicroFiber Command
Up to 20km

INTREPID™
MicroFiber Sentinel
Up to 130km

The INTREPID™ MicroFiber™ Series delivers a cost-effective, high-performance solution for real-time, accurate detection of perimeter disturbances. Sensitive enough to detect the smallest events yet smart enough to filter out nuisance alarms, it provides rapid, reliable alerts operators can depend on. Its compact, all-in-one design streamlines installation and flexible software controls make it easy to tailor performance to specific site needs. With advanced detection algorithms and full integration with Video Management Systems (VMS), IP cameras, and radar devices, the system provides seamless, intelligent perimeter protection.

- **Superior Noise Floor Sensitivity & Dynamic Range:** Outperforms conventional fiber-optic systems, detecting minute vibrations with fast, accurate alerts.
- **Advanced Detection:** AI-driven algorithms ensure reliable threat detection while minimizing nuisance alarms.
- **Precision Acoustic Sensing:** Captures high-fidelity, real-time measurements for accurate intrusion detection.
- **Automated Setup & Monitoring:** Simplifies installation, commissioning, and testing.
- **Web-Based Interface:** Secure remote access via browser for monitoring and control.
- **Flexible Multi-Application Deployment:** Supports fence, wall, and buried installations with a single fiber, providing unmatched versatility.
- **Integrated Compact Design:** Combines all sensing, electronic, and processing components in a single unit.
- **Software-Defined Control:** Acquisition parameters can be configured via software for rapid optimization.
- **Distributed System Architecture:** Eliminates single points of failure in multi-unit deployments.
- **Open System Architecture:** Supports custom software deployment for flexible applications.

INTREPID™ MicroFiber

SPECIFICATIONS

	MicroFiber™ Command	MicroFiber™ Sentinel
Detection Range	Up to 20km	Up to 130km
Installation Method	Fence, Wall or Buried	Fence, Wall or Buried
Spatial Resolution	3m	< 1m
Number of Channels	1 or 2	1 or 2
Dual Fiber Option	Yes	Yes
Cut Resilient Option	Yes	Yes
Hardware Redundancy	Yes	Yes
Noise Floor Sensitivity	-65 DB RAD \sqrt /HZ	-78 DB RAD \sqrt /HZ
Dynamic Range	155 DB	155 DB
Measurement	Quantitative DAS	Quantitative DAS
Standard Fiber Type	SMF-28e ITU-T G.652, G.654 or G.655	SMF-28e ITU-T G.652, G.654 or G.655
Optical Connections	LC/APC or SC/APC	E2000-PS APC
Size	19-inch 1U Enclosure (W) 482.6 x (D) 295 x (H) 44.5 mm	19-inch 3U Enclosure (W) 483 x (D) 466 x (H) 133 mm
Weight	6kg	16.5kg
Mounting	Rackmount Slide Rails	Extendable Rackmount Rails
Power Supply	AC or DC	AC or DC
Power Consumption	40W	110W
Operating Environment	-5° C to +50° C 23° F to +122° F	-5° C to +50° C 23° F to +122° F
Operating Humidity	85% non-condensing	95% non-condensing
Ingress Protection	IP50	IP50
Electromagnetic Compatibility (EMC)	USA (FCC): 47 CFR Part 15 B Canada: ICES-003 2012 EU: (CE) - 2014/30/EU	USA (FCC): 47 CFR Part 15 B Canada: ICES-003 2012 EU: (CE) - 2014/30/EU
GNSS Time Synchronization	Yes	Yes
Electrical Safety Compliance	EU: (CE) - 2014/35/EU USA: (UL) 62368-1	EU: (CE) - 2014/35/EU USA: (UL) 62368-1
Laser Safety Class	Class 1 (IEC 60825-1, 21CFR1040.10)	Class 1 (IEC 60825-1, 21CFR1040.10)

INTREPID™ is a trademark of Southwest Microwave, Inc. Specifications subject to change without notice.



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