

INTERCEPTOR FOCUS^{NX™} and INTERCEPTOR FOCUS^{LX™} represent the next evolution of fiber-based intrusion detection purpose-built for protecting classified and mission-critical networks. Powered by advanced Distributed Acoustic Sensing (DAS), these systems transform standard single-mode fiber into a continuous, real-time sensing layer—capable of detecting, classifying, and precisely locating physical threats with exceptional accuracy.

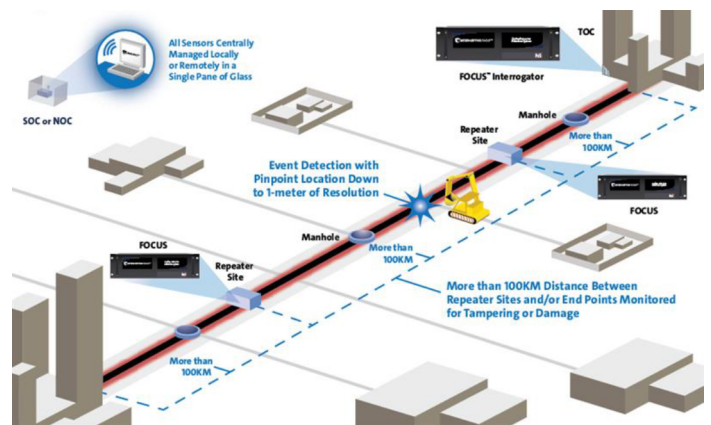
At the core of the system, a centrally located INTERCEPTOR FOCUS interrogator transmits and analyzes light signals over fiber routes extending up to 150 km. Physical disturbances—such as digging, conduit intrusion, or cable manipulation—create measurable changes in the optical signal. These disturbances are immediately detected and processed through advanced machine learning analytics that filter out nuisance activity, and deliver real-time classification and pinpoint location of verified threats.

This enables security teams to move from reactive response to proactive protection, minimizing operational risk, preventing service disruption, and ensuring compliance across classified network environments.

Two models are available to align with mission requirements:

- INTERCEPTOR FOCUS^{LX} – The smallest interrogator available, FOCUS^{LX} is optimized for shorter distances (typically under 20 km), delivering high-performance detection with a cost-efficient footprint.
- INTERCEPTOR FOCUS^{NX} – Designed for extended range and maximum performance, providing enhanced processing power and long-distance coverage for critical infrastructure and long-haul applications.

Together, INTERCEPTOR FOCUS^{NX} and INTERCEPTOR FOCUS^{LX} deliver a scalable, compliant, and mission-ready Alarmed PDS solution—ensuring continuous visibility, real-time threat detection, and the operational assurance required to protect classified communications infrastructure.



INTERCEPTOR FOCUS™ Technical Specifications

	INTERCEPTOR FOCUS ^{NX}	INTERCEPTOR FOCUS ^{LX}
OPTICAL SPECIFICATIONS		
Optical Sensing Ports	E2000-PS APC	SC/APC or LC/APC
Optical Range (@6.4m gauge length)*	Up to 150km per port ¹	Up to 20km per port
Fiber Type	Single-mode - ITU-T G.652, G.654, or G.65 Multimode: ITU-T G.651.1, et al. (Range limited: ~8km)	
Ports	1 or 2	
Maximum Loss Budget	32 dB	10 dB
Maximum back reflection	< 3%	
Maximum Attenuation	0.2 dB per km	
Operating Wavelength	1550.12 nm 193,400 Ghz ITU CH34	

ELECTRICAL		
Power Input	100-230 AC, 50/60 Hz or 24/48V DC	100-240V AC w/ 65W AC/DC Converter or 24 or 48V DC
Power Supplies	Dual Redundant	External
Operating Power (Typical)	110 Watts Nominal	40 Watts Nominal

ENVIRONMENTAL		
Operating Temperature	-5°C – +50°C	
Storage Temperature	-40°C – +70°C	
Operating Humidity	95% Non-Condensing	

PHYSICAL		
Rack Installation	19" x 3 Rack Units	19" x 1 Rack Unit
Dimensions (in - HxWxD)	5.22 x 19 x 18.5	1.75 x 19 x 11.6
Dimensions (mm - HxWxD)	132.5 x 482.6 x 471	44.5 x 483 x 296
Weight (lbs)	37	13.2
Weight (kg)	17	6
Mounting	4 post rack w/ sliding rails	2 post rack

REMOTE MANAGEMENT		
Network	Ethernet Small Form-factor Pluggable (SFP)	
Protocols	ZeroMQ API	

INDUSTRY CERTIFICATIONS		
Laser Safety	Class 1 LASER PRODUCT (IEC 60825-2014, 21CFR1040.10/11)	
Safety (UL)	USA: UL 62368-1; EU: CE compliant - 2014/35/EU	
EMC Compliance	USA: FCC 47 CFR Part 15 B; EU: CE Compliant - 2014/30/EU	

¹Note-Range is dependent upon quality of fiber, local environment, and the specific activity detection required.

For specifications on all other products and the Warranty and Support Program, please refer to our website at www.networkintegritysystems.com