Fiber Optic Intrusion Detection System

Nxtar Fiber Optic Security Co., Ltd

NS-200S   Detection Controller Specification Table

1	System theory	PIFOMIS(polarization insensitive fiber optic Michelson interferometric sensor)
2	HARDZONE defense design structure	Each zone of detection functions independently. Even if one zone is destroyed, the other zones still work perfectly to secure the remaining perimeter. Completely solve the fatal shortcomings of the destruction of one zone of the software partition (SOFTZONE), and the entire zone completely loses its defense function
3	Zones of Detection	2 Zones
4	Controller	Indoor (surveillance center)
5	Secured	≤300m
6	Suitable for use	Families with fences or walls
7	Input power	AC 100V~240V
8	Power	≤5W
9	Operating temperature	-20℃~50℃
10	Storage	-20℃~60℃
11	Laser di-oxide wavelength	1535nm~1565nm
	Laser diode constant temperature	No
	DFB laser output power	Coaxial 4mW
12	Sensing & detection medium	Fiber
13	Sensing signals	Vibration / Pressure
14	Operating	ontroller buttons and screen or Computer mounting the NS (NXTAR) software
	PC connection interface	USB Mini type to USB A type
	Other communication	Can be converted to other communication interfaces such as RJ45 through a converter
15	Sensitivity parameter setting	Level with 1~99 value setting with 4 dynamic range setting
		Period with 1~99 seconds setting
		Counts within sensing period
16	Pre-warning indication	INTRUDER from non-lit to red blink
17	Intrusion	INTRUDER blink in red to lit in red
	Intrusion alarm relay status	RelayNC-nI & CC-nI become short from open(n=1．2)
	Intrusion alarm horn sound	Yes (Beep sounds from controller)
18	Tamper indication	TAMPER from lit in green to green blink
	Tamper relay	TAMPER relay NC-nT& /CC-nT become short from open(n=1．2)

	Tamper alarm horn sound	No
19	Power cut	All relays become short from open
	Power cut parameter status	Designed with host parameters not affected by power cut
20	System Integration	The system can be integrated with CCTV, auto-dialer, access control, siren, searchlights, network video, police and civilian connections. and etc.(relay expansion module)
21	Dimension / Net weight	34.4cmX26.5cmX7.8cm/3.1kg

Connect the computer and activate the NXTAR software to monitor the following functions

22	Analysis reference for abnormal optical circuits	Online diagnosis provides user with the information about the status of sensing/leading fiber. Also, it can analyze the decay of optic power.
23	Intelligent global noise filter	Within 1.6 seconds, the build-in advanced intelligent algorithm can filter out the increased global noise by comparing and analyzing N and S.
24	Self calibration	When fiber is cut or removed, tamper alarm will be issued within 5 seconds. Meanwhile, the diagram with a spanner will be shown in Maintenance Mode to notice user.
25	Optical power decay pre-warning & autogain	While fiber or optic components may malfunction, due to improper use, and leads to optic power decay, the system automatically enhance autogain 25 times within 5 seconds, making the system still work properly before repair . Simultaneously displays its overall optical path power attenuation status in
26	Grouping	The system can filter out the global noise (strong wind, heavy rain, earthquake, thunder and etc) by grouping two or more zones in which the three basic parameters of these zones are met simultaneously.The system will analyze this signal as a non-intrusive signal and exclude it. And it is recommended to group 3 or more as a group.
27	Monitor mapping	User may download the map of the perimeter into to the software.The system can indicate the detection zones in accordance with the actual mapping to examine if there is any intrusion or tamper.
28	Event log	It can record the time of intrusion alarm or system failure in each defense zone, and also record the time of abnormality in the connection between the detector and the computer
29	Signal analysis	It can analyze the long-term sensing signal curve of each defense zone to optimize the parameter settings
30	Remote monitoring and diagnosis function	The detection controller can be transmitted to the remote monitoring or maintenance center via the Internet, and the maintenance mode can be turned on for network connection such as system abnormal diagnosis and parameter optimization . Achieve global synchronous remote real-time

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