

Fiber Monitoring System (FMS)



Features:

- > 2 swappable slots, 8 ports per slot
- > SM fiber, 1310nm (1550nm optional) wavelength
- > All LC connectors
- > RS232 Management connectivity
- > GUI Management
- > Settable alarm thresholds and time intervals.
- > Alarms – LEDs, Dry Contact, Sound and management report
- > Alarms history logging
- > 220VAC Power Supply

Benefits:

- > Efficient optical signal monitoring

Applications:

- > FiberOptic Networks signal monitoring
- > FiberOptic fences penetration monitoring

Descriptions

Communication networks are increasingly vulnerable to tapping and intrusion. Fiber optic networks in contrast to what people may think are also easy to tap. Such tapping action introduces small amount of signal loss, which can be detected by using Fibernet's Monitoring System (FMS). In fact, this system

can support different applications for optical signal degradation detection like underwater fiber-optic fences.

FMS is modular system, consisting of two slots that can hold besides the Monitoring modules also other application oriented modules. Each module consists of eight ports with TX and RX tributaries. Using TX is optional for fibers where there is no existent traffic like in water fence applications. Upon detection of signal degradation the unit activates local sound alarm, lights LED and closes/opens Dry Contacts associated with specific channel and send notification through the management interface to optional GUI application.

FMS provides different parameters setting to tune the system to specific environment. Among setting is the "Delta" between the "normal" signal level and the alarm condition level. It is possible to tune the time windows for alarms and signal capture for reference.

Management connectivity established through RS232 interface from the front or rear located 9-pin D-Type connectors. The product comes with GUI software for Windows 7 type of operation system, but it is possible to create customer tailored application by providing the communication protocol details. It is possible to "chain" FMS (fully populated) units with rear located 2 RS232 connectors

Environmental and Mechanical Parameters:

Parameter	Min	Typ	Max	Unit
Supply Voltage	88	220	264	VAC
Power Consumption			20	W
Operating Temperature	0		50	°C
Operating Humidity	5		95	%
Mechanical Dimension (W x D x H)		442 x 199 x 44		mm
Optical Connectors		LC		
RS232 connectors		3 x D-TYPE 9pin		
RS232 setting	115200, 8 bits, no parity, 1 stop bit and no flow control			

Optical Parameters for the Monitoring module:

Parameter	MIN	TYP	MAX	UNIT	Comments
Number of Channels		8			
Wavelength		1310		nm	
TX Level		-10	-8	dBm	Adjustable through SW
RX level	-50		-5	dBm	
Delta	0.5			dB	Adjustable through SW
Reference value setup time		5		sec	Adjustable through SW
Alarm time		5		sec	Adjustable through SW
Time between alarms		20		sec	Adjustable through SW

Ordering Information:

FMS-X-LASMAC08Z – 2 Slot, 1U Fiber Monitoring System with one FMS-M-LASM08 module

FMS-M-LASM08 – 8 port Fiber Monitoring module with 8 LC ports for FMS-X-LASMAC08Z