

# Product Information

## RM-Fiber 4S

### Optical Fiber Attenuation Module

for monitoring optical attenuation switches

The RM-Fiber 4S module is a stand-alone measurement and monitoring device for up to 4 optical attenuation switches in series on a single optical fiber (eg. LANCIER Monitoring cover sensors for manhole cover monitoring).

The RM-Fiber 4S module uses a spare optical fiber as a measurement loop which is being measured continuously. The monitoring of a fiber between two stations is provided by the use of two RM-Fiber 4S modules. One is acting as a transmitter while the other acts as a receiver. The optical attenuation switches do not require a power supply.

The thresholds for the attenuation values can be programmed with no restriction using an integrated keypad and the basic module's display. All settings are saved in an internal EEPROM memory to prevent losses.

For the remote alarm system the RM-Fiber 4S module possesses built-in dry output contacts. Additionally it can be connected to the LANCIER Tx-Bus, a Can-Bus or a telecontrol system via Modbus.

The LANCIER Monitoring Rail-Module-Bus is a modular and robust sensor system.

Several measuring modules are mounted on a DIN rail and are directly connected to one another by means of plug-in contacts. The supply voltage, data analysis and control panel as well as their transmission to the remote measuring stations are carried out via the RM-Basic module.



RM-Basic-Modul

RM-Fiber 4S module

## Technical Data

Measurement range	-9.9 .. 50 dB
Resolution	0.1 dB
Measuring wavelength	1625 nm
Response time	< 1 sec.
Supply voltage	by RM basic module
Operating temperature	-20 °C .. +50 °C
Admissible ambient humidity	0 .. 95 % rel. humidity, non-condensing
Display	by RM-Basic module
Signal LEDs	5 x green/red: alarm/acknowledged alarm 1 x blue: LC display of RM basic module is active for this sensor
Signal outputs	4 dry change-over contacts for switch alarm 1 dry change-over contact for attenuation alarm
Max. switchable voltage / current	100 V DC / 0.1 A DC
Dimensions RM-Fiber 4S (W x H x D)	108 x 62.2 x 89.7 mm

## Ordering Data

### RM-Fiber 4S

Measuring module for optical attenuation switches with display and keys. Signal output via dry contacts.

**Order-no. 074705.09A**

<b>A:</b> Fiber connector ST = 2	Fiber connector FC/APC = 6
Fiber connector SC/PC = 3	Fiber connector LC = 7
Fiber connector DIN/PC = 4	Fiber connector E2000 = 8
Fiber connector SC/APC = 5	Fiber connector FC/PC = 9 Other connectors upon request

### RM-Basic

Power supply, communication and display module for the RM-Bus

**Order-No. 074001.100**

**19" DIN rail for RM-Series, 3 HU**

**Order-No. 075416.000**

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#### System diagram

Application example of manhole cover monitoring with LANCIER Monitoring CoverSensors

