

## Fiber Monitoring System FMS-01

### Characteristics:

- "Plug & Play"- System for monitoring of:
  - Fiber breakage
  - Temperature of the connectors
  - Fiber connectivity on both ends
- Adjustable temperature range.
- Available for all laser systems.
- Low-voltage operation.
- Error display.
- Industry proofed.



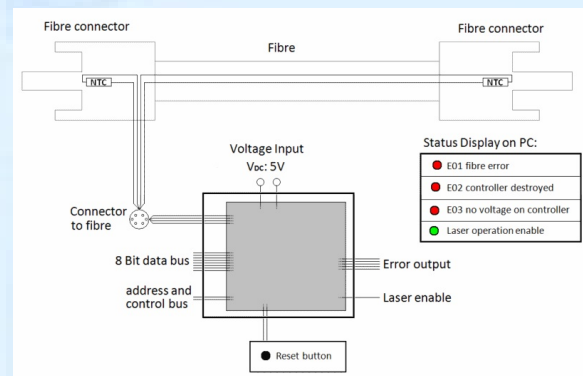
### Operating

The principle is based on applying voltage at temperature-dependent resistors, which is proportional to the respective resistance. If the voltage falls below the lower or the upper limit, a relay switches, interrupting power transfer to the laser.

In monitoring the fiber, the upper limit voltage serves to protect against fiber breakage, while the lower limit voltage bridges the contacts for connectivity.

In monitoring the fiber plug temperature, only the lower limit voltage is used to prevent the fiber plug from overheating

### Outer circuit:



### Technical specifications:

Operating voltage	5 V DC
Control signal	5 V DC
Load-bearing capacity	10 W
Operating temperature	10°C bis 30°C
Storage temperature	-30°C bis +70°C
Shutdown temperature	60°C bis 120°C
Tolerance of the shutdown	±2°C
Relay lifetime	10 <sup>5</sup> switching cycle
Relay switching time	<7 ms