500SSM40
EDS500 series

- Long Range SFP for distances up to 40 km
- Suitable for all EDS500 devices with SFP slots (MSA)
- Duplex LC connector / Single-mode fiber
- Monitors the optical signal quality / Alarm generation before link loss

Application
The Long Range SFP is a pluggable optical transceiver for fiber optical transmission lines of up to 40 km range. A minimum attenuation is not required.

This SFP type supports monitoring the receiver input power, as well as the transceiver temperature and voltage (via DOM, Digital Optical Monitoring). Additionally, with this SFP type, the optical signal quality and attenuation can be monitored (for instance via SNMP if supported by host). A signal quality threshold can be defined, to enable alarming even before the optical link is lost (due to material aging or similar).
Technical data

**Power budget**
- Minimum output power: -5 dBm
- Maximum output power: 0 dBm
- Receiver sensitivity: -34 dBm
- Minimum power budget: 29 dB

**Electrical/ Optical Characteristics**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optical Wavelength</td>
<td>1263 nm</td>
<td>1310 nm</td>
<td>1360 nm</td>
</tr>
<tr>
<td>Receiver Overload</td>
<td>0 dBm</td>
<td></td>
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<tr>
<td>Fiber Type</td>
<td>9/125 µm single mode</td>
<td></td>
<td></td>
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<tr>
<td>Laser Class</td>
<td>Class 1 DIN EN 60825-1 eye safety compliant</td>
<td></td>
<td></td>
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<tr>
<td>Supply Voltage</td>
<td>3.1 Volt</td>
<td>3.3 Volt</td>
<td>3.5 Volt</td>
</tr>
<tr>
<td>Power Dissipation</td>
<td></td>
<td>875 mW</td>
<td></td>
</tr>
</tbody>
</table>

**General Characteristic**
- Data Rate: 100 Mbps Ethernet (125 MBaud)
- Range Classification: Long Range (LR) / 40 km
- Connector: Duplex LC
- Connector Contact Type: Physical Contact (PC)
- RoHS Compliant: Yes

**Environmental conditions**
- Nominal operating temperature range: -40°C... 85°C
- Relative humidity: 5%... 95% (non condensing)

**Ordering information**
- 500SSM40 R0001
- 1KGT038914R0001

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