Fiber Type
Station
Connector
Station
1 PORT

Transmission Line Interface:
ST Connectors-standard (SMA option)

Optical Power (TR):
Receiver Sensitivity:

Operating Temperature:
-25°C to +70°C
(-20°C to +60°C for SM)

Metal Enclosure:
DIN Rail Mounting

Electrical Isolation:
1500V

Conducted Emissions:
EN55022 Class B

TABLE 1

<table>
<thead>
<tr>
<th>Model</th>
<th>Wavelength (nm)</th>
<th>Fiber Diameter (Micron)</th>
<th>Fiber Type</th>
<th>Connector</th>
<th>TR PWR (+dBm)</th>
<th>REC SEN (-dBm)</th>
<th>Attenuation (dB/Km)</th>
<th>Distance Meters</th>
<th>Distance Feet</th>
<th>OPT Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>2145-0</td>
<td>660/850</td>
<td>200</td>
<td>Plastic</td>
<td>BFOC2.5(ST)</td>
<td>10</td>
<td>22</td>
<td>10/7</td>
<td>700/1000</td>
<td>2000/3000</td>
<td>2 PL</td>
</tr>
<tr>
<td>2145-MM</td>
<td>850</td>
<td>50 or 62.5</td>
<td>Multimode</td>
<td>BFOC2.5(ST)</td>
<td>7</td>
<td>20</td>
<td>3.0</td>
<td>100</td>
<td>330</td>
<td>2 PL</td>
</tr>
<tr>
<td>2145-SM</td>
<td>850</td>
<td>50 or 62.5</td>
<td>Multimode</td>
<td>BFOC2.5(ST)</td>
<td>12</td>
<td>24</td>
<td>3.0</td>
<td>3000</td>
<td>10000</td>
<td>1 MM</td>
</tr>
<tr>
<td>2145-MM-SM</td>
<td>850/300</td>
<td>50 or 62.5</td>
<td>MM/SMD</td>
<td>BFOC2.5(ST)</td>
<td>12/15</td>
<td>24</td>
<td>3.0</td>
<td>3000/10000</td>
<td>100000</td>
<td>2 MM</td>
</tr>
<tr>
<td>2145-SM-SM</td>
<td>1300</td>
<td>9</td>
<td>SM/SMD</td>
<td>BFOC2.5(ST)</td>
<td>15/27</td>
<td>0.35</td>
<td>10000</td>
<td>33000/33000</td>
<td>1 MM/1 SM</td>
<td>2 SM</td>
</tr>
<tr>
<td>2145-0</td>
<td>1300</td>
<td>9</td>
<td>Single Mode</td>
<td>BFOC2.5(ST)</td>
<td>15</td>
<td>27</td>
<td>0.35</td>
<td>10000</td>
<td>33000</td>
<td>1 SM</td>
</tr>
</tbody>
</table>

Note: Plastic fiber can be used for short distance applications.

Features:
- Meets PROFIBUS-DP specification. Tested & approved by PROFIBUS Lab
- Modbus - RS485
- Multimode or single mode, plastic or glass fiber
- 2 port optical repeater, optical T-connector, optical to electrical converter
- 9600 bps to 12 Mbps - switch selectable
- DIN rail mounting
- Status indicators: power, TxD, RxD, invalid switch setting
- Conformal coated boards

The Model 2145 Bit-Driver used in a PROFIBUS-DP application is a two optic port repeater with single TIA/EIA-485-A electrical port. The 2145 operates at rate 9600 baud to 12 Mbaud in linear bus topology. The 2145 can be used as an optical repeater between the fiber optic segments, an optical to electrical converter between an fiber optic segment and electrical station(s), or T-connector/repeater between two fiber optic segments and electrical station(s). The 2145 is transparent and does not evaluate the PROFIBUS data exchange.

Using fiber optics over the physical layer, the 2145 provides longer segment distances, electromagnetic noise immunity and ground potential difference independence in the linear bus topology. The 2145 optics can be optionally equipped with optics of different characteristics.

The 2145 retimes the received optical signal and can link up to 32 fiber optic segments in series. The electrical port supports up to 31 stations.

The 2145 Termination switch can select an internal cable type-A termination. External terminations can derive power from the sub-D connector between pins 6 and 5.

The 2145 unit attaches to EN50022 (35mm DIN) mounting rail. Power is applied through screw terminals and data rate selection made through internal DIP switches.

TYPICAL APPLICATION

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