USB2.0 to Fiber Optic Media Converter

**Features:**
- Supports USB 2.0 over fiber
- Four USB ports, each hub port provides attached device with 5VDC power (up to 500mA)
- Power, Optical Signal Detect, Link Status, and Device port status LED indicators
- LC optical connectors
- DIN Rail Mounting Option
- Improved Operation for Vista Operating System
- Supports USB 1.1 and USB 2.0 controller
- Works with National Instrument controllers

S.I.Tech 2183/2184 USB media converter pair extends the range of USB 2.0 beyond the USB 5 meter limit. The USB media converters are compliant with the USB 2.0 specification supporting low speed (1.5 Mbps), full speed (12 Mbps), and high speed (480 Mbps) USB data transfer.

The 2183/2184 are enumerated as generic USB hub and provide a 4-port USB hub at distances up to 2 Km over fiber optic cable. The 2183 connects to host PC through USB type B connector. The 2184 connects to USB peripherals through USB type A connector.

Note: 2184 5 watts typical, additional USB devices power (5V, up to 500mA) can increase 2184 power to 16 watts.

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**OPERATING DISTANCE FOR FIBER OPTIC CABLE**

<table>
<thead>
<tr>
<th>Fiber Size (Microns)</th>
<th>Attenuation (dB/Km)</th>
<th>Bandwidth (MHz/Km)</th>
<th>Distance Meters</th>
<th>Distance Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>850 nm</td>
<td>3.0</td>
<td>600</td>
<td>1450</td>
<td>4750</td>
</tr>
<tr>
<td>1300 nm</td>
<td>4.0</td>
<td>400</td>
<td>1800</td>
<td>5900</td>
</tr>
<tr>
<td>SMF 50 SM</td>
<td>-17dBm Minimum</td>
<td>-17dBm Minimum</td>
<td>-17dBm Minimum</td>
<td>-17dBm Minimum</td>
</tr>
<tr>
<td>MMF 62.5 SM</td>
<td>-20dBm Minimum</td>
<td>-20dBm Minimum</td>
<td>-20dBm Minimum</td>
<td>-20dBm Minimum</td>
</tr>
<tr>
<td>MMF 10 SM</td>
<td>-20dBm Minimum</td>
<td>-20dBm Minimum</td>
<td>-20dBm Minimum</td>
<td>-20dBm Minimum</td>
</tr>
<tr>
<td>SMF 850 SM</td>
<td>-20dBm Minimum</td>
<td>-20dBm Minimum</td>
<td>-20dBm Minimum</td>
<td>-20dBm Minimum</td>
</tr>
</tbody>
</table>

SM - Single mode option - 1300nm (Application limits may be exceeded)
Optical Unit Connection: Connect the optical transmission line to the T and R receptacles. Note which cable channel goes to Tx or Rx by noting cable imprint. If you are using Laser Enhanced multimode fiber, depending upon its bandwidth, longer distances maybe possible.

Specifications subject to change without notice.

Note: 2183/2184 require USB2.0 root hub support from USB 2.0 host controller. The USB 2.0 host controller will be identified in the Windows Device Manager as “Enhanced” or EHCI controller.