## **Model 2182**

## s.i.TECH

## USB2.0 to Fiber Optic Media Converter



Operation Mode: Input/Output Interface: Transmission Line Interface: Transmission Distance: Transmitter Output Power:	LC optical connector is standard See distance chart MMF -9dBm Minimum 62.5micron				
System Wayalangth:	SMF -9dBm Minimum				
System Wavelength:	850 or 1300 nm 1.5 (USB 1.0), 12 (USB 1.1), and				
Data Nate.	480 (USB 2.0) Mbps				
Bit Error Rate:					
Receiver Sensitivity:					
-	MMF(1300nm) -20dBm Minimum				
	SMF(1300nm) -20dBm Minimum				
Operating Temperature:					
	0.75 lb (340 grams)				
Input Power:	5 VDC (4.75 to 5.5 VDC)				
	External with power supply - 5W				
	typical (S.I.Tech #2166 - 100 to				
	240 VAC, 50/60 Hz, to 5VDC,				
Metal Enclosure:	UL, CE, & TUVGS Listed) 4.75" X 3.75" X 1.000"				
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Note: 2182 5 watts typical, additional USB devices power (5V, up to 500ma) can increase 2182 power to 16 watts.

## Features:

- Supports USB 2.0 over fiber
- Smaller size and Compact than 2173
- Four USB Hub Ports, each hub port provides attached device with 5VDC power (up to 500mA)
- Power, Optical Signal Detect, Link Status, and Device port status LED indicaters
- 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 2181/2182 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 2181/2182 are enumerated as generic USB hub and provide a 4-port USB hub at distances up to 2 Km over fiber optic cable. The 2181 connects to host PC through USB type B connector. The 2182 connects to USB peripherals through USB type A connector.

OPERATING DISTANCE	FOR FIBER OPTIC CABLE
0. =	

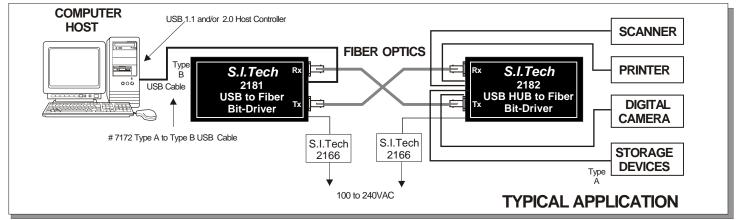
Fiber Size			Bandwidth		Distance		Distance	
(Microns)			MHz/Km		Meters		Feet	
	850nm	1300nm	850nm	1300nm	850nm	1300nm	850nm	1300nm
50	3.0	1.5	600	600	500	600	1650	1800
62.5	4.0	1.5	200	600	275	600	900	1800
10 SM	Unspecified	0.4	Unspecified	Unspecified	-	5000	-	16000

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.

Meets FCC requirements of Class B, Part 15 Computing Devices Standard, USB Standard. Specifications subject to change without notice.

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Note: 2181/2182 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.



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