Model 9036

S.I.TECH

Fiber to RJ45 HUB - IBM Systems 3X & AS/400

S.I.TECH FIBER CLUSTER® HUB   **MODEL 9036**
TD   POWER   RD
S.I.TECH   110 VAC, 60 Hz, 0.5 AMP   6 5 4 3 2 1 0   **Trunk** T R
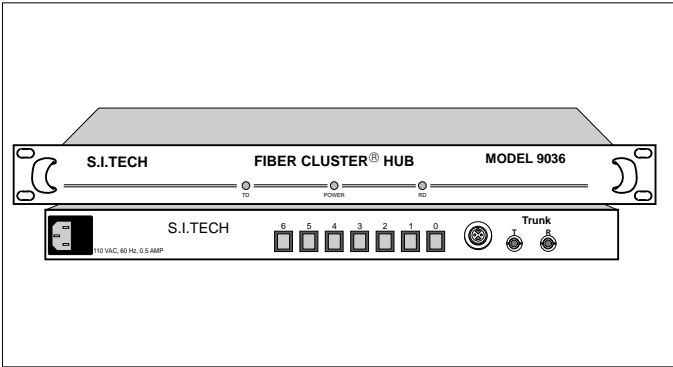
Features:
- Supports IBM 3X & AS/400 Protocol
- Status indicators - TD, RD, and Power
- Allows direct connect to RJ45 twisted pair cable, no balun required.
- Twinax to fiber. Combines fibers to TP in one unit
- Multimode or singlemode option

S.I.Tech 9036 Fiber Cluster® is designed to work with IBM 3X & AS/400 systems using twinax cable & STP cable. Model 9036 Bit - Driver® is a twinax to fiber optic transmitter/receiver full duplex protocol. Normal operating data rate is 1 Mbps.

This Fiber Cluster® Hub product eliminates many disad- vantages of twinax, especially EMI/RFI, ground loops (electrical isolation with fiber), high attenuation (high signal loss), limiting distance between nodes of system (5000 feet max, twinax), and potential lightning damage outdoors between buildings.

S.I.Tech Model 9036 Fiber Cluster® is a stand alone Star Hub product allowing easy change from twinax to fiber, to STP: simply disconnect twinax and connect to model 9036 input/output port. Model 9036 comes with power supply and status indicators.

At remote end 9036 with RJ45 allows easy connection to 7 terminals or PCs in Star Hub configuration, eliminating a need for separate Hub.

Operation Mode:	Synchronous, half/full duplex 1 Mbps, Serial Bi - phase data
Input/Output Interface:	100 ohm twinax bulkhead jack input or fiber & IBM protocol RJ45 output
Transmission Line Interface:	2 ST connector fiber optic receptacles (SMA - Option)
Transmission Distance:	2 km - 6600 ft. (5km Option)
Transmitter Output Power:	30 Microwatts into 50 Micron fiber
System Wavelength:	820 nm (1300 nm Option)
Receiver Sensitivity:	3 Microwatts at less than 10^{-9} bit error rate
Operating Temperature:	$0\,^{\circ}C$ to $50\,^{\circ}C$
Metal Enclosure:	Rack mount - 1U high 17.0"W X 1.7"H X 7.5"L (43.2 X 4.3 X 19 CM)
Weight:	6.5 lb(3 kg)
Input Power:	110 VAC, 60 Hz, 10W
230 Volt Version:	9036V

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UL & CSA listed. Meets FCC requirements of Class A, Part 15 Computing Devices Standard..
Specifications subject to change without notice.

Operating Distance for Fiber Cable

Fiber Size (Microns)	Attenuation dB/km	Distance Meters*	Distance Feet*
50	3.0	2000	6600
62.5	4.0	2000	6600
10 SM**	1.0	7000	23000

* High power option available
** Single mode (1300nm) option
(Maximum distance depends upon IBM timeout spec)

Optical Unit Connection: Connect the optical transmission line to the T and R receptacles. Note which cable channel goes to T or R by noting cable imprint. On the other end, reverse the connections.

1. IBM specifications: Twinax 5000 ft. (1524 m) max, local ports - 7 devices max, remote ports - 4 devices max, 5751 Cluster Controller, 5294 and 5394 controllers.
2. If other than twinax cable is used, matching impedance transformers (Balun) are recommended. S.I.Tech 9036 Hub is designed to run without balun.
3. Some fiber types in short distance applications may overload the receiver.

TYPICAL APPLICATION

IBM 3X & AS/400 SYSTEM
Twinax Cable 1 Port
S.I.Tech 9036 or 2836
T R
FIBER OPTICS
6   0
STP   BALUN
S.I.Tech 9036 HUB   T R
DTE
TWINAX
1 PORT (Option)