

**DATACOMsystems®**  
**16SY-10/100+1C Full-Duplex VERSAtap™**  
*Quick Installation Guide*



September 2003

Part Number: 541-0085-A.00

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**Warranty**

**TAP**

**Ethernet/Token Ring**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
10/100-AT	1	10/100 BaseT	RJ45
1000BT-AT	1	1000 BaseT	RJ45

**Fiber**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
F50/50/62-M	1	100FX, OC3, OC12, Gigabit	Dual SC
F50/50/50-M	1	100FX, OC3, OC12, Gigabit	Dual SC
F50/50/9-S	1	OC3, OC12, Gigabit	Dual SC

**PERMALink™ Tray**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
8SY-M/62	8	100FX, OC3, OC12, Gigabit	Dual SC
8SY-M/50	8	100FX, OC3, OC12, Gigabit	Dual SC
8SY-S/9	8	OC3, OC12, Gigabit	Dual SC

**VERSAtap™**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
16SY-10/100+1C	16	10/100 BaseT	RJ45
4SY-SX+4C	4	Gigabit	Dual SC & LC

**WAN**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
DS3AT1 (4) (8)	1 (4) (8)	DS3	BNC
DS3-AT	1	DS3	BNC
DS3/E3-PT	1	DS3/E3	BNC
E3-AT	1	E3	BNC
T1/E1-PT	1	T1/E1	RJ48

**VERSALink™**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
1X4SY-SX+2C	1X4	Gigabit	Dual SC & LC
1X8SY-SX+2C	1X8	Gigabit	Dual SC & LC
2X4SY-SX+2C	2X4	Gigabit	Dual SC & LC
2X8SY-SX+2C	2X8	Gigabit	Dual SC & LC

**WAN**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
W2358Ds/	2X8	WAN	DB15
WX8T1/E1sl	2X8	T1/E1	RJ48
WX16T1/E1sl	2X16	T1/E1	RJ48
D28100BTsl	1x8 • 1x8	10/100BaseT and WAN	RJ48 • DB15
DS3-8Cs/	2X8	DS3	BNC
2X4SY-DS3/E3	2X4	DS3/E3	BNC

**OPTICALswitch™**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
1X8SP-OM (S)	8	100FX, OC3, OC12, Gigabit	Dual SC
1X8SY-OM (S)	8	100FX, OC3, OC12, Gigabit	Dual SC

**LANswitch™**

**ATM In-Line**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
2X8SY-ATM-M (S)	2x8	ATM, OC3-OC12	Dual SC

**Ethernet/Token Ring**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
2X16FD-SY	2x16	10/100 BaseT	RJ45
MX8100E/Tsl	2x8	10/100 BaseT or Token	RJ45
MX16100E/Tsl	2x16	10/100 BaseT or Token	RJ45

**Fiber Custom**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
4XSPSY-CM	4	Gigabit	Dual SC
4X8SY-CM	4X8	Gigabit	Dual SC
4X8SP4-CM	4X8	Gigabit	Dual SC
4X16SP-CM	4X16	Gigabit	Dual SC

**Gigabit In-Line**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
1X8SY-SX (LX)	1x8	Gigabit	Dual SC
2X8SY-SX (LX)	2x8	Gigabit	Dual SC

**Gigabit SPAN**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
1X8SP-SX (LX)	1x8	Gigabit	Dual SC
2X4SY-SX (LX)	2x4	Gigabit	Dual SC
2X8SY-SX (LX)	2x8	Gigabit	Dual SC

**Gigabit SPAN + In-Line**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
2X8SP4-SX (LX)	2x8	Gigabit	Dual SC

**Receive Only**

MODEL	PORTS	TOPOLOGY	CONNECTIVITY
2X8RX-SX	2x8	Gigabit	Dual SC

**ACCESSORY**

**Software**

MANAgents — Multiple Agent Controlling Console Software

**Support**

M3415A — V.35 Connectivity Panel  
RMC-3 — 1U Rack Panel for 3 Small Form DSI Products  
SCS — Switch Control Server

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This Quick Installation Guide was written to help you get to know your new 16SY-10/100+1C quickly and easily. We would welcome any comments or suggestions you may have regarding this Quick Installation Guide. Please send your remarks and recommendations via mail, telephone, facsimile, or Internet E-mail.

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### 1 What's in the Package



### 2 Introduction

The 16SY-10/100+1C is a directional 16-port full-duplex device that provides an easy method to rapidly and effectively deploy your analysis tools to monitor 10/100 BaseT traffic between your network devices. Typically the VERSAtap™ is installed on critical 10/100 BaseT links in the network where monitoring and analysis capabilities are important.

16SY-10/100+1C features and benefits:

- 10/100 BaseT compatible
- Full duplex monitoring
- Non-intrusive monitoring device
- Standard RJ45 connectors
- Redundant power supply

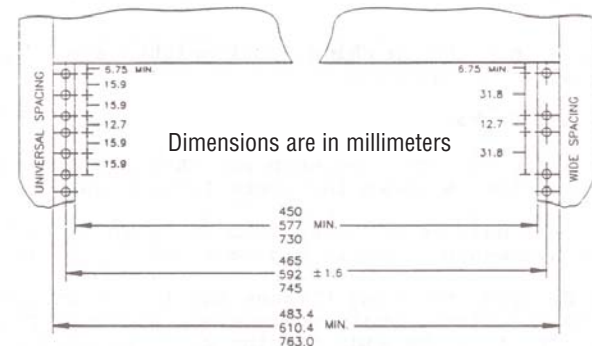
### 3 16SY-10/100+1C Specifications

Feature	Specification
Channel	16 directional 10/100 BaseT Ethernet
Cable Type	CAT 5E
Port Connectivity	I/O 1-16 A TAPS B 1-16
Distance Limit	90 meter maximum length between network end-points. Tap typically 1 meter.
Power Requirements	Two external power supplies 5 VDC, 5 A
Operating Temperature	0° to 40° C (32° to 104° F)
Storage Temperature	-30° to 65° C (-22° to 149° F)
Humidity	Less than 95° C non-condensing
Dimensions	1.10" (H) x 5.75" (W) x 5.75" (D) (includes rack mount bracket) 28 mm (H) x 146 mm (W) x 146 mm (D)
Weight	Unit - 11 pounds; Shipping - 22 pounds

### 4 Installing a 16SY-10/100+1C in an Equipment Rack

Prior to putting the 16SY-10/100+1C in a standard 19-inch rack, a couple of equipment considerations should be noted:

- Do you have universal or wide spacing flanges?



ANSI/EIA-310-D-1992 Mounting Flange Dimensional Requirements

The 16SY-10/100+1C occupies 1 unit of space when fastened in a wide spacing hole of a universal or wide-space flange. The 16SY-10/100+1C occupies a part of 2 adjoining units of space when fastened in the middle hole of a universal flange.

Do you want to fasten the VERSAtap differently? Then remove and replace the bracket screws on the side chosen with through hole mounting tab facing the direction required.

To put the 16SY-10/100+1C in a standard 19-inch equipment rack, follow these steps:

1. Decide where to place the 16SY-10/100+1C in the equipment rack.
2. Align the 16SY-10/100+1C through hole and the equipment rack hole.
3. Insert screws through the 16SY-10/100+1C bracket into the rack.
4. Tighten the screws until the 16SY-10/100+1C is secure in the rack.



16SY-10/100+1C fastened in the equipment rack

### 5 Functional Operation

Refer to FIGURE 1 for a diagram of the functional operation of the 16SY-10/100+1C.

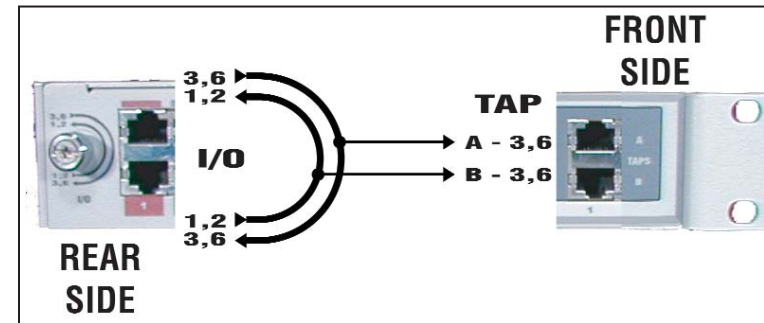


FIGURE 1 — 16SY-10/100+1C Functional Diagram

### 6 Connecting a 16SY-10/100+1C to the the Network

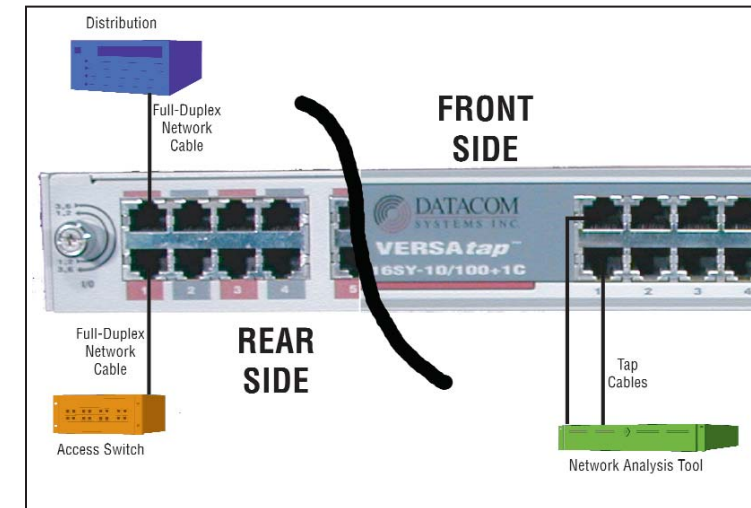


FIGURE 2 — 16SY-10/100+1C Simple Connectivity Diagram

To connect the 16SY-10/100+1C into the network, refer to FIGURE 2 and follow these steps:

**IMPORTANT: The maximum length of 90 meters must not be exceeded between end-points.**

1. Connect one of the network device cables to an UPPER 1-16 RJ45 network port connector.
2. Connect the other network device cable to the LOWER same 1-16 RJ45 network port connector.

**NOTE: Network devices that DO NOT automatically negotiate Rx/Tx pin-out differences between devices to establish link typically require a cross-over cable. If needed, connection of the cross-over cable is to the UPPER RJ45 network port connector.**

3. Connect one tap cable from the TAP A RJ45 connector into one port of the Network Analysis Tool interface card.
4. Connect the other tap cable from the TAP B RJ45 connector into the other port of the Network Analysis Tool interface card.
5. Connect the first Power Supply miniature 4-pin Male quick lock connector into the POWER 1 port and then plug the Power Supply into the external power source wall receptacle. The POWER 1 LED illuminates indicating power is on.
6. Connect the second Power Supply miniature 4-pin Male quick lock connector into the POWER 2 port and then plug the Power Supply into the external power source wall receptacle. The POWER 2 LED illuminates indicating power is on.