

DATACOMsystems®
SINGLEstream™ Aggregator
Quick Installation Guide



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Customer Service

This Quick Installation Guide was written to help you get to know your new SINGLEstream™ 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.

Datacom Customer Service personnel are available from 8 AM to 5:30 PM Eastern time, weekdays. Customer Service is available via telephone, facsimile, and Internet E-mail. Outside of support hours, please leave a voice message and our Customer Service Staff will return your call as soon as possible.

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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-SX	4X8	Gigabit	Dual SC
4X8SP4-SX	4X8	Gigabit	Dual SC
4X16SP-SX	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

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
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
W2358Dsl	2X8	WAN	DB15
WX8T1/E1sl	2X8	T1/E1	RJ48
WX16T1/E1sl	2X16	T1/E1	RJ48
D28100BTsl	1x8 • 1x8	10/100BaseT and WAN	RJ48 • DB15
DS3-8CsI	2X8	DS3	BNC
2X4SY-DS3/E3	2X4	DS3/E3	BNC

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Warranty

1 What's in the Package



4 Installing a SINGLEstream™ in an Equipment Rack

Prior to putting the SINGLEstream™ in a standard 19-inch rack you may want to contact your SINGLEstream™ representative to discuss an optional rack panel or ...



2 Introduction

The SINGLEstream™ aggregator flawlessly combines the separate streams of a full-duplex link and provides two identical monitor ports for easy 24x7 scrutiny with single NIC 10/100 monitoring devices, eliminating link access contention. The SINGLEstream™ technology also prevents data overload and dropped packets for seamless monitoring continuity. The SINGLEstream™ is non-intrusive and fault-tolerant. Even if power is lost, network traffic continues to flow.

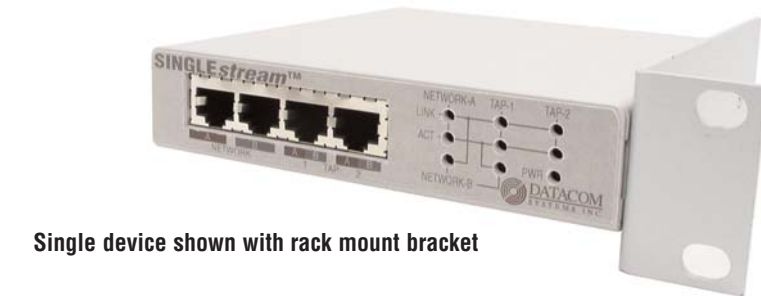
SINGLEstream™ features and benefits:

- Simultaneous two device monitoring of the same link.
- 10/100 In-line monitoring of full-duplex
- Power fault tolerant
- Transparent to the network

3 SINGLEstream™ Specifications

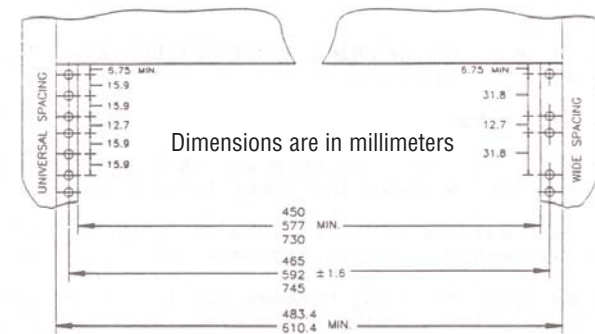
Feature	Specification
Channel	One 10/100 In-line
Cable Type	CAT 5E
Port Connectivity	
NETWORK A	RJ45
NETWORK B	RJ45
TAP 1 A/B	RJ45
TAP 2 A/B	RJ45
Distance Limit	100 meter maximum length between network end-points. Tap typically 1
Power Requirements	External power supply 5 VDC, 1 A
Operating Temperature	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 RMC-3 panel bracket) 28 mm (H) x 146 mm (W) x 146 mm (D)
Weight	Unit - 12 ounces; Shipping - 2 pounds

optional single mount rack bracket.



In any case, a couple of equipment considerations should be noted:

- Do you have universal or wide spacing flanges?
- The SINGLEstream™ occupies 1 unit of space when properly fastened in a universal flange. The SINGLEstream™ occupies part of 2 adjoining units of space when improperly fastened in a wide spacing hole of a universal or wide-space flange.



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

5 Functional Operation

Refer to FIGURE 1 for a diagram of the functional operation of the SINGLEstream™.

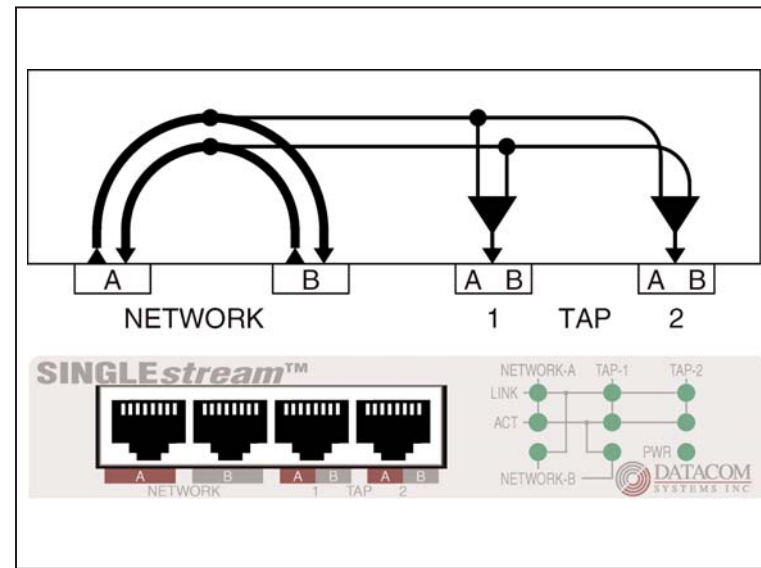


FIGURE 1 — SINGLEstream™ Functional Diagram

3. Connect one tap cable from the SINGLEstream™ RJ45 port **TAP 1** connector into the network device's interface card.
4. If desired, connect the other tap cable from the SINGLEstream™ RJ45 port **TAP 2** connector into another network device's interface card.
5. Connect the Power Supply barrel connector into the **POWER** port of the SINGLEstream™ and then plug the Power Supply into the external power source wall receptacle. The **POWER LED** to the right of the RJ connectors illuminates indicating power is on. The **NETWORK-A LINK LED** illuminates indicating link has been established between the NETWORK A connector and NETWORK A device. The **NETWORK-B LINK LED** illuminates indicating link has been established between the NETWORK B connector and NETWORK B device. The **NETWORK A** and **NETWORK B ACT LEDs** illuminate as data is passed back and forth between the NETWORK A and NETWORK B device. The **TAP 1 LINK LED** illuminates indicating link has been established between the TAP 1 connector and network device's interface card. The **TAP 1 ACT LED** illuminates as data is passed to the TAP 1 device. The **TAP 2 LINK LED** illuminates indicating link has been established between the TAP 2 connector and network device's interface card. The **TAP 2 ACT LED** illuminates as data is passed to the TAP 2 device.

6 Connecting a SINGLEstream™ to the the Network

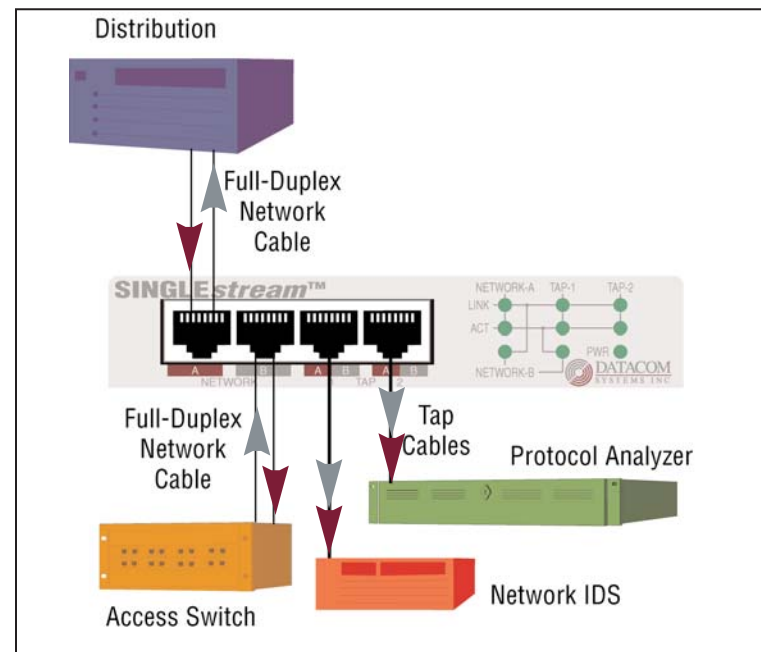


FIGURE 2 — SINGLEstream Simple Connectivity Diagram

To connect the SINGLEstream™ into the network, refer to FIGURE 2 and follow these steps:

IMPORTANT: The maximum length of 100 meters must not be exceeded between end-points.

1. Connect one of the network cables to the SINGLEstream™ RJ45 port **NETWORK A** connector.
2. Connect the other network cables to the SINGLEstream™ RJ45 port **NETWORK B** connector.

7 Example Applications

