### Achieve full duplex visibility across four in-line network links even with single interface monitoring solutions

#### **Aggregation**

Monitoring full duplex network traffic and traffic from multiple sources is often a critical requirement for network monitoring applications. For example, in order to properly monitor channelized links (e.g. Gigabit EtherChannel), network professionals need to receive traffic simultaneously from multi-trunked full duplex channels.

Because traffic in a Gigabit EtherChannel implementation is load balanced, packets are distributed across several different physical links. Often, traffic transmits on one segment and receives on another. This makes network analysis and monitoring especially challenging. If an analyzer or monitoring device is put on only one physical link, it will not see the entire conversation.

Also, while traditional taps might enable fullduplex monitoring of all traffic on a network link, they transmit the data to the connected monitoring device in two separate half-duplex streams (one for Tx and one for Rx). Not only does this require the monitoring device to have two network interface cards, it also requires that the device be capable of combining and processing both streams of data in order to monitor both sides of the conversation. Not all monitoring systems, including the most popular software solutions, have the required hardware to aggregate traffic.

The SINGLEstream™ 4210 Quad Link Aggregation Tap can selectively combine traffic from four (4) network taps to create a full duplex data stream and allow any connected monitoring device, including those with only one NIC, to receive a copy of the data collected from all four taps - even in a single trace file.

#### LINKprotect™

Many traditional taps prevent the operation of redundant routing and failover systems because they keep both sides of the network invisible to the other. The built-in LINK protect feature eliminates this point of network failure by continuously monitoring both sides of the tapped network for link status. If one side of the tap loses link status, LINK protect will close the other side of the link, so routers and switches can engage protocols to bypass the failed link.

LINK*protect* will also keep monitoring both sides of the link until repaired, where it can then automatically re-establish the primary link. Timers (polling and recovery) and link re-establishment settings (manual or auto) are all user-configurable on both sides of the link and provide a level of convenience and fl exibility not previously available in copper Gigabit taps.

#### Regeneration

One-to-Many configurations replicate copies of identical network traffic to provide multiple tools monitoring access to the same links. In addition to eliminating contention for access to critical links, multiple tools can be connected to the same link for redundancy, testing, or advanced monitoring applications.

#### Reliable and Easy to Use

Unlike setting up operating systems and binding NICs, the SINGLEstream Quad Link Aggregation Tap is simple to deploy, and every unit comes with dual redundant power supplies to ensure monitoring uptime.



#### **Highlights**

- View entire full-duplex conversations even across redundant links using singleinterface monitoring tools
- Save money by reducing the number of required tools or tool interfaces necessary to monitor all your data
- Decrease reliance on switch resources for network management visibility
- Eliminate SPAN port contention, oversubscription, and configuration errors
- Deploy tools immediately without impacting your production network
- Easily share tap ports for improved monitoring without maintenance windows.
- Single point of deployment and remote management minimizes management expenses and reduces MTTR

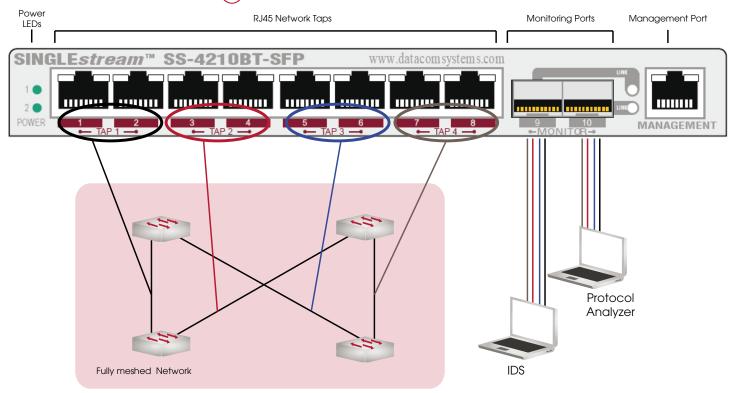
#### **Features**

- Aggregation Receive copies of multiple network links or channels into one stream for visibility into complete network conversations
- LINKprotect Ensure automatic failover and recovery of redundant paths and routing protocols
- Regeneration Send copies of traffic from the tap to multiple connected tools to share data sources
- Port Speeds from 10 to 1000MB; supports full duplex, half duplex, or auto-negotiate
- SSH, SNMPv2c, v3
- Flexible traffic flow to monitoring tools single-direction or bidirectional for traffic injection
- Dual Redundant Power ensures monitoring uptime.



# SINGLEstream<sup>™</sup>4210

## Quad Link Aggregation Tap with 2 Monitoring Ports. SS-4210BT-SFP-S



#### **Technical Specifications**

#### **PORTS**

Network: Four (4) 10/100/1000 Network Taps (RJ45) Monitoring: Two (2) SFP Any to Any Ports Management: RJ45 @ 100Mbs Full-Duplex Serial (rear): DB9F

#### **POWER REQUIREMENTS**

Two (2) External AC Adapters (included) Input: 100-240 VAC, 50-60Hz, 0.8A

#### **CERTIFICATIONS**

CE. RoHS

#### PHYSICAL DIMENSIONS (H x W x D)

1.10 x 8.00 x 7.00 in (2.79 x 20.32 x 17.78 cm)

#### WEIGHT

1.6 lbs (0.7 kgs)

#### **ENVIRONMENT**

Operating Temperature: 32° to 104°F (0° to 40°C) Storage Temperature: -22° to 149°F (-30° to 65°C) Humidity: 5 to 90% non-condensing

#### **WARRANTY**

One (1) Year Hardware Warranty included. Advanced Replacement-Next Day, third business day options available

#### **ORDER INFORMATION**

#### **Product**

SS-4210BT-SFP-S

#### **Optional Equipment**

SFP-SX SFP-LX SFP-RJ45 RMC-2 RMC-12-2 RPS-12-5-AC (or -DC)

#### **Description**

SINGLEstream™ Quad Link Aggregation Tap with 4 10/100/1000 Taps, 2-SFP Monitoring Ports with SSH, **SNMP** 

1G Multimode Fiber Transceiver 1G Singlemode Fiber Transceiver 1G Copper Transceiver 2-TAP 1U Rack Mount Chassis 12-TAP 6U Rack Mount Chassis 12-TAP Dual Redundant Rack Mountable Power Supply Unit (specify AC or DC)

Find out more. Visit www.datacomsystems.com

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