Selecting the Right SINGLE*stream*™ Product

SINGLE*stream*™ is a link aggregation tap.

Models range from two (2) to eight (8) monitoring ports allowing you to connect multiple tools..

Unlike out-of-band traffic capture devices, Network TAPs (test access ports) are placed in-line between two network endpoints in order to access data that is flowing across a network link.

Use a SINGLE*stream*™ Link Aggregation Tap when:

■ You need to monitor both directions of full duplex transmissions but your monitoring tool only has one NIC (full duplex aggregation)

■ You need to monitor aggregated* or non-aggregated** traffic from one link with multiple tools (regeneration)

■ You need to monitor aggregated or non-aggregated traffic from multiple links with one tool (link aggregation)

■ The number of links you need to monitor exceeds the number of tools you have available (link aggregation)

■ You network links and tools are not the same made up of various media types (media conversion)

* The sum of aggregated traffic from all network links should not exceed 100% of the monitoring port bandwidth
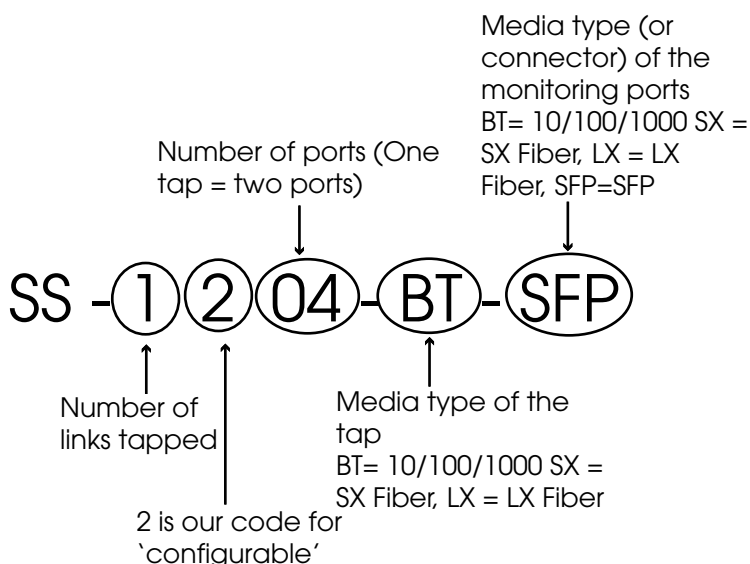
** Most models can be configured to perform aggregation and/or function like a standard non-aggregating tap

How Many Links Do You Need to Monitor?

Depending on model, the SINGLE*stream* Link Aggregation Tap will have either one (1), two (2), or four (4) built-in network taps, which will allow each unit to be placed between 1-4 network links to copy traffic to the connected monitoring tools.

■ One in-line network segment: SS-1200 Series

■ Two in-line network segments: SS-2200 Series

■ Three or Four in-line network segments: SS-4200 Series

■ More: Daisy-chain to meet your needs.

Deciphering the SINGLE*stream*™ Product Code

Number of ports (One tap = two ports)

Media type (or connector) of the monitoring ports
BT= 10/100/1000 SX = SX Fiber, LX = LX Fiber, SFP=SFP

SS -①②04-BT-SFP

Number of links tapped

2 is our code for 'configurable'

Media type of the tap
BT= 10/100/1000 SX = SX Fiber, LX = LX Fiber

Examples:

SS-4210BT-SFP: 4 – 10/100/1000 links, 2 – 10/100/1000 tools

SS-2210LX-SFP: 2 – LX links, 6 – various media tools

SS-1206SX-BT: 1 – SX link, 4 – 10/100/1000 tools:

SS-1210SX-SFP: 1 – SX link, 2 – 10/100/1000 SPAN Ports, 6 – various media tools

SS-1204LR-10G: 1 – 10 Gbps LR link, 2 – 10 Gbps SR tools

The monitoring/tool ports on the SINGLE*stream* Link Aggregation Tap are "any-to-any ports", so they can be configured as either inputs (i.e. receive traffic from SPAN port or external taps) or outputs (i.e. send traffic to a tool).

Do You Also Need to Receive Input from SPAN Ports?

The monitoring/tool ports on the SINGLE*stream* Link Aggregation Tap are "any-to-any ports", so they can be configured as either inputs (i.e. receive traffic from SPAN port or external taps) or outputs (i.e. send traffic to a tool). All SINGLEstream™ models* have from two (2) to eight (8) any-to-any ports, so they can function as both in-line and out-of-band devices, allowing you to tap links and monitor SPAN traffic at the same time with as little as one device.

* Any-to-any ports not available in 100/200 Series for 10/100 Mbps

Selecting the Right Media Type (some examples)

- Match the TAP port to the media type of the network link being monitored:
    - 10/100/1000 link = 10/100/1000 tap (RJ45 connectors)
    - Gigabit SX link = Gigabit SX tap (SC or LC connectors)
    - 10 GigE SR link = 10 GigE SR tap (SC or LC connectors)
- Match the monitoring ports of the tap to the media type of the monitoring tool:
    - 10/100/1000 tool = 10/100/1000 tool port on tap (RJ45 or SFP connectors)
    - Gigabit LX tool = Gigabit LX tool port on tap (SC, LC, or SFP connectors)
    - 10 GigE LR tool = 10 GigE LR tool port on tap (SC, LC, or XFP connectors)
- If required, many Datacom Systems products have SFP or XFP Ports that can allow you to connect tools to networks even if both media types are different:
    - Copper to Fiber (SX or LX)
    - Fiber (SX or LX) to Copper
    - Fiber (SX or LX) to Fiber (SX or LX)

Ensuring Proper Fiber Connectivity

- Fiber diameter – Match the fiber diameter of the link to the fiber diameter of the tap
    - SX and SR = 50 or 62.5 micron (specify when ordering)
    - LX, ER and LR = 9 micron
- Split Ratio – Choose the appropriate split ratio
    - Datacom Systems' standard split ratio is 50/50
    - More split ratios are available

Power and Cables

- Standard fiber taps are passive, non-powered devices
- Most products have dual redundant and load balanced power supplies
- Power supplies (internal or external) and power cords are always included
- Most power supplies are AC; some models have DC power available
- To reduce power strips, transformers, and clutter, use a 12-unit power supply (AC or DC) when installing more than a few taps in the same rack.

**For more information, visit
www.datacomsystems.com**

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