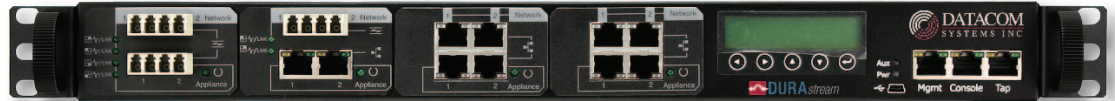


# DURAstream™ 1G Bypass Switch

(with up to 4 - Copper, Fiber, or Media Conversion Modules)

**DS-4000 Models**

**Ensure 100% Network Uptime when Deploying In-Line Monitoring Solutions and Intrusion Protection Systems**



### Automatic Failover = Constant Link State

Deploying in-line monitoring devices such as intrusion prevention systems (IPS) or bridge devices like VPN gateways and firewalls used to mean a potential point of failure on the network. When one of these devices malfunctioned or became overwhelmed with traffic, network outages could occur. This posed serious challenges when deployed on mission critical links.

The DURAstream™ Bypass Switch ensures your network's most important data does not fail even when in-line devices do. Deploying a DURAstream™ Bypass Switch ensures uptime of critical links regardless of in-line device performance by diverting critical network traffic away from malfunctioning in-line devices until such devices are operating normally. This not only alleviates potential issues with traffic congestion affecting link behavior caused by an IPS, it allows maintenance and upgrades of attached in-line tools without network downtime.

The DURAstream™ 4000 1G Bypass Switch is an easy-to-manage external active bypass providing failover and TAP capabilities for data monitoring of critical Gigabit network segments. Each bypass switch offers up to four independent interface modules with a variety of media options (copper, fiber, and media conversion). Each of the four network modules operates independently to ensure link protection monitoring of one to four links at any time.

Line-rate throughput and real-time data forwarding hardware protects data and allows critical voice and data applications to perform uninterrupted and meet high demands for quality and security. Deployed with an in-line monitoring tool, a DURAstream™ Bypass Switch creates a comprehensive solution for intrusion prevention.

### Heartbeat Mode

The DURAstream™ 4000 1G Bypass Switch can monitor the health of in-line appliances by sending and receiving a heartbeat packet. A user programmable heartbeat packet can be injected into the monitoring port link to determine availability of attached monitoring devices or help determine delay due to high traffic volume. Even if a connected in-line tool is powered on, the bypass switch can automatically switch traffic around it until the device returns to normal operation. At that time, traffic is re-routed back to the monitor port.

### Passive Mode

In the event of power loss, the switch closes to create a physical connection, which in turn, creates a passive bypass path to help prevent traffic interruption.

### Robust Management, Security and Logging

Manage your switch using built-in CLI or GUI, including secure web interface over HTTPS. Supports secure shell (SSH), SNMP, e-mail notifications, TACACS+ as well as Syslog to enable consolidation of log data from multiple systems into a central repository

### Reliable and Easy to Use

The DURAstream™ 4000 1G Bypass Switch is simple to deploy, enables plug-and-play connectivity, and is compatible with all major manufacturer's monitoring systems. Every unit not only comes with dual redundant power supplies to ensure monitoring uptime, the voltage of each power supply is continuously monitored for instances of power decline or outage. In such cases, the unit can initiate a switch to passive bypass mode.

### Benefits

- Optimized reliability of critical network links
- Achieve fail-safe monitoring with in-line monitoring tools such as IPS and DPI
- Improved network uptime and security
- Protects against abnormal traffic patterns
- Increased application availability
- Upgrade, maintain, or replace in-line devices without interrupting network operations

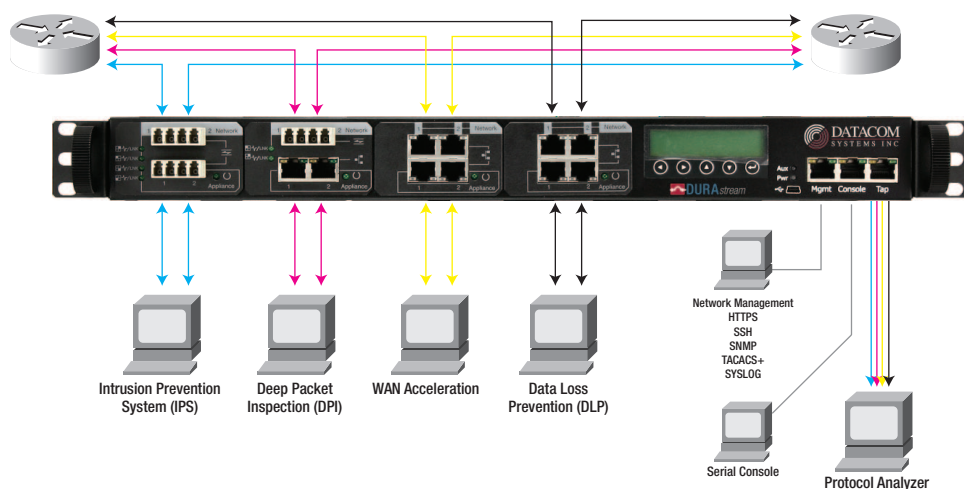
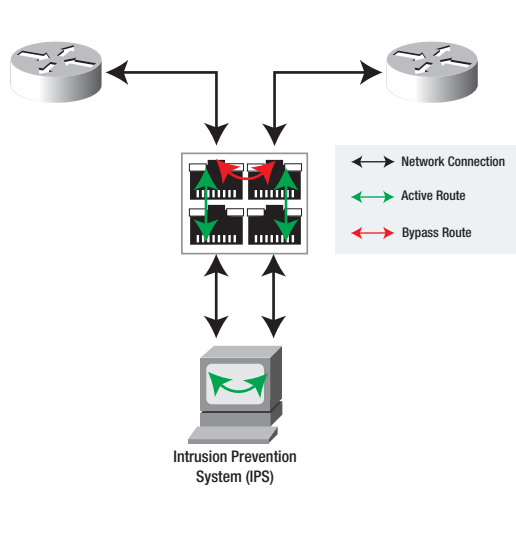
### Features

- Passive bypass maintains network integrity during power loss
- Active switching of traffic in case of system failure to prevent network interruptions
- Heartbeat Mode - several user-configurable options to monitor link status and health of in-line appliances including bridge devices like firewalls and VPN gateways
- TAP port provides passive traffic monitoring of the individual segments or aggregated data streams from two or more of the links
- Flexible deployment options - copper, single mode, multi-mode, and media conversion
- Dual redundant power supplies ensure monitoring uptime
- Power fail protection monitors power supplies for power decline or outage and can switch to passive mode
- Manage device remotely or locally with Web-based management (HTTPS) or extensive CLI
- Management port with SSH connectivity
- SNMP traps and e-mail event notifications on defined events
- Interfaces with authentication servers such as TACACS+
- Syslog support

# DURAstream™ 1G Modular Bypass Switch

(with up to 4 - Copper, Fiber, or Media Conversion Modules)

DS-4000 Models



## Technical Specifications - DS-4000

### PORTS

Network: Four (4) Network Segments Tapped  
 Management: RJ45  
 Serial: RJ45  
 Tap: RJ45

### POWER REQUIREMENTS

Dual Redundant External Power Supplies (Included)  
 Maximum Power Consumption: Less than 47 Watts  
 Input: 100-240V ~47-63Hz 1.4A MAX.  
 Output: 12V 5.0A

### CERTIFICATIONS

CE  
 EMC  
 FCC Class A  
 UL  
 Fully RoHS Compliant

### PHYSICAL DIMENSIONS (HXWXD)

1.75 x 16.75 x 12.00 in (4.45 x 42.55 x 27.94 cm)

### WEIGHT

13.5 lbs (6.12 kgs)

### ENVIRONMENTAL

Operating Temperature: 32° to 131°F ( 0° to 55°C)  
 Storage Temperature: -22° to 149°F (-30° to 65°C)  
 Humidity: 5 to 95% non-condensing

### WARRANTY

One (1) Year Limited Warranty

### ORDER INFORMATION

Product	Description
DS-4000-4BT	DURAstream™ 1G Bypass Switch (4 - 10/100/1000 Network Segments)
DS-4000-4SX*	DURAstream™ 1G Bypass Switch (4 - Multi-mode (SX) Network Segments)
DS-4000-4LX	DURAstream™ 1G Bypass Switch (4 - Single Mode (LX) Network Segments)
DS-4000-2BT/2SX*	DURAstream™ 1G Bypass Switch (2 - 10/100/1000 and 2 - Multi-mode (SX) Network Segments)
DS-4000-2BT/2LX	DURAstream™ 1G Bypass Switch (2 - 10/100/1000 and 2 - Single Mode (LX) Network Segments)
DS-4000-2LX/2SX*	DURAstream™ 1G Bypass Switch (2 - LX and 2 - SX Network Segments)
DS-4000-2BT/LX/SX*	DURAstream™ 1G Bypass Switch (2 - 10/100/1000, 1 - LX, and 1 - SX Network Segments)
DS-4000-4SX-BT*	DURAstream™ 1G Bypass Switch w/ SX to BT Media Conversion (4 - Multi-mode (SX) Fiber In-Line Links to 10/100/1000 Tools)
DS-4000-4LX-BT	DURAstream™ 1G Bypass Switch w/ LX to BT Media Conversion (4 - Single Mode (LX) Fiber In-Line Links to 10/100/1000 Tools)

\*Specify 50 or 62.5 micron



universal power