To deploy the INT1G8xxBP Bypass Tap into your network, simply:

- Unpack and install the INT1G8xxBP into any available 1U slot of a network rack and secure it with rack mount screws.
- Connect the power supply to the INT1G8xxBP and plug it into an available power source.
- Utilizing the Console or DIP switches, configure the INT1G8xxBP for the operating mode of your choice.
- Remove the power supply to the INT1G8xxBP temporarily.
- Using standard Ethernet cables, connect ports [A] and [B] (Auto MDI/MDIX Copper) of the INT1G8xxBP between the two live network devices where you would otherwise directly connect an inline appliance or sensor (IPS or DLP). Verify network traffic is flowing, confirming that network cabling is correct.
- Connect ports [C] and [D] (Auto MDI/MDIX) to the primary inline IPS/DLP appliance/sensor (or configure for other tools for traditional monitoring)
- Connect ports [E] and [F] (Auto MDI/MDIX) to an optional secondary inline IPS/DLP appliance/sensor (or configure for other tools for traditional monitoring)
- Connect ports [G] and [H] (Auto MDI/MDIX) for additional monitoring capabilities. Ports may be setup for combined (aggregated) or directional (breakout).
- Connect the provided power leads to the INT1G8xxBP and plug them into an available power source.
- **Note:** Fiber is always 1000Mbps speed. Other operating modes may be desired for monitoring and may be configured using the console or provided DIP switches. DIP switches will take precedence over console configuration.

![Diagram of INT1G8xxBP Bypass Tap](image)
INT1G8xxBP Tap Operating Modes

Primary Sensor is Healthy and Passing Traffic

Secondary Sensor is Healthy and Ready

Additional Monitoring Outputs Configured

Dual Inline Bypass (Auto)

Primary Sensor is Offline

Secondary Sensor is Active and Healthy

Dual Inline Bypass (Primary Offline)

Monitoring Outputs Remain

Network  Sensor 1  Standby  Outputs

Network  Offline  Sensor 2  Outputs
INT1G8xxBP Tap Operating Modes

- **Primary Sensor is Healthy and Passing Traffic**
- **All Other Ports Configured for Passive Monitoring**

**Single Inline Bypass + Monitoring**

**Primary Sensor is Healthy and Passing Traffic**
- Ports Configured for Breakout & Aggregation
INT1G8xxBP Tap Configuration Menus

[1] Running Configuration
Current Status: Primary Inline
Operating Mode: Dual Inline Device Mode (Secondary Hot Standby)

<table>
<thead>
<tr>
<th>Live Network</th>
<th>Inline Sensor 1</th>
<th>Inline Sensor 2</th>
<th>Passive Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port A</td>
<td>Port B</td>
<td>Port C</td>
<td>Port D</td>
</tr>
<tr>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Auto</td>
<td>Auto</td>
<td>Auto</td>
<td>Auto</td>
</tr>
<tr>
<td>UP</td>
<td>UP</td>
<td>UP</td>
<td>UP</td>
</tr>
<tr>
<td></td>
<td>HB MISS</td>
<td>HB MISS</td>
<td>HB GOOD</td>
</tr>
</tbody>
</table>

Heartbeat Rate: 15 HB/Sec
Heartbeats to miss before entering Bypass: 15
Link Failure Propagation: Enabled
Reverse Bypass: Disabled
Sticky Mode: Disabled

Press any key to continue:

[2] Configuration
Set:
1. Tap Operation
2. Speed of Ports
3. Link Failure Propagation
4. Reverse Bypass
5. Live Network Duplex
6. Heartbeat Parameters
7. Bypass Configuration
0. Return

[3] Username/Password
Select:
1. Change Username
2. Change Password
0. Return
## INT1G8xxBP Tap Configuration Menus

### [1] Tap Operation
**Set:**
- 1. Tap Operation
- 2. Speed of Ports
- 3. Link Failure Propagation
- 4. Reverse Bypass
- 5. Live Network Duplex
- 6. Heartbeat Parameters
- 7. Bypass Configuration
- 0. Return

### [2] Speed Configuration
**Set:**
- 1. Ports A B C D E F
- 2. Ports G H
- 0. Return

### [3] LFP Mode Configuration
**Current Mode:** Enabled
- 1. Enabled
- 2. Disabled
- 0. Apply Settings and Return

### [4] Reverse Bypass Mode Configuration
**Current Mode:** Disabled
- 1. Enable
- 2. Disable (Default)
- 0. Apply Settings and Return

### [5] Duplex Configuration
**Current Mode:** Auto
- 1. Auto Negotiate (Default)
- 2. Force Full Duplex (100 Mbit Only)
- 0. Apply Settings and Return

### [6] Heartbeat Parameters
**Current Heartbeat Rate is:** ## HB/Sec
Enter new Heartbeat Rate in HB/Sec (## to ###): ##

**Current Number of heartbeats to miss is set to #**
Enter Number of Heartbeats to miss before entering Bypass Mode: (# to ##): ##

### [7] Bypass Configuration
**Current Mode:** Auto Bypass
- 1. Force Primary
- 2. Force Secondary
- 3. Force Bypass (Bypass ALL IPS)
- 4. Auto Bypass (Default)
- 0. Apply Settings and Return
**Bypass** or **BP**: A mode that allows active temporary bypass of an IPS/DLP type inline device. Bypass based on the operating characteristics of the connected network appliance. When a bypass tap device is not able to detect link or heartbeats from (or through) inline appliances or sensors connecting to PRI or SEC tap sensor port pairs, the appliance is bypassed automatically, keeping link up and networks online and passing data.

**Aggregation**: Combines data flows for full-duplex monitoring on a single interface. Ideal when monitoring both sides of network traffic simultaneously.

**Breakout**: Separates data flows for half-duplex directional monitoring. Ideal when utilization is very high and packet loss is not an option.

**LFP** (Link Failure Propagation): Allows link state to be mirrored to adjacent live network interfaces. When one side of a network loses link on a connecting tap, the link state is propagated to the other interface of the tap and ultimately to the other side of the network. Enabled by default.

**LNK** (Link/Activity): Solid when link is achieved and flashes when data is detected on an interface.

**FailSafe**: On power loss, live network tap ports re-establish link with each other, resuming traffic flow between critical network devices. Always on.

**Sticky**: If the primary sensor has been bypassed and the secondary is currently active, secondary will remain active even when the primary comes back online. If the secondary appliance goes offline, the primary will be used if it has link and is passing traffic in both directions. Disabled by default.

**Reverse Bypass**: Disables link on both live network ports if all inline appliances lose link or cannot pass traffic. Disabled by default.