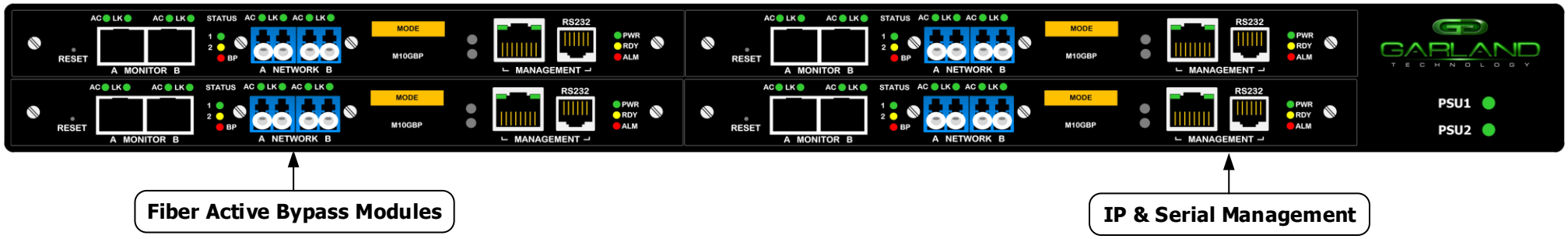
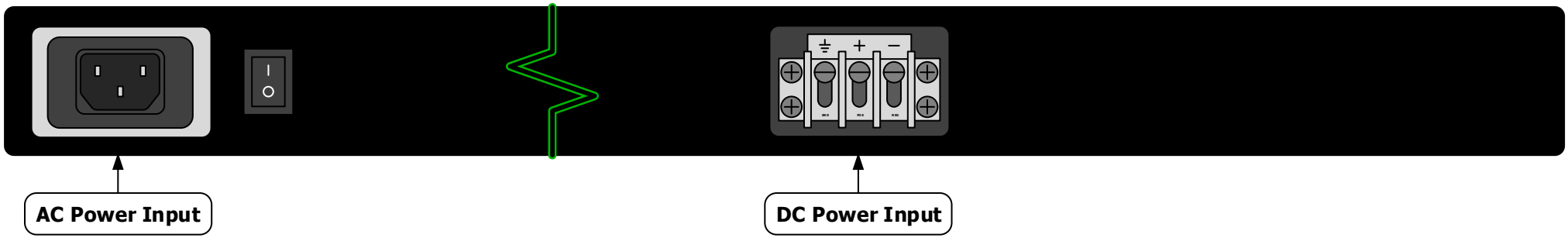
M10GxxBP Series Modular Tap Installation Guide

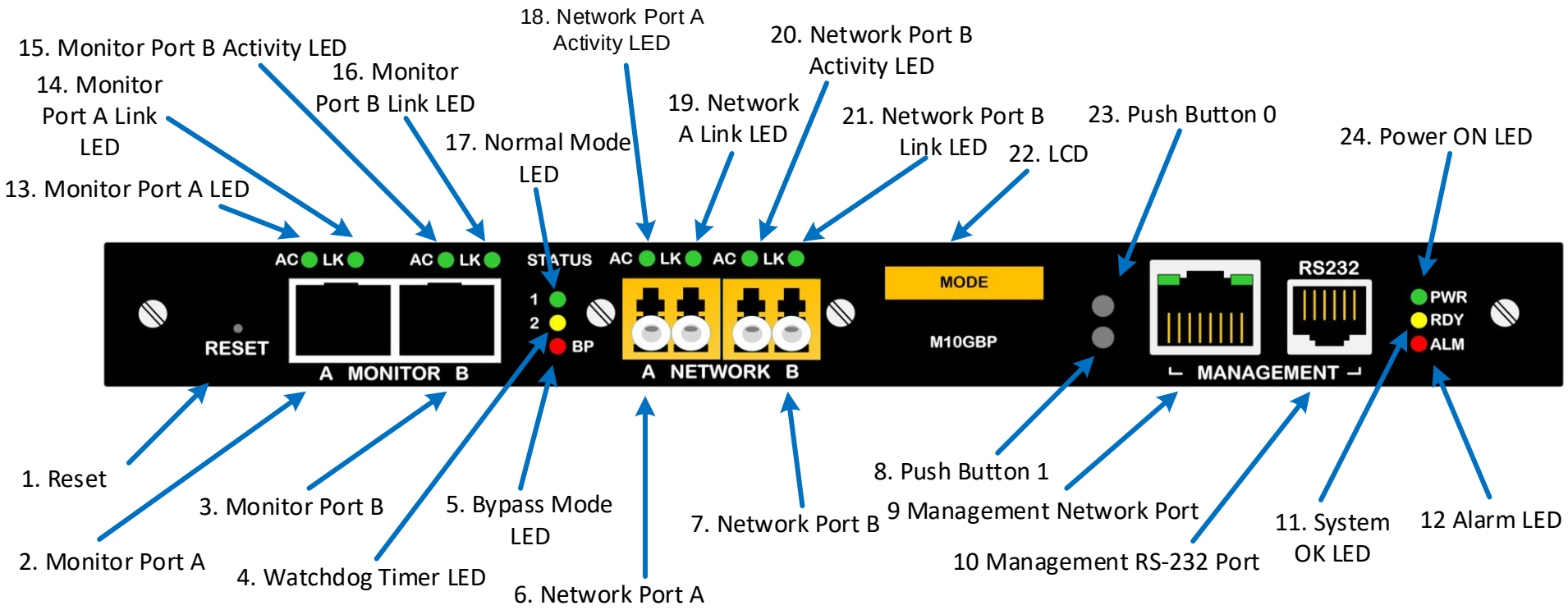
To deploy the M10GxxBP modular tap system into your network, simply:

- Carefully unpack and inspect the tap modules and system chassis.
- Insert and fully seat the M10GxxBP modules into the M10Gxxxx chassis and secure modules using both screws.
- Install the tap and chassis assembly into any available 1U slot of a network rack and secure it with rack mount screws.
- Connect the power supply to the M10GxxBP and plug it into an available power source and turn on the power switch. **Note:** *A VLAN message on the LCD screen is normal.*
- Utilizing the CLI or GUI, configure the M10GxxBP for the operating mode of your choice (default is bypass mode).
- Remove the power supply to the M10Gxxxx chassis temporarily.
- Using standard Ethernet cables, connect **NETWORK** ports [**A**] and [**B**] of the M10GxxBP between the two live network devices where you would otherwise deploy an inline appliance or sensor (for example: IPS or DLP). Verify network traffic is flowing, confirming that network cabling is correct.
- Connect **MONITOR** ports [**A**] and [**B**] to the inline IPS/DLP appliance or other tools for traditional breakout or aggregated traffic monitoring.
- Connect the power leads to the M10Gxxxx chassis power supplies and plug it into an available power source. Turn on the chassis power switch. **Note:** *A VLAN message on the LCD screen is normal.*

Notes: * Fiber is always 10Gbps speed. Other operating modes may be desired for monitoring and may be configured using the CLI or GUI.
* If you wish to replace one of the modules in a chassis without shutting the power to the entire chassis, you need to remove power to the module that you wish to replace through the CLI using the "power_off" command. See Sub-paragraphs 6.56.8 and 6.56.9 on page 69 of the User Guide.

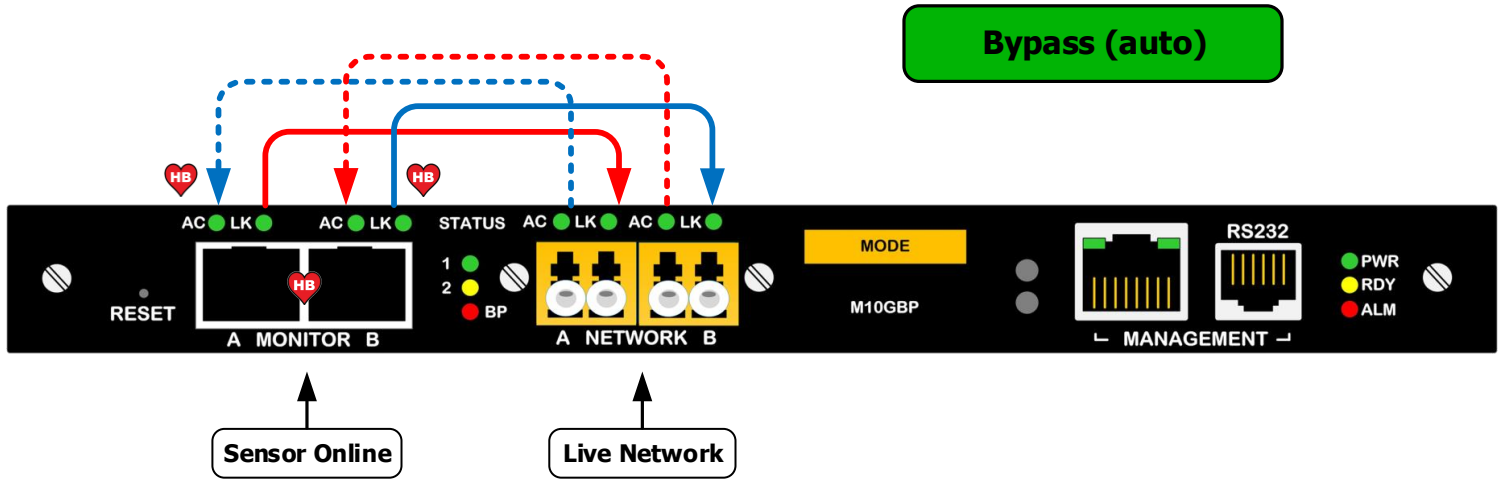


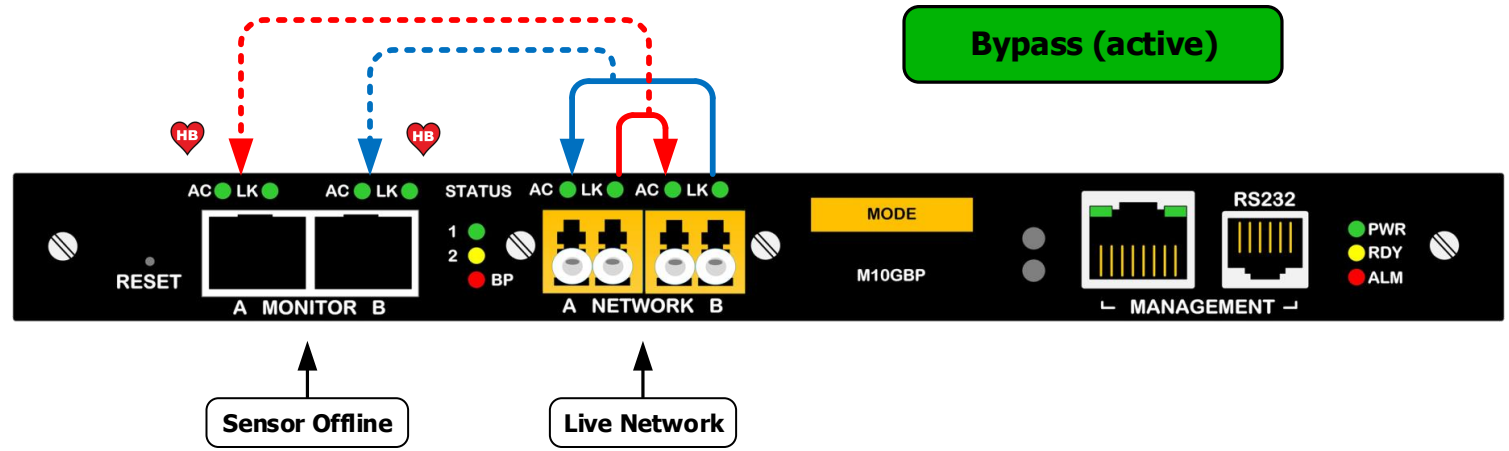




LFP or **Link Failure Propagation**: Allows link state to be mirrored to adjacent live network interfaces. When one side of a network loses link on a connecting tap, the link state is propagated to the other interface of the tap and ultimately to the other side of the network. Enabled by default.
LK or **Link/Activity**: Solid when link is achieved and flashes when data is detected on an interface.
BP or **Bypass**: A mode that allows active temporary bypass of an inline appliance or sensor type IPS/DLP device. Bypass is 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 appliance or sensor connecting to the C and D sensor port pair, 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.
SPAN or **Regenerate**: Allows users to multiply one or more inputs into many outputs. BP LED's are not used while this mode is configured.
FailSafe: On power loss, live network tap ports re-establish link with each other, resuming traffic flow between critical network devices. Always on.
Reverse Bypass: Disables link on both live network ports if all inline appliances lose link or cannot pass traffic. Disabled by default.
Packet Injection: Allows monitor ports to inject Ethernet frames back into the live network flows.

M10GxxBP Tap Module Operating Modes





Bypass Mode Detail

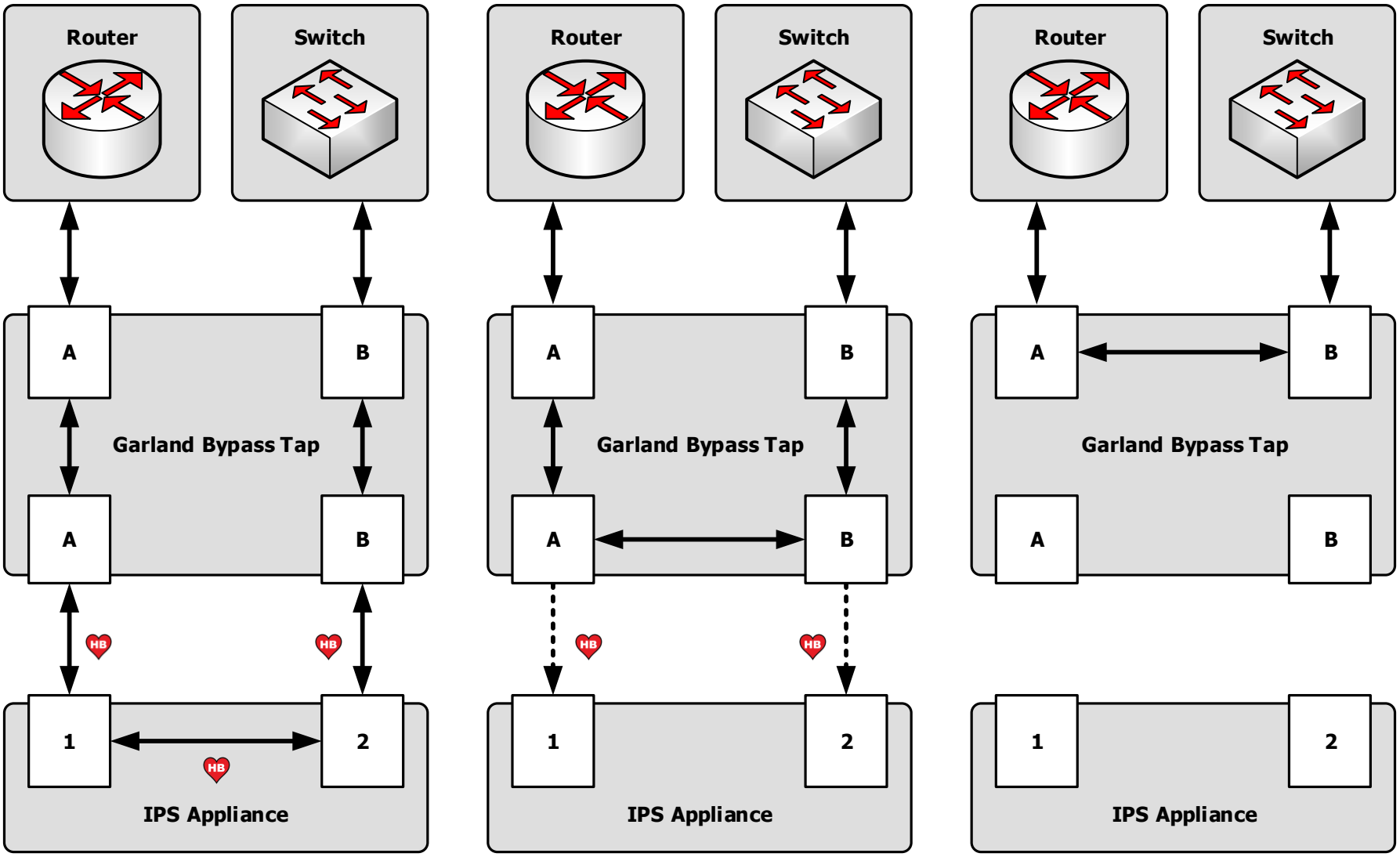
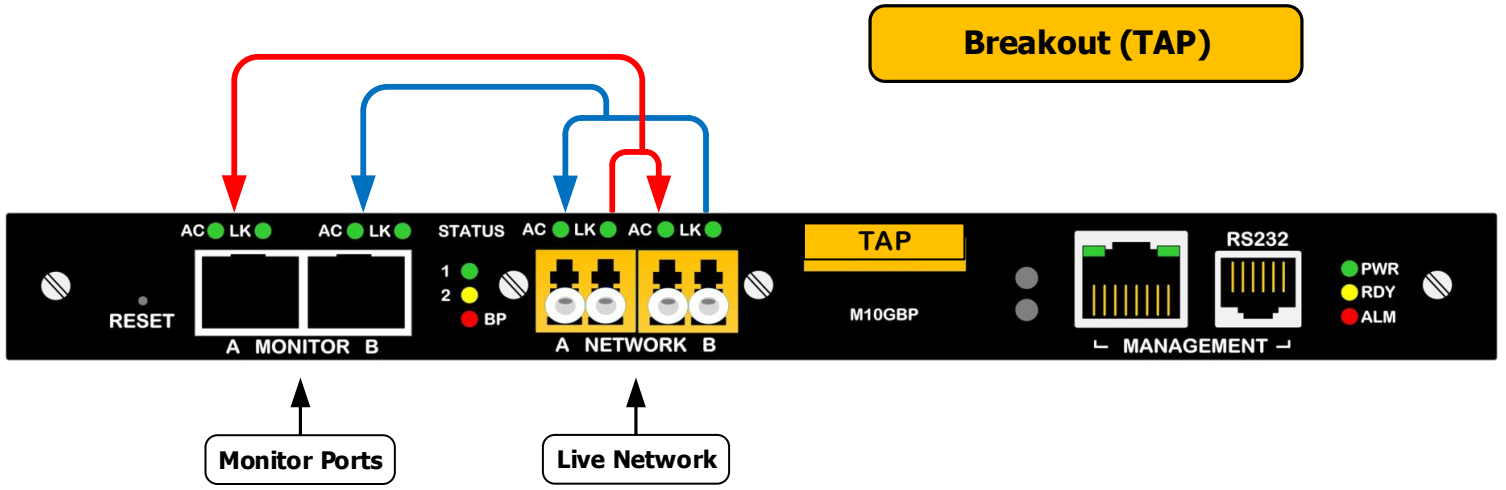


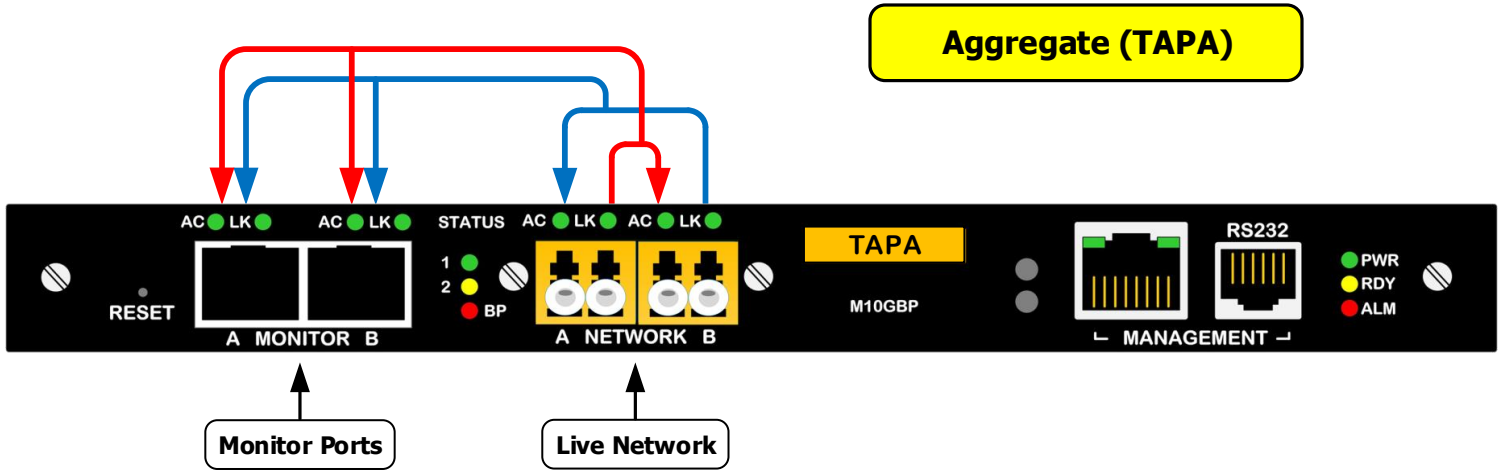
Figure 1: Normal Operation (IPS Online)
All Data Passes Through Sensor Inline

Figure 2: Active Bypass (IPS Offline)
Data and Heartbeats Copied to Sensor

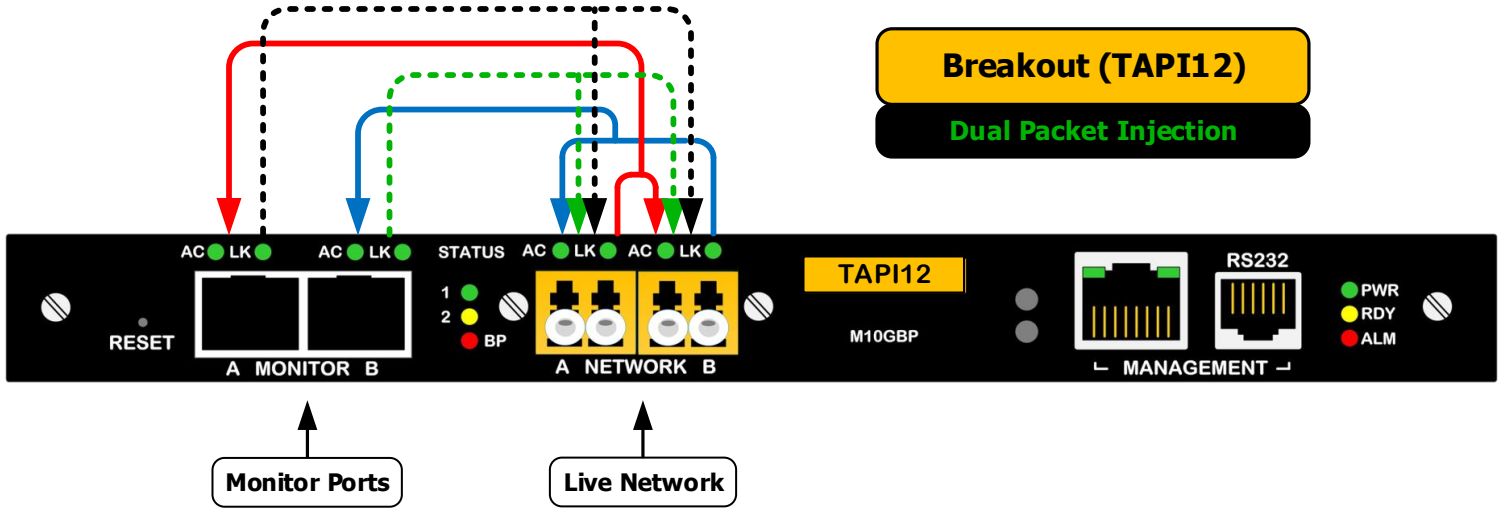
Figure 3: Passive Bypass (Power Failure)
Network Interfaces Renegotiate Resuming Flow

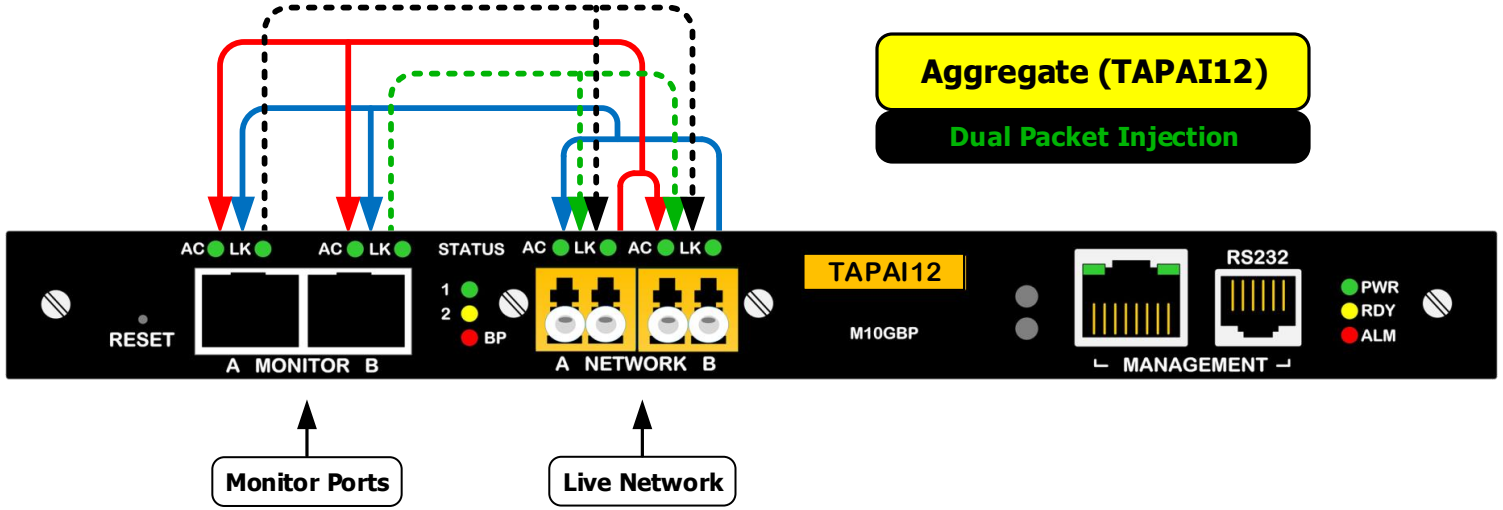
M10GxxBP Tap Module Operating Modes





M10GxxBP Tap Module Operating Modes





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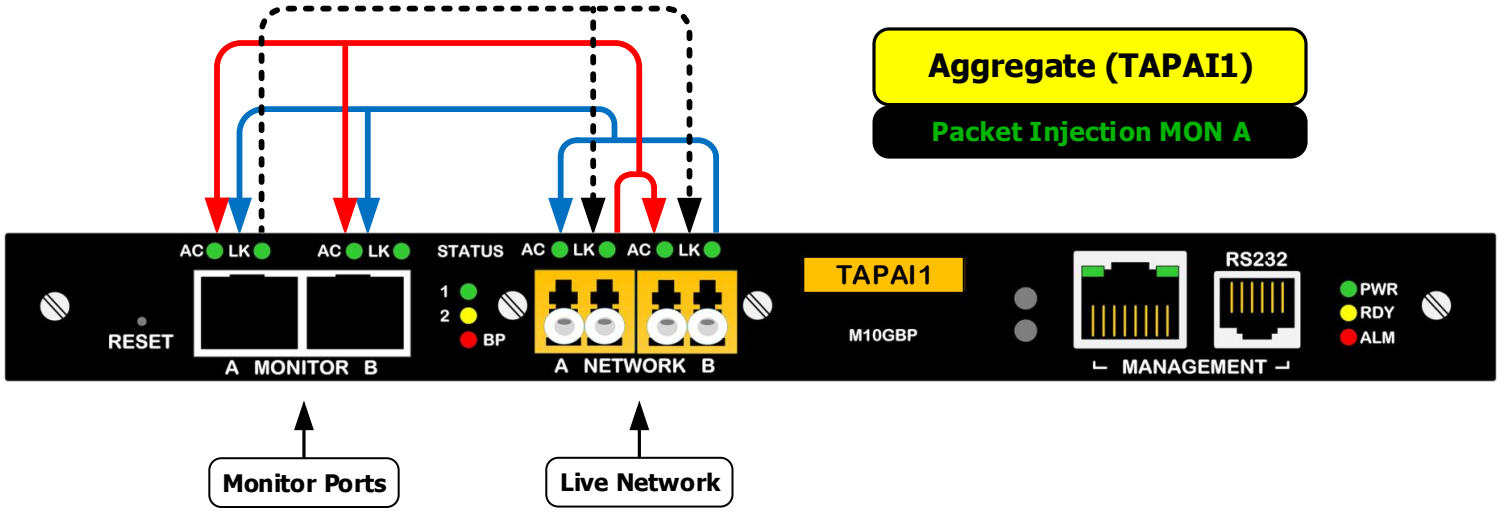
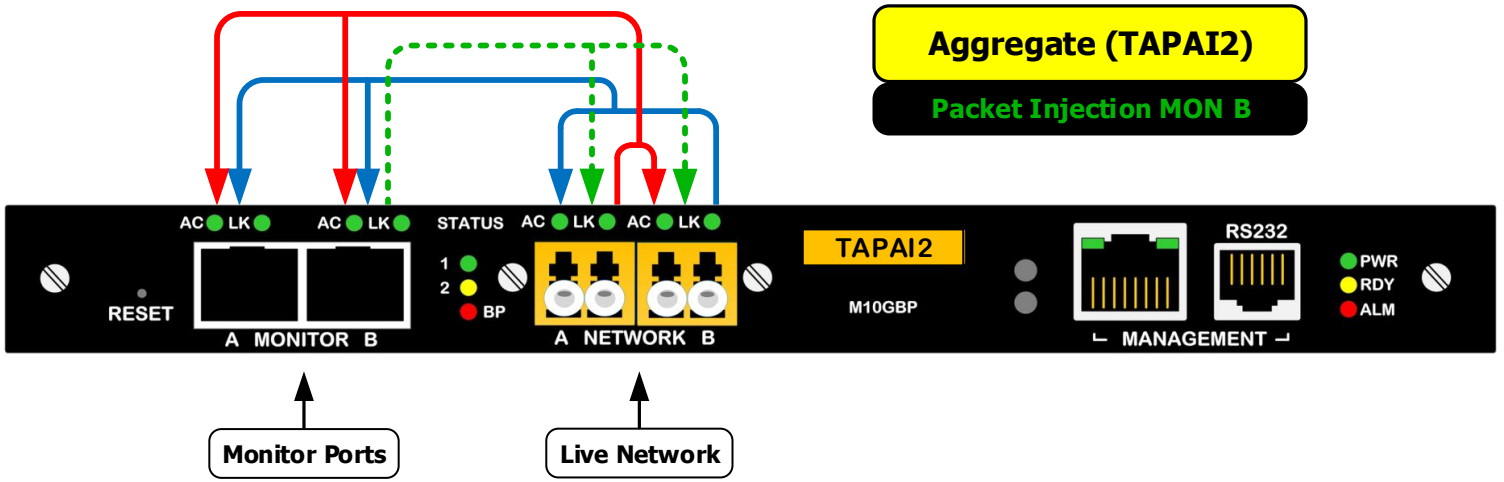
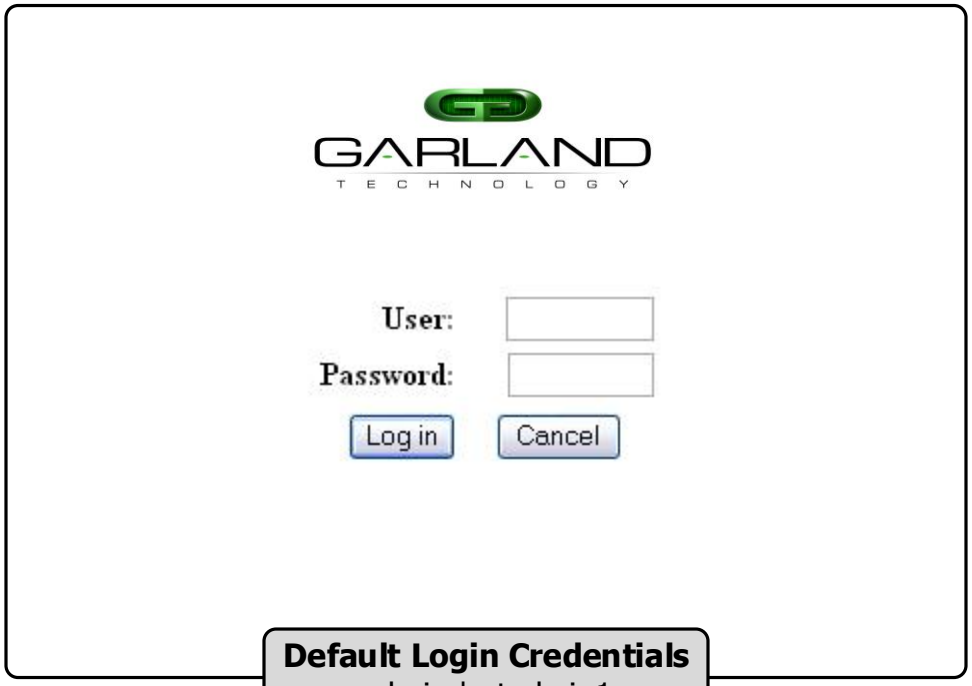


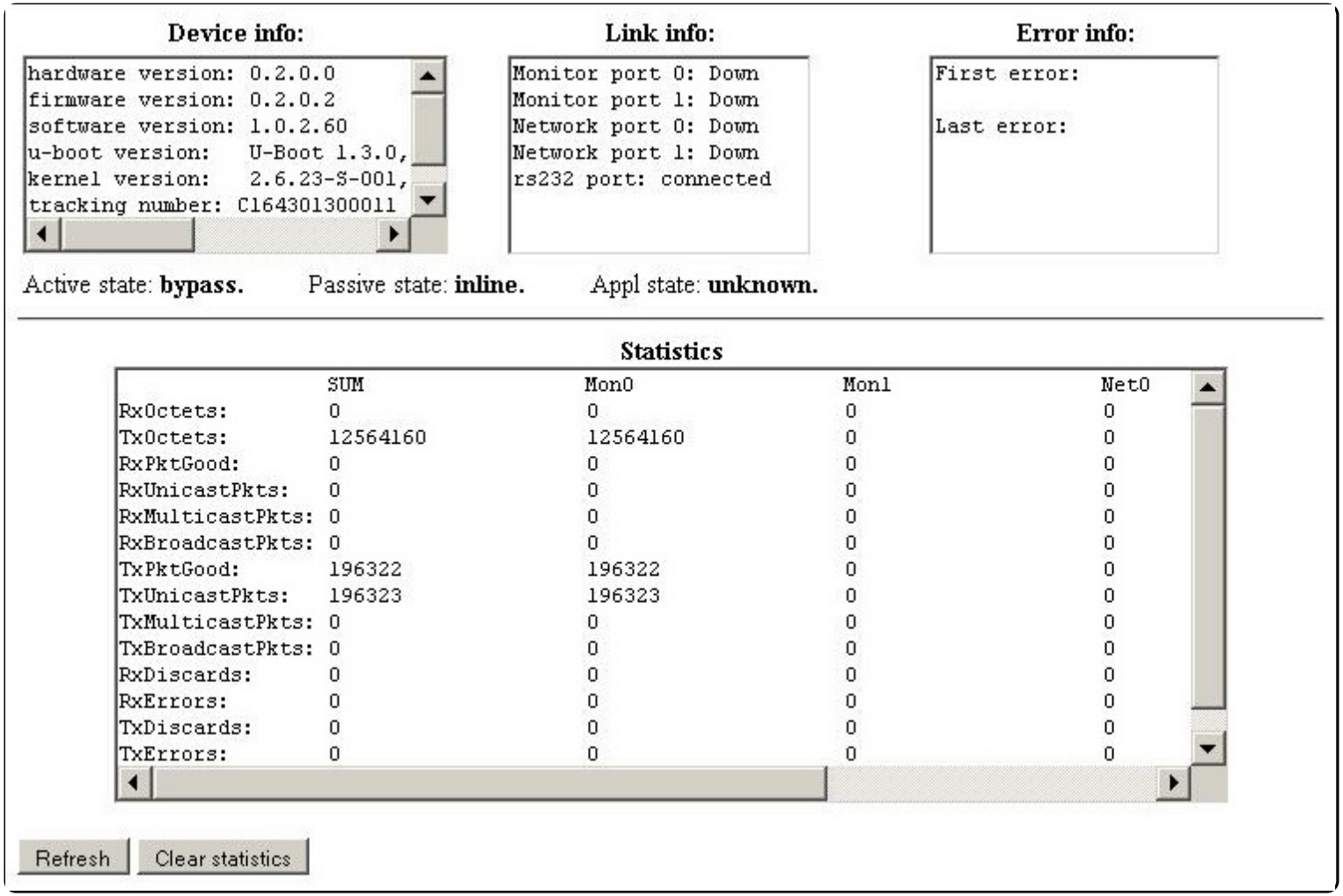


Web Interface Orientation



Default Login Credentials
admin | gtadmin1

Web Interface Orientation



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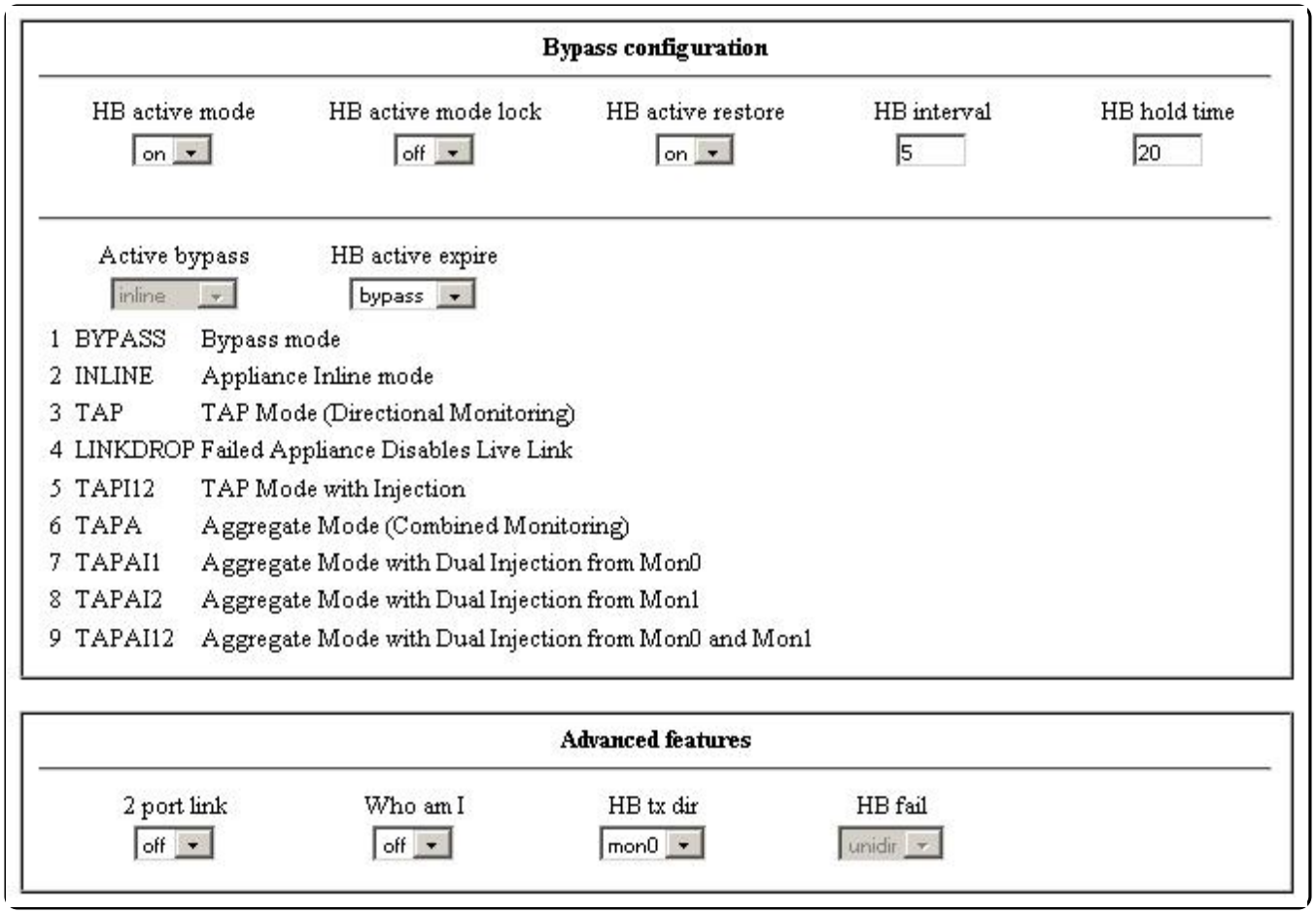

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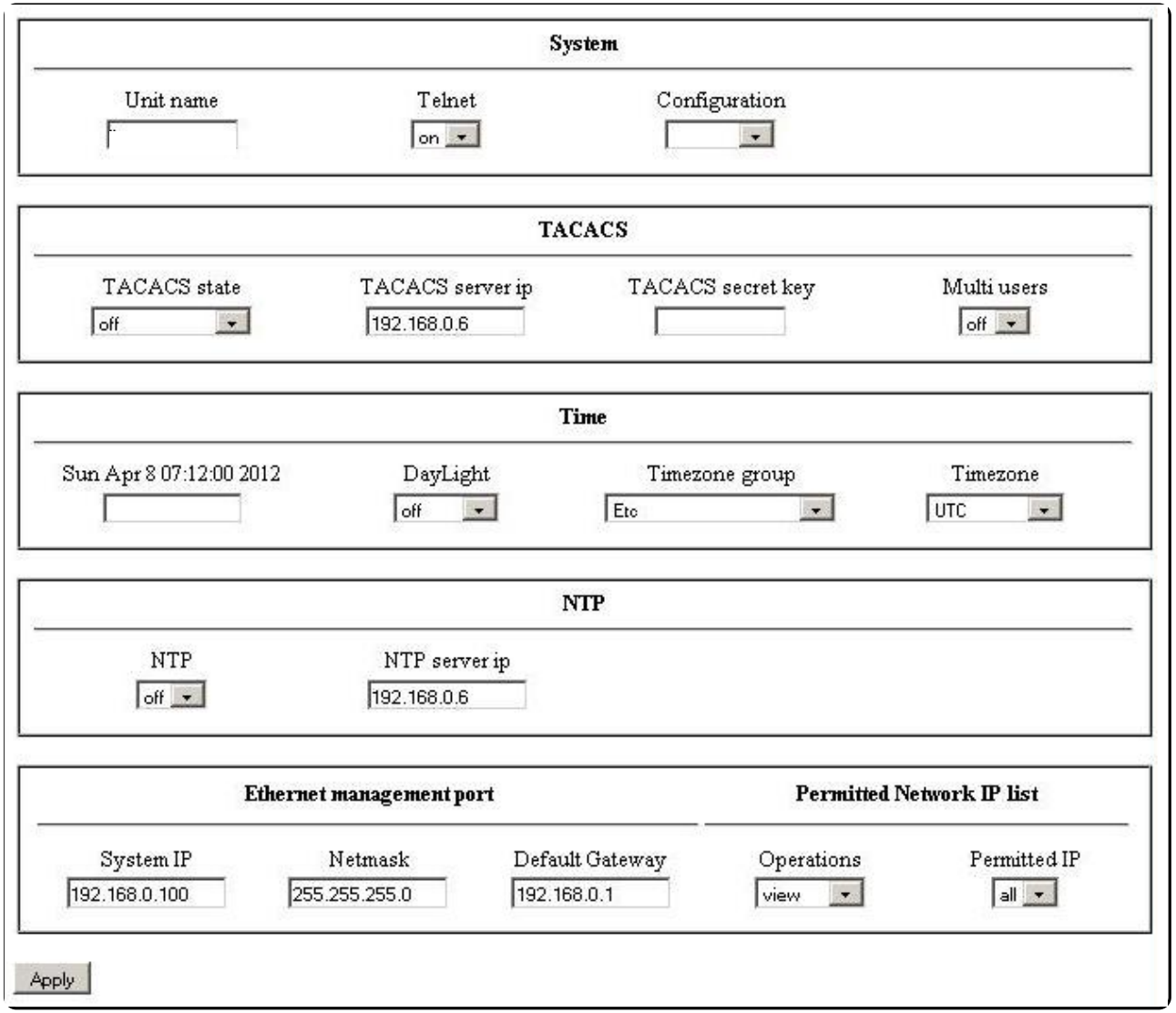
Web Interface Orientation



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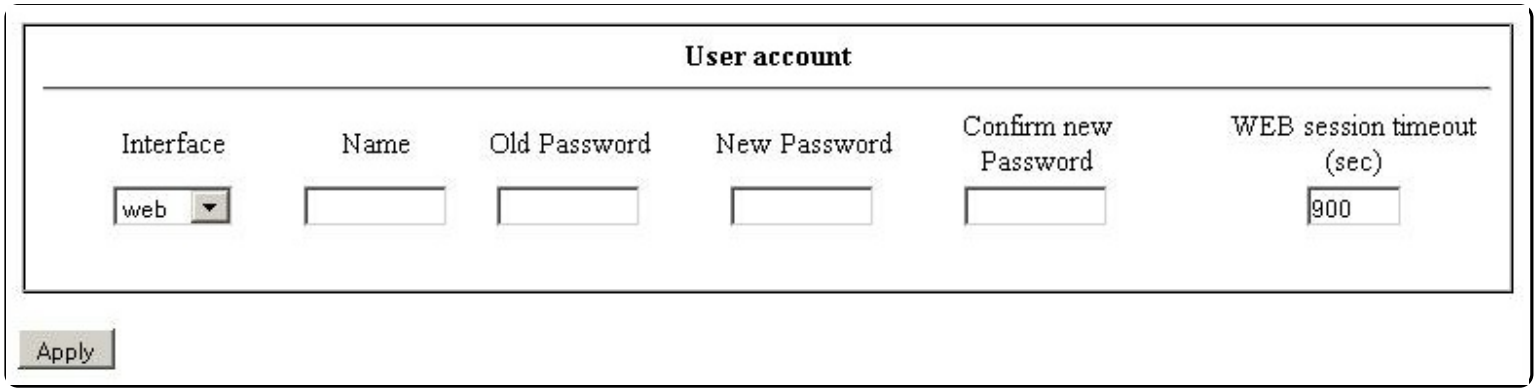

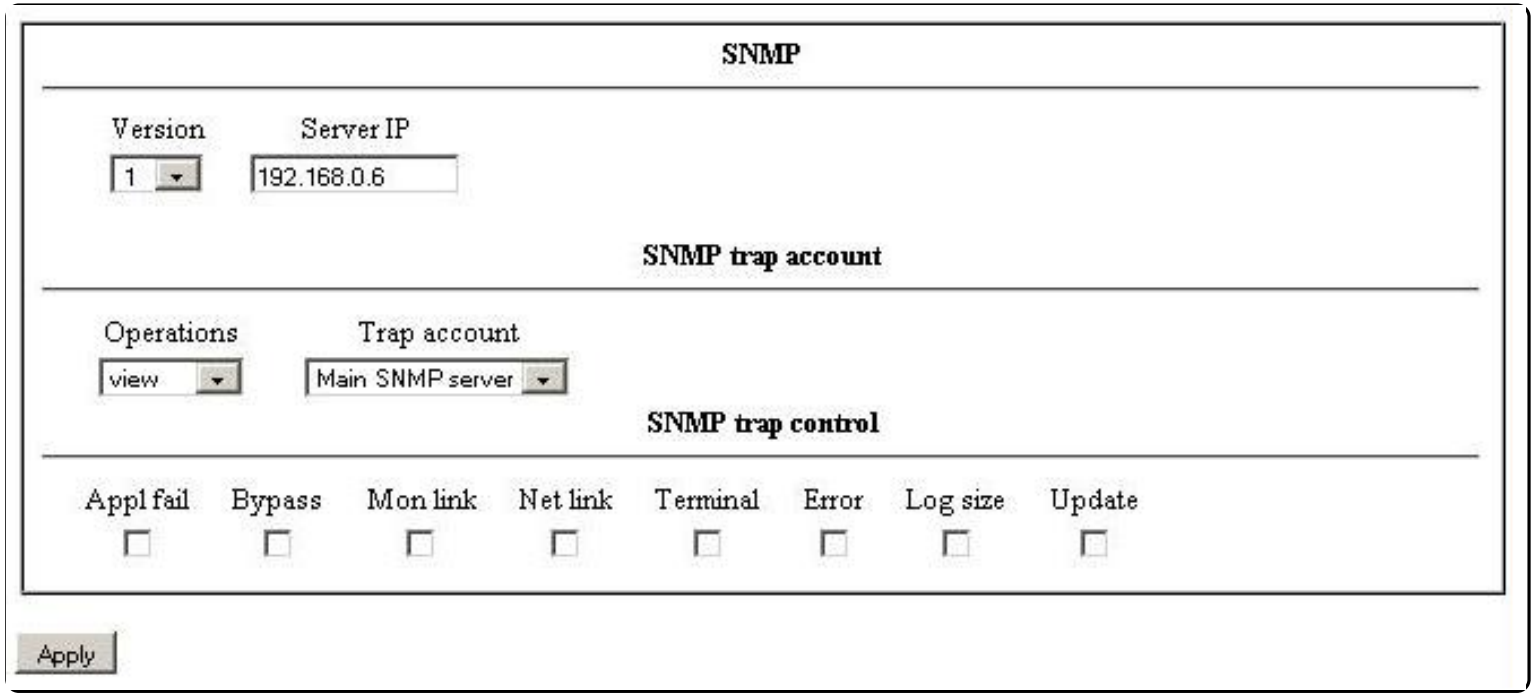

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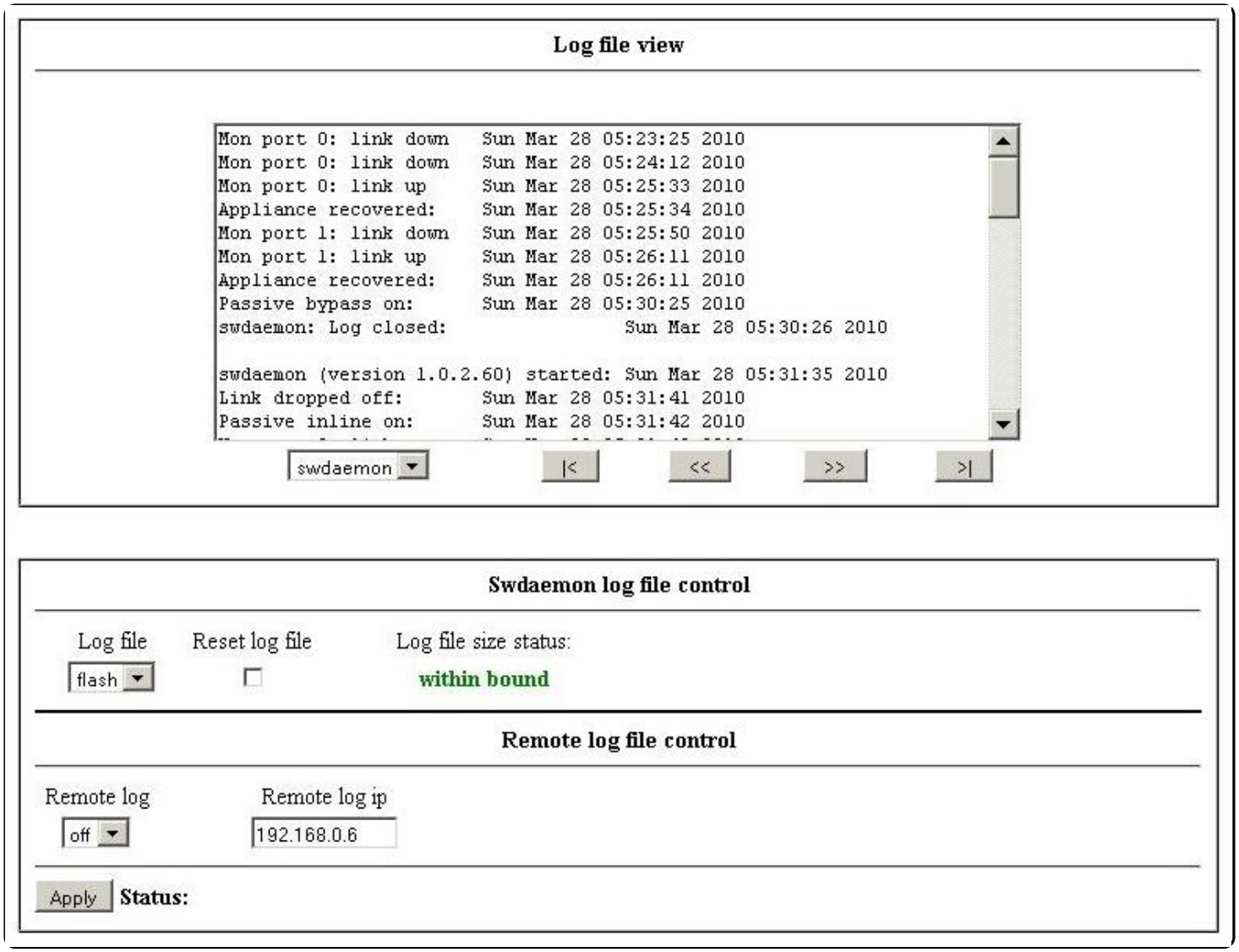

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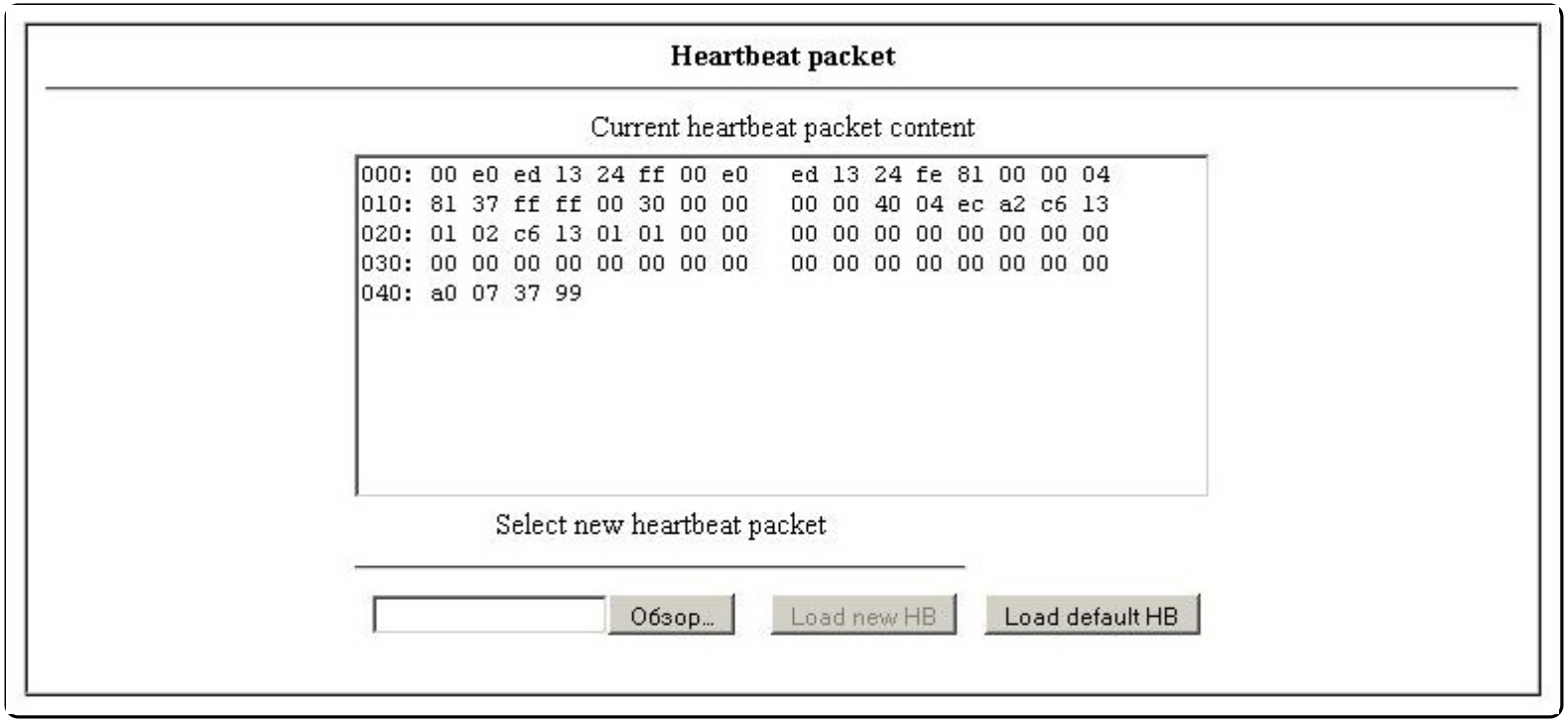

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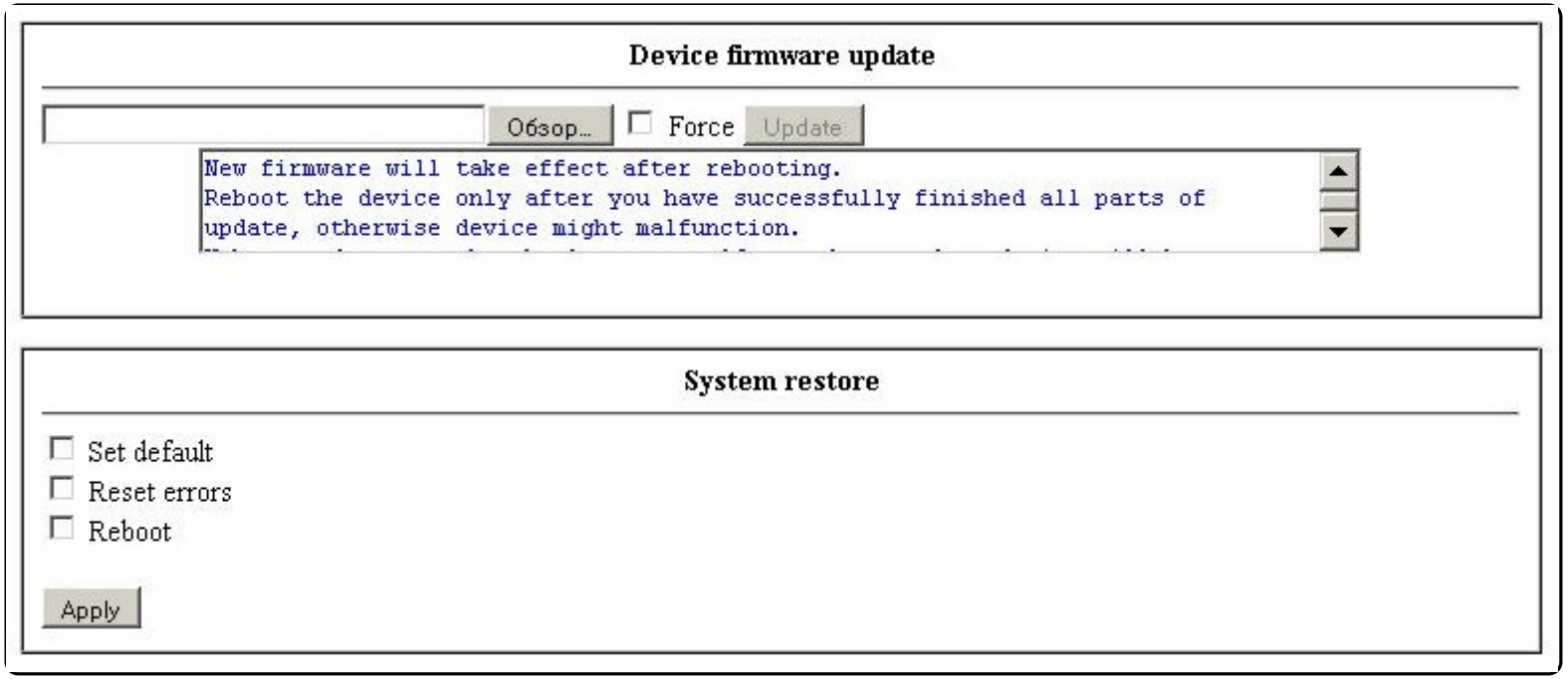
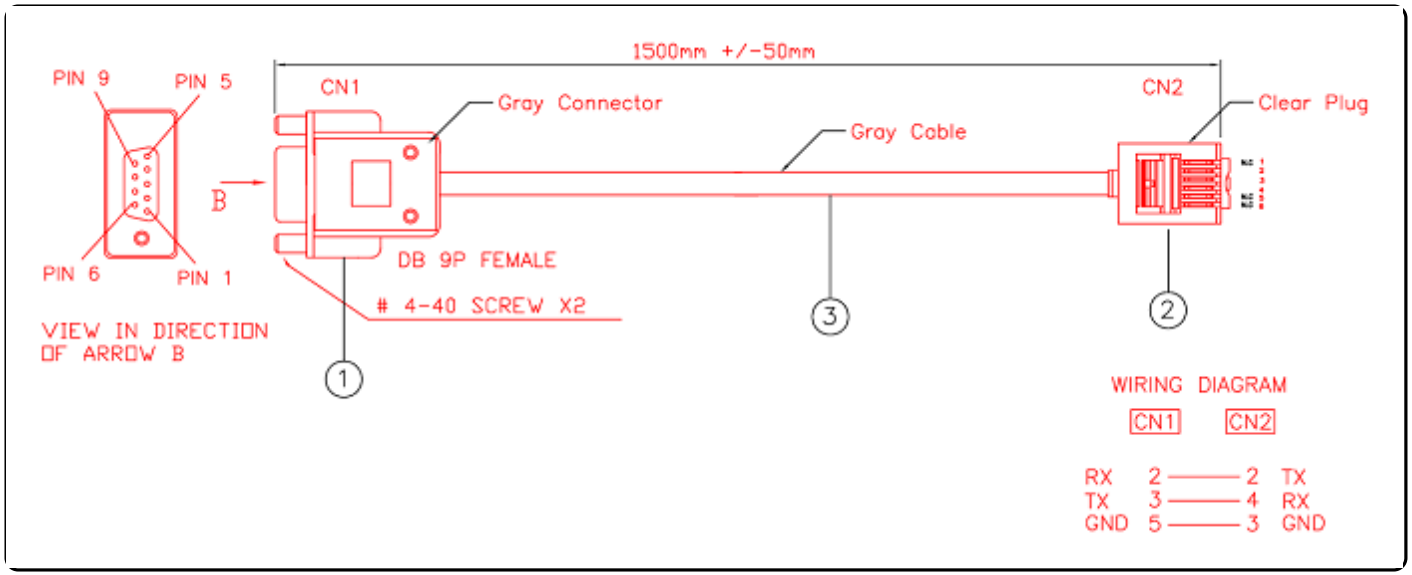


Serial Console Cable Pinout



I. Serial Console Settings

M10GxxBP administrators may gain access to the command line interface environment using a serial terminal emulator console using the settings below:

Bits per second:	115200
Data bits:	8
Parity:	None
Stop:	1
Flow Control:	None

II. Login Credentials

The "**admin**" account grants full access and permission to a device. The default password for admin is "**gtadmin1**". Administrators may change the default login credentials by issuing the following commands:

Set_usr	Changes the user account login name
Set_psw	Changes the user account password

III. Command Help

M10GxxBP allows commands for configuring each module independently. Command help may be issued by executing the following commands:

Help	Provides a list of all **show** and **set** type commands
Help full	Provides a list of all **show** and **set** commands including a detailed description of each command and its usage
Exit	Logs out and exits the command line interface

IV. IP Management Interface

M10GxxBP system administrators may choose to manage the device via the provided Ethernet port. The default IP address parameters are:

Address:	10.10.10.200
Netmask:	255.255.0.0
Gateway:	0.0.0.0

M10GxxBP system administrators may set the Ethernet management port's IP address parameters with the following commands:

Set_ip	Configures an IPv4 address
Set_netmask	Configures an IPv4 subnet mask
Set_gateway	Configures an IPv4 default network gateway

V. Web Interface Login

M10GxxBP system administrators may choose to configure and manage devices via web or graphical user interface. After changing the management port's IP address, you have the option to access the graphical user interface using a web browser application, such as Google Chrome or Mozilla Firefox. Simply browse to your devices assigned IP address and login using the login credentials:

Address:	http://10.10.10.200
Username:	admin
Password:	gtadmin1

***For product support and inquiries visit: www.garlandtechnology.com**