

Easy VLAN Setup with GBS

What is a VLAN?

Creating a VLAN or Virtual Local Area Network is like partitioning or grouping devices within a LAN that are completely isolated from one another but within the same equipment. Before VLANs, you would have to invest in complete sets of equipment like routers and switches which were entirely discrete from one another. VLAN technology allows multiple “Virtual” LANs on the same network switch. VLAN traffic can even flow across multiple compatible switches (such as ProPlex GBS) via a method called trunking.

One of the main benefits to using a VLAN would be security. Devices on different VLANs are inherently isolated from each other and normally will not share traffic. This is ideal for separating different types of data streams, like between different departments in a business. In the entertainment technology world, it would be separating discrete networks for lighting, audio, media, or other content.

Network performance is another reason to employ a VLAN. Without VLANs, all devices would be on the same broadcast domain which is not necessarily a good thing. Every port on the switch will receive broadcasted traffic, and the result could potentially be a broadcast storm that causes outages. VLANs can be used to reduce the load of traffic, delivering data to only the devices that need it.

How to set up a VLAN on GBS with LCD

Managed GBS switches normally require a laptop connection to the switch, and a few settings within the browser configuration to assign ports to specific VLANs or trunks. This can be quite cumbersome to do in the field as it requires more advanced skills in IT and networking which may not be readily available.

We understand that ease of deployment is extremely important, so we have developed the GBS LCD screen to facilitate a more user friendly and accessible management solution. The GBS LCD screen can create several pre-configured settings changes to the GBS switch, all at the simple press of a button.

GBS 10-Port Modes include:

MANAGED	Basic managed switch features are enabled (RSTP, IGMP and QoS) – Good for basic use with Art-Net, sACN, Hog-Net, Dante etc.
MANAGED + 2 VLANs	Ports 1,2 & 3 assigned to VLAN group 1 Ports 4,5 & 6 assigned to VLAN group 2 Ports 7,8,9 & 10 assigned to trunking
MANAGED + 3 VLANs	Ports 1 & 2 assigned to VLAN group 1 Ports 3 & 4 assigned to VLAN group 2 Ports 5 & 6 assigned to VLAN group 3 Ports 7,8,9 & 10 assigned to trunking
MANAGED + DHCP	Basic managed switch features enabled with DHCP address server running
UNMANAGED	All advanced features disabled

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GBS 28-Port models can be configured with even more options for VLAN grouping due to the number of available ports. The etherCON modules are blocks of 3 or 6 etherCON ports with dual trunk pots in both etherCON and opticalCON QUAD on the rear of the unit (in default configuration). Port LEDs are also RGB, so indicator lights can show VLAN grouping by color.

GBS 28-Port Modes include:

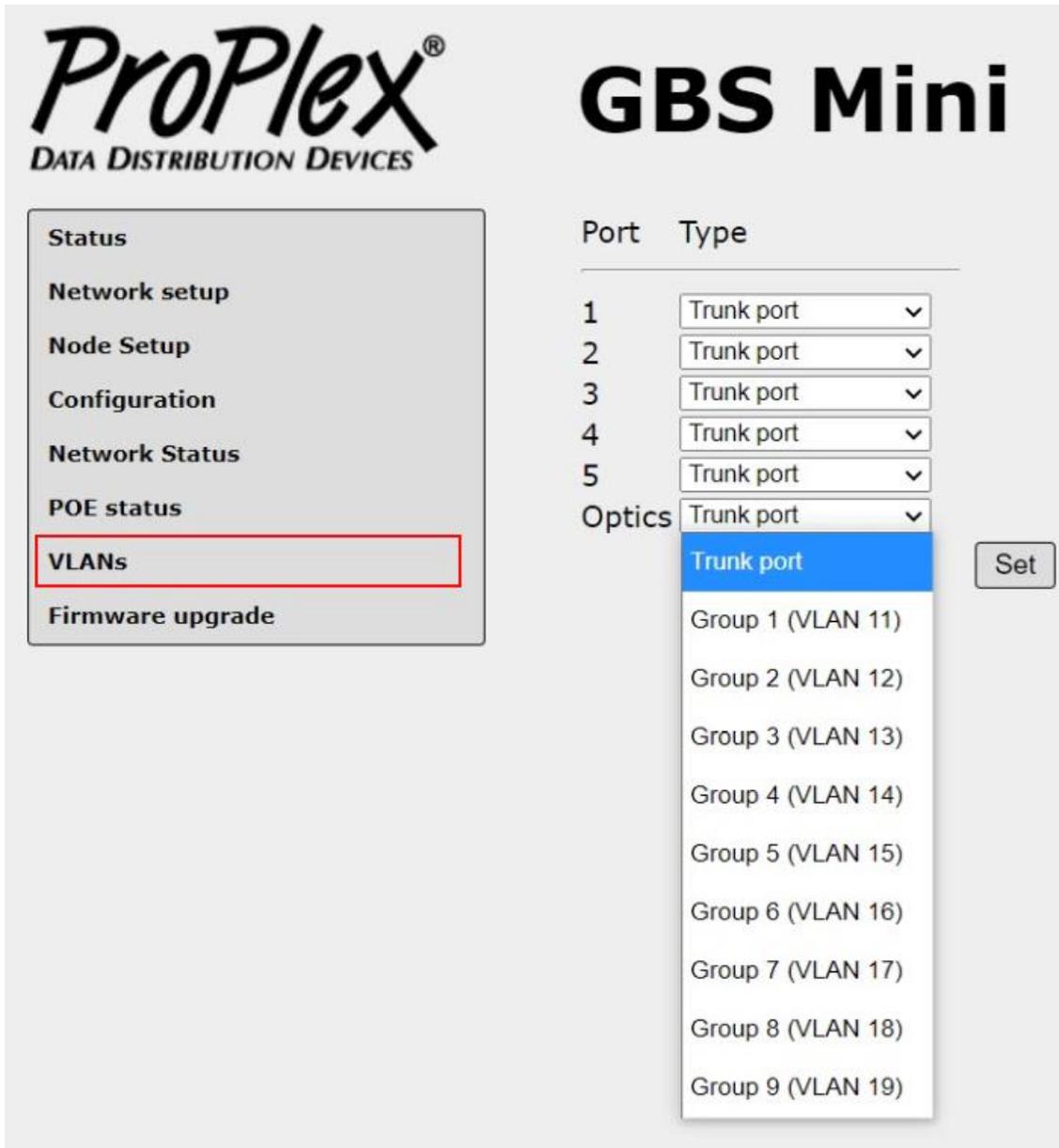
MANAGED	Basic managed switch features are enabled (RSTP, IGMP and QoS) – Good for basic use with Art-Net, sACN, Hog-Net, Dante etc.
MANAGED + 2 VLANs	
MANAGED + 3 VLANs (A)	
MANAGED + 3 VLANs (B)	
MANAGED + 4 VLANs	
MANAGED + 6 VLANs	
MANAGED + DHCP	Basic managed switch features enabled with DHCP address server running
UNMANAGED	All advanced features disabled
Custom/Unknown	Other configurations available through GUI management interface

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Easy VLAN Setup with GBS

GBS Mini PoE is our smallest entry in our managed switch line. While there is no LCD on this model, the unit is fully customizable through an intuitive Web Interface. Each of the 5 etherCON ports can be assigned to any 9 VLAN options, or as a trunk. There is also a single opticalCON QUAD port which is trunk by default, but also can be assigned to any VLAN if necessary.

Simply connect via laptop to the GBS Mini PoE and type the IP address into your favorite browser. You will be directed to the web interface which allows variety of customization options.



ProPlex[®]
DATA DISTRIBUTION DEVICES

GBS Mini

- Status
- Network setup
- Node Setup
- Configuration
- Network Status
- POE status
- VLANs**
- Firmware upgrade

Port	Type
1	Trunk port
2	Trunk port
3	Trunk port
4	Trunk port
5	Trunk port
Optics	Trunk port

- Trunk port
- Group 1 (VLAN 11)
- Group 2 (VLAN 12)
- Group 3 (VLAN 13)
- Group 4 (VLAN 14)
- Group 5 (VLAN 15)
- Group 6 (VLAN 16)
- Group 7 (VLAN 17)
- Group 8 (VLAN 18)
- Group 9 (VLAN 19)

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