OPTICAL
SYSTEMS
DESIGN

Quick Start Guide

OSD2524

MANAGED 20 x 10/100/1000BASE-T, 4 x

COMBO AND 2 x 1G ETHERNET SWITCH

INDEX 1

1 INTRODUCTION

Thank you for choosing the OSD2524 20-Port Gigabit Managed Ethernet Switch. This Quick Start Guide is designed to guide you through the installation and basic software function.

2 INSTALLATION

ELECTROMAGNETIC COMPATIBILITY

WARNING: This is a **Class A product**. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

OPTICAL OUTPUT OPERATION

WARNING: **Laser Safety:** Class 1 Laser Product (SFP) per IEC 60825-1:2014 standard.

Class 1
The OSD2524 is a **Class 1 laser product (when SFPs fitted).**


PRECAUTIONS

- All service personnel should be provided training as to the hazards of direct viewing of laser radiation and of the precautionary measures during servicing of equipment
- Areas where laser products are installed should be restricted in access to trained service personnel only and appropriate warning signs posted in the work area.
- All laser apertures should be covered by protective covers when not connected to optical fibers. Never leave outputs uncovered.
- Laser equipment should be positioned above or below eye level where possible. Apertures should be positioned away from personnel.
- Protective eyewear should be worn in the vicinity of laser equipment.

3 OSD2524 FRONT AND REAR PANELS

3.1 FRONT PANEL

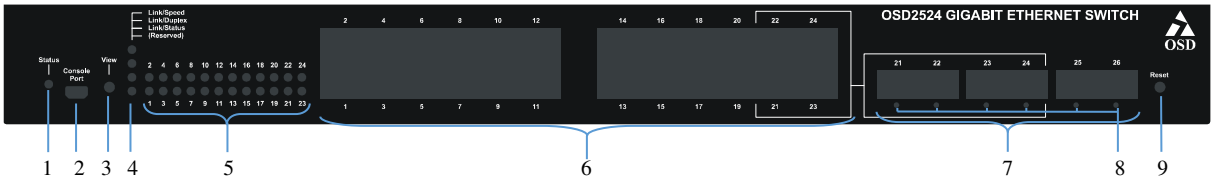


FIGURE 1: FRONT PANEL

1. Board Status LED
2. USB Console Port
3. View LED Mode Button
4. View Mode LEDs Indicators
5. Port Status LEDs
6. RJ45 Copper Ports
7. SFP Fiber Ports
8. SFP LEDs
9. Reset Button

3.2 REAR PANEL

FIGURE 2: REAR PANEL

10. Earth
11. Power 1 LED
12. Dual Redundant Power Input
13. Power 2 LED

4 Power Supply Connections

Dual Redundant DC Power Version

Connect the dual redundant power to the 4-way terminal block located on the rear of the unit.

The OSD2524 DC version requires external +10 to +36V_{DC} @ 40VA Max power.

FIGURE 3: DC POWER CONNECTION

TABLE 1: DC POWER CONNECTION

External Power Pin	Specification
Pin 1, Pin 3	0V (Ground Isolated)
Pin 2, Pin 4	+10 to +36V_{DC} @ 40VA max

AC Power Version

Connect AC power to the IEC connector located on the rear of the unit.

The OSD2524 AC version requires external 90 to 264V_{AC} @ 50VA Max power.

FIGURE 4: AC POWER CONNECTION

5 LED Indicators

TABLE 2: LED FUNCTION

	Function
Board Status LED	• Green – Normal status • Red Blinking – Internal Warning
View Mode LED Indicators	Controlled by View LED Mode Button. Pressing the Mode button cycles the Copper Port Status LED indication. Speed Mode → Duplex Mode → Status Mode → Reserved →.
Copper Port Status LED	The Copper Port Status LED will indicate different information. Speed Mode: • Green – 1Gbps • Yellow – 100MBps • Off – No Connection • Blinking - Traffic Duplex Mode: • Green – Full Duplex • Yellow – Half Duplex • Off – No Connection • Blinking - Traffic Status Mode: • Green – Connection good • Off – No Connection
Fiber Port Status LED	• Green – 1Gbps • Off – No Connection • Blinking - Traffic

6 Fitting SFP Connectors

Care should be taken when inserting/removing the SFP connectors from the SFP port as SFP modules are Electrostatic (ES) sensitive and Electrostatic Discharge (ESD) precautions should be taken when installing. Ensure that the SFP is fully engaged and latched into position.

Inserting SFP – Ensure that the SFP lever is in the locked position and insert into appropriate SFP port. Gently push the SFP until it locks into place. Remove plastic/rubber dust cap and fit appropriate fiber cable.

Removing SFP – Remove fiber connector. Pull the SFP lever down to unlock SFP from housing. Using the lever, gently pull the SFP out.

Fiber SFP

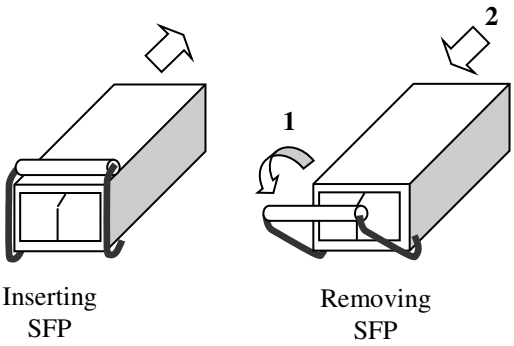


FIGURE 5: FITTING/REMOVING SFP CONNECTORS

7 COMBO PORTS

Note that ports 21, 22, 23, and 24 are Combo Ports and either the RJ45 ports or SFP ports will operate at one time. Each port is label accordingly and the combo ports are marked by the white outline.

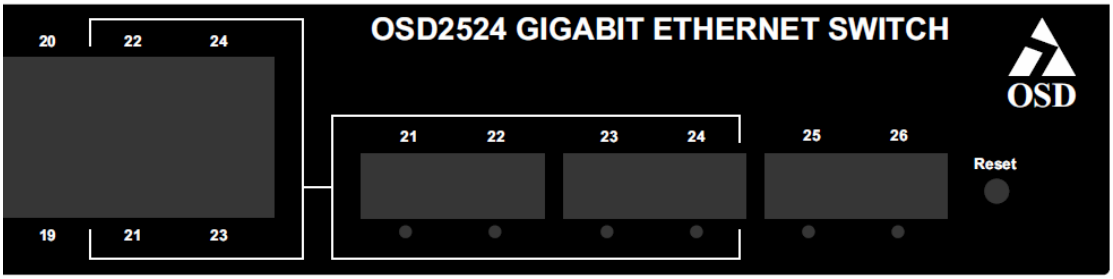
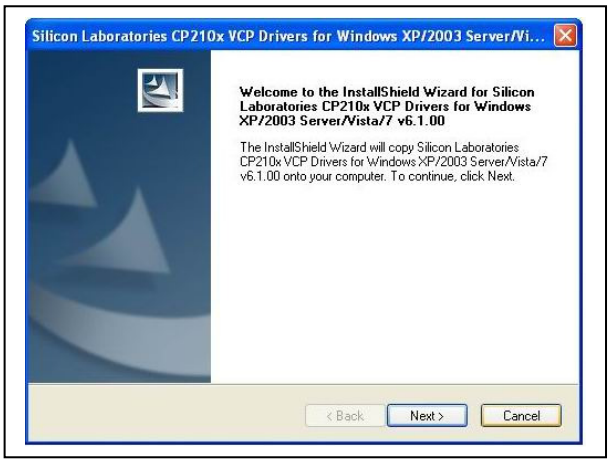


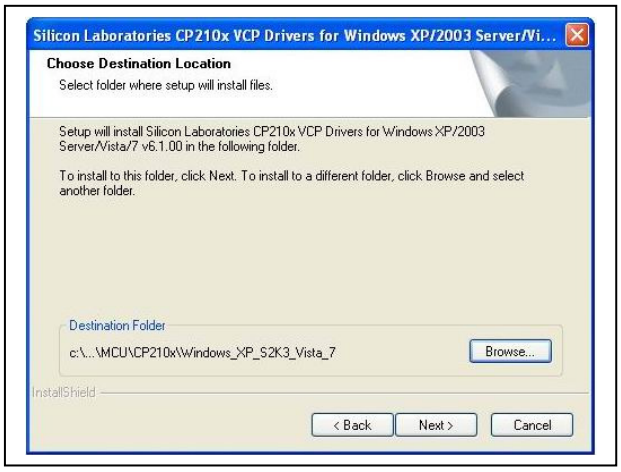
FIGURE 6: COMBO PORT ALLOCATION

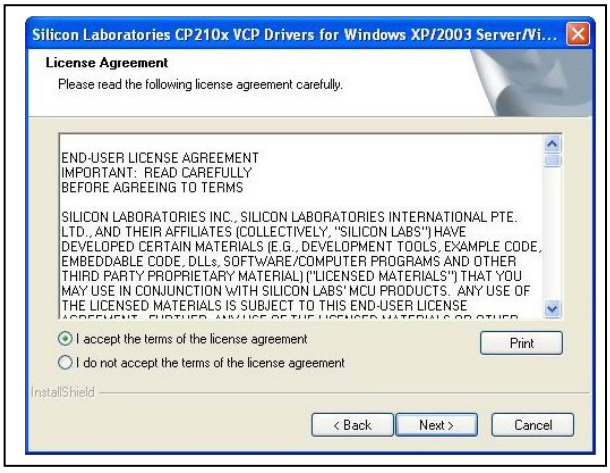
8 CLI OVERVIEW

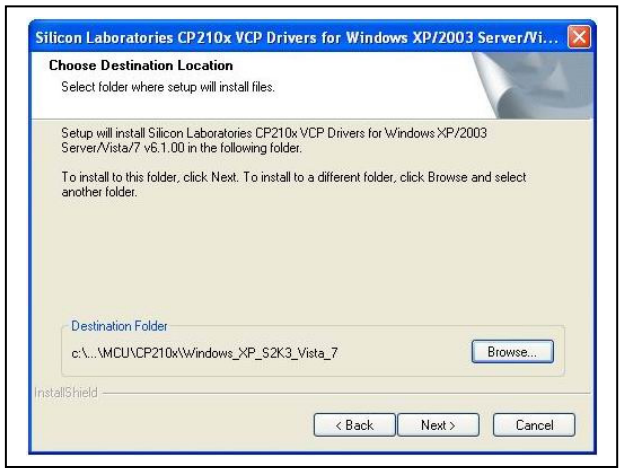
8.1 CONNECT TO CLI

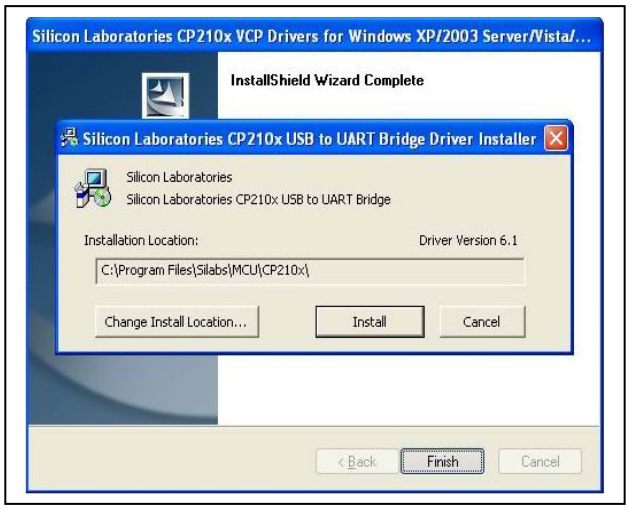
The Silicon Laboratories CP210x VCP Drivers is needed to be installed on the PC before connecting the switch.

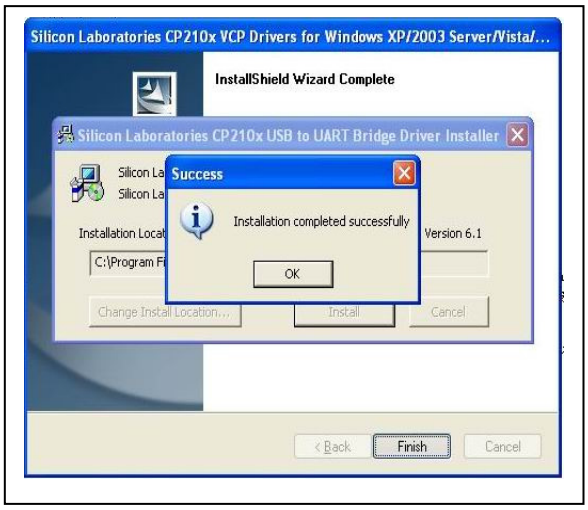












1. Connect the Console Port on UUT to PC with USB cable (Type A to Type B).
2. Using HyperTerminal to set up the following parameters.
    - Baud Rate: 115200
    - Data Bits: 8
    - Parity: None
    - Stop Bits: 1
    - Flow Control: None
3. Check the link by pressing <ENTER>. The line should jump to the next line.
4. Using the Username and password to login the switch
    - Default Username: admin
    - Default Password: (None)

8.2 CLI COMMAND FOR IP CONFIGURATION

- ***show ip interface brief***: Display the current IP address and subnet mask.
- ***configure terminal -> interface vlan 1 -> ip address <IP address> <subnet mask>***: Setup the switch IP address.
- ***copy running-config startup- config***: Save the current configuration to start-up configuration.

PS: All configuration changes must be saved otherwise all the changes will be lost after rebooting!

9 GUI Overview

9.1 DEFAULT SETTING

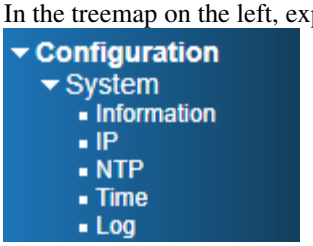
- IP Address: 192.168.0.99
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.0.1
- User Name: admin
- Password: (None)

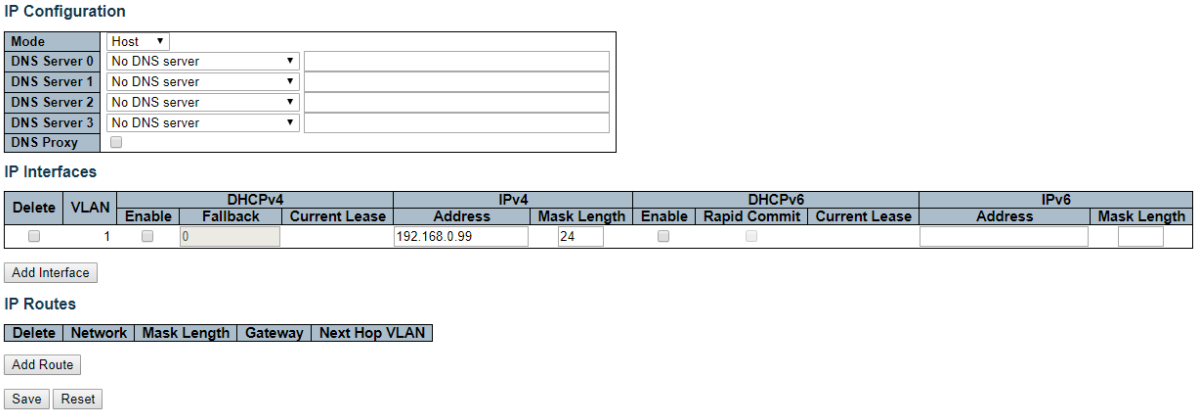
9.2 LOG INTO THE SWITCH

- Connect a switch port to a PC, Change the PC's network IP address to connect to the switch (i.e.: 192.168.0.2).
- In a web browser, enter the URL 192.168.0.99.
- Enter the username and password.

9.3 IP CONFIGURATION

In the treemap on the left, expand the **Configuration → System → IP.**





Enter the **IPv4 address** and **Mask Length** in the table.

Choose the management VLAN ID to access that IP in **VLAN** table if VLAN function is required.

If the multiple IP addresses are required, click **Add Interface** to add more IP interface.

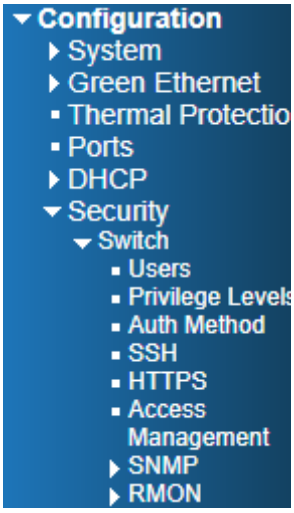
Click **Save** to save the configuration.

Use new IP address to access the switch.

PS: All configuration changes must be saved otherwise all the changes will be lost after rebooting!

9.4 USERS AUTHENTICATION

In the tree map on the left, expand the **Configuration → Security → Switch → Users**



Users Configuration

User Name	Privilege Level
admin	15

Add New User

Click **admin** to change the current admin account setting.

Edit User

User Settings	
User Name	admin
Password	
Password (again)	
Privilege Level	15

Save Reset Cancel

If multiple users are required, click **Add New User**

Add User

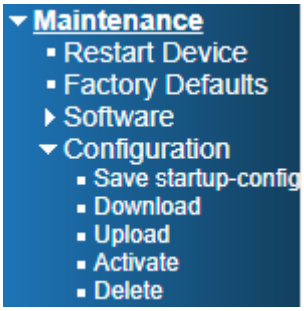
User Settings	
User Name	
Password	
Password (again)	
Privilege Level	0

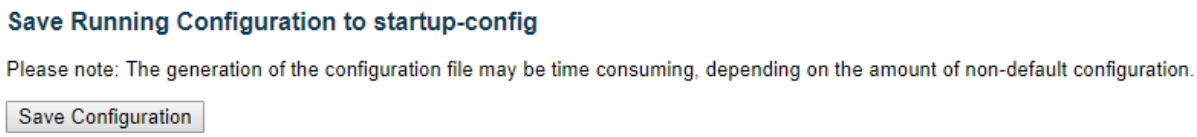
Save Reset Cancel

PS: All configuration changes must be saved otherwise all the changes will be lost after rebooting!

9.5 SAVE CONFIGURATION TO START-UP

In the treemap below, expand the **Maintenance** and expand **Configuration**, then select Save startup-config





Click **Save Configuration** to save the configuration on start-up.

10 WARRANTY

Thank you for purchasing equipment designed, manufactured and serviced by Optical Systems Design (OSD). OSD warrants that at the time of shipment, its products are free from defects in material and workmanship and conforms to specifications. Our Warranty conditions are outlined below:

10.1 WARRANTY PERIOD

For warranty period, please call your local OSD distributor.

10.2 REPAIRS

Optical Systems Design reserves the right to repair or replace faulty modules/units. Please obtain a "Return Material Authorisation" (RMA) form and number before returning goods.
Goods must be returned in adequate packing material to Optical Systems Design, Warriewood or its nominated authorised representative, for all repairs.

10.2.1 WARRANTY REPAIRS

Return shipments to OSD shall be at customer's expense and freight back to the customer will be at OSD expense.

10.2.2 OUT-OF-WARRANTY REPAIRS

OSD reserves the right to repair or replace any faulty goods. Freight costs and insurance for both journeys are met by the user. All equipment repaired by OSD will have a 3-Month Warranty from the date of dispatch.

10.2.3 SITE REPAIRS

By agreement site repairs may be undertaken for which out of pocket, hotel and travel expenses will be charged.

10.2.4 EXCLUSIONS

This warranty does not apply to defects caused by unauthorized modifications, misuse, abuse or transport damage to the equipment. All modifications to OSD's standard product will need written authorization and will be charged at normal repair rates. All modifications are to be carried out by OSD Technicians. Warranty is void if unauthorized removal and/or tampering with serial number and/or repair labels is evident.

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