Chapter 1　　Introduction

1.1 General Description

The Gigabit PoE+ Smart Managed Switch is equipped with 24 gigabit RJ45 ports and 4 SFP slots. The switch supports high performance, enterprise-level security control & QoS Layer 2 management features. It supports the PoE+ (802.3af/at) standard and provides power to connected PD devices via CAT 5 twisted cables. With a total PoE power budget is 375W, up to 30W per port. The switch can easily connect the high-powered devices such as Wireless AP, IP Cameras or VoIP Phones.

The switch supports the Web GUI to control each port status and bandwidth controlled by port rate limiting. The Storm Control feature protects against Broadcast, Multicast and Unicast Storm. The rich Quality of Service(QoS) & VLAN provides enhanced traffic management capabilities to move your data smoother and faster. The device supports a complete lineup of layer 2 features, including 802.1Q tag VLAN, Port Isolation, Port Mirroring, STP/RSTP, Link Aggregation Group and 802.3x Flow Control function. It also supports SNMP management functions.

The switch complies with IEEE802.3az Energy Efficient Ethernet to save power consumption, Support IGMP Snooping function to improve traffic performance. Moreover, the various diagnostic LEDs on the front-panel provide the operating status of individual port and whole system.

1.2 Key Features

- 24* RJ-45 ports for 10/100/1000Mbps connectivity
- 4* SFP ports for 100/1000Mbps Fiber connectivity
- Supports MDI/MDI-X auto crossover
- Supports NWay protocol and auto-detection
- Complies with IEEE802.3, 802.3u, 802.3ab, 802.3af, 802.3at Ethernet standards
- Supports PoE total power budget 375W
- Supports PoE Dynamic Mode (Priority Class Base) and Statics Mode (Priority Power Base)
- Supports IEEE802.3x Flow Control and Back-Pressure function
- Supports STP & RSTP
- Supports LLDP Discovery
- Supports VLAN : Static, Port Based, Tag Based, Voice OUI mode
- Supports QoS : CoS, DSCP, CoS-DSCP, IP Precedence
- Supports Security : Management Service (HTTP, HTTPS, SNMP), Protected Port, Storm Control, DoS attack prevention
- Supports Storm Filter (Broadcast, Unknown Multicast, Unknown Unicast)
- Supports port based Ingress/Egress rate limit
- Supports 8 queues is handled SP and WRR
- Supports Jumbo Frame : up to 10KB
- Supports 8 Link Aggregation Groups with Static & LACP types

- Support port mirroring, Ping Testing, Copper Testing
- Supports SNMP access control & trap event
- Supports IGMP Snooping v2/v3
- Supports IEEE802.3az EEE enable and disable
- Supports Firmware upgrade and backup
- Supports Configuration upgrade and backup
- Full Range of Internal universal switching power supply
- Supports Reset to factory default button

1.3 The Front Panel

The following figures show the front panel of the switch:

24-port PoE/PoE+ Plus 4SFP Gigabit Managed Switch
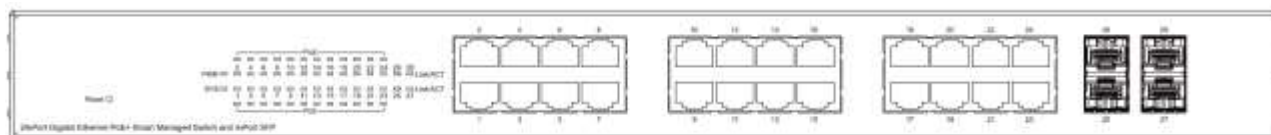
LEDs Definition

This device provides various LEDs to show the activities on power, system and ports.

See the following description for your reference:

LED	Status	Operation
POWER	Steady Green	The switch is powered on.
	Off	The switch is powered off.
SYSTEM	Steady Green	The switch is on and functioning properly
	Blinking Green	The switch is rebooting and performing self-diagnostic tests.
	Off	The power is off or the system is not ready/malfunctioning.
Link/ACT	Steady Green	Valid port connection;.
	Blinking Orange(10M/100M) /Green(1000M)	Valid port connection and there is data transmitting/receiving
	Off	Port disconnected.
PoE	Steady Green	PoE port connection;.
	Off	PoE port disconnected.

The Reset Button

Reset the switch to its factory default configuration via the RESET button. Press the RESET button for two seconds more and release. The switch automatically reboots and reloads its factory configuration file. The RESET button is on the front panel of the switch.

Product Specifications

Standard	IEEE802.3, IEEE802.3u, and IEEE802.3ab IEEE 802.3x flow control IEEE 802.1Q IEEE 802.3az Energy Efficient Ethernet(EEE) IEEE802.3af, IEEE802.3at
Interface	24* 10/100/1000Mbps PoE+ RJ-45 NWAY ports 4* SFP 100/1000Mbps ports 1* Reset button
Transmission Mode	10/100Mbps: Full-duplex, Half-duplex 1000Mbps: Full-duplex
MAC Address Table	8192
Jumbo Frame	10K Bytes
Buffer Memory	524.8KBytes
Temperature	Operating: 0°C ~ 50°C (32°F ~122°F)
Humidity	Operating: 10% ~ 90% RH, non-condensing
LED Indications	1*Power LED(Green) 1*System LED(Green) 24*10/100/1000M Link/Act LEDs(Orange/Green) 24*PoE+ Link LEDs (Green) 4*SFP Link/Act LEDs(Green/Orange)
Power Supply	Internal Switching PSU, 100~240VAC, 50~60Hz, Rating 6.0A Max
Dimensions	441*310*45 mm
Certification	CE – EMC /FCC/VCCI CLASS A, LVD

61NB-UM2850+207