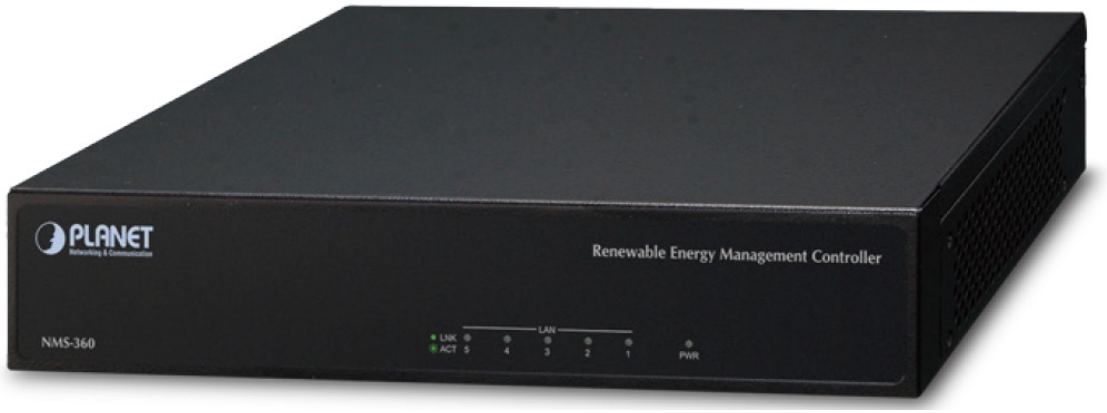
PLANET Renewable Energy Management Controller NMS-360 Installation Guide

Contents

PLANET Renewable Energy Management Controller NMS-360

Package Contents

Thank you for purchasing PLANET Universal Network Management Controller.
The description of the model is shown below:
NMS-360 Renewable Energy Management Controller
"NMS-360 Controller" is used as an alternative name in this Quick Installation Guide.

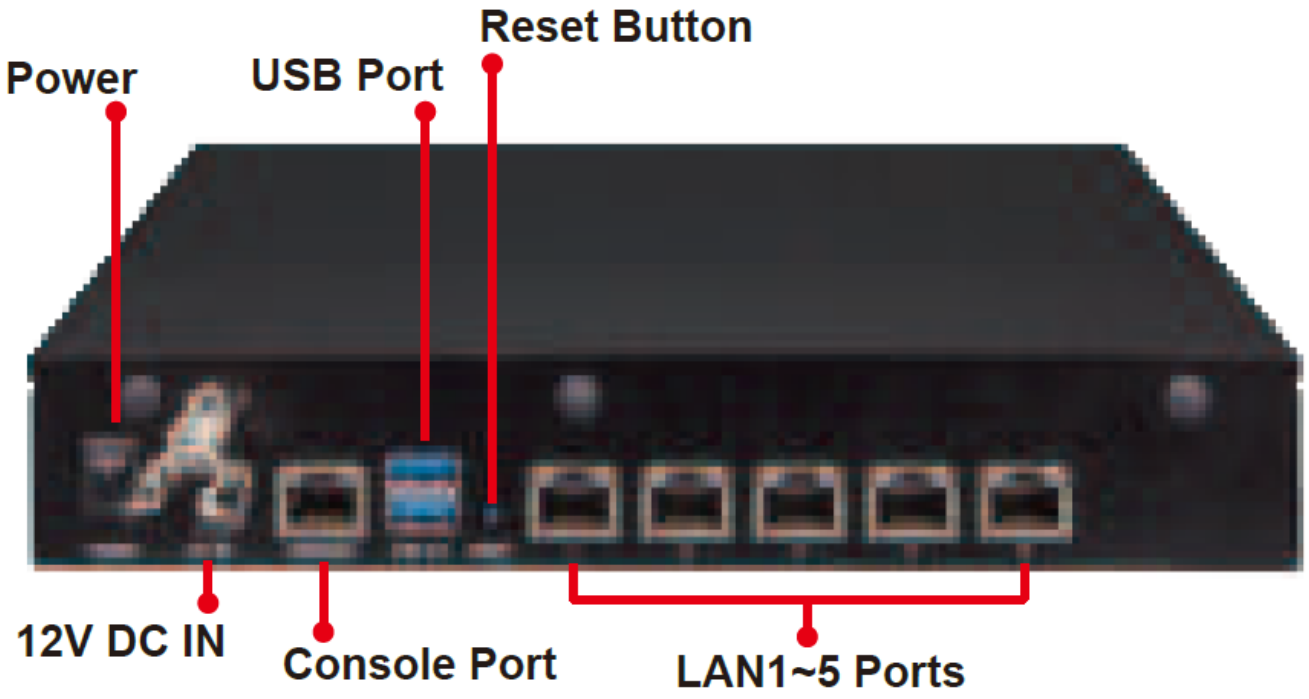


Package Contents:

- The NMS-360 Controller x 1
- Quick Installation Guide x 1
- RS232 to RJ45 Console Cable x 1
- Adapter with Power Cord x 1
- UTP Cable x 1
- Round Gasket x 4

If any item is found missing or damaged, contact your local reseller for replacement.

Hardware Description



Reset Button: < 5 sec: System reboot; > 5 sec: Factory default

Hardware Interface Definition

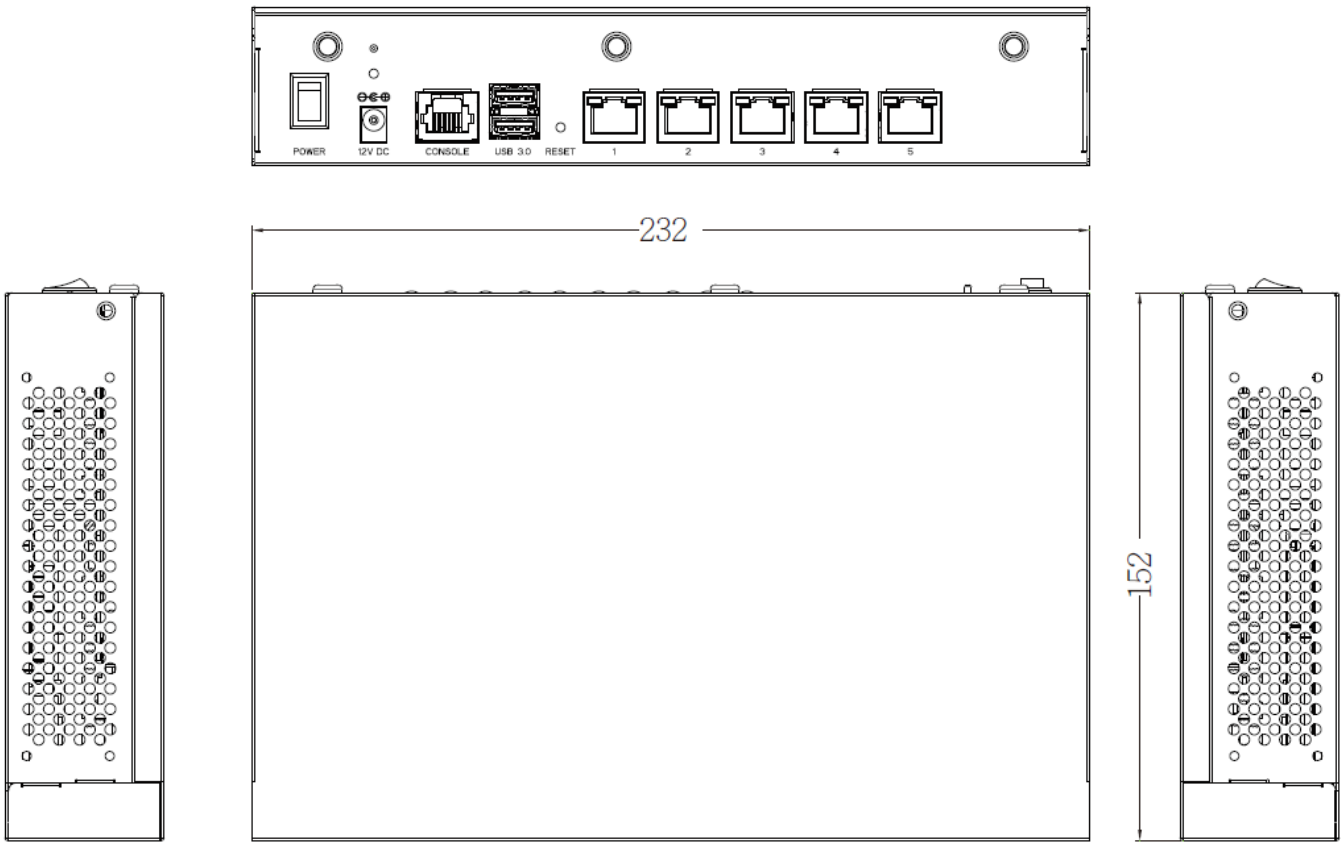
Interface	**Description**
Power Switch	Press the power switch to power on the device
DC IN	DC jack power input 12V, 5A
Console Port	Connect PC through the RS232 to RJ45 serial cable (115200, 8, N, 1) to enter the man agement interface
USB Port	Connect the USB HDD to enable USB backup/restoration function
Reset Button	< 5 sec: System reboot > 5 sec: Factory default
LAN Ports (1~5)	10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
PWR LED	Indicates that the device is powered on (Blue)
LAN LED	Link: Steady Green (Green) Active: Flashing Green (Green)

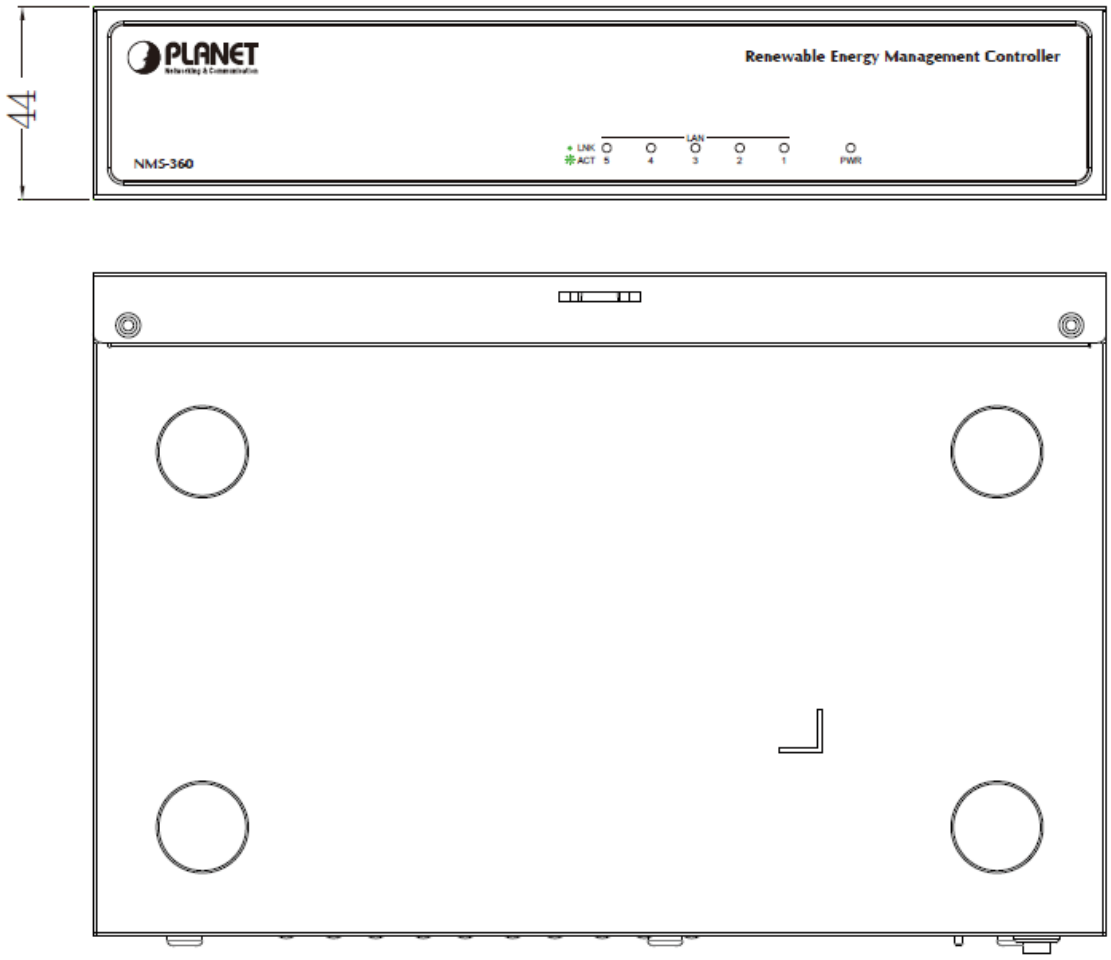
Remarks: The console port is used for technology maintenance.

RJ45 LED	Color	Function	
1000 LNK/ACT	Green	Lights	To indicate the port is successfully established at 1000Mbps.
		Blinks	To indicate that the switch is actively sending or receiving data over that port.
100 LNK/ACT	Orange	Lights	To indicate the port is successfully established at 100Mbps.
		Blinks	To indicate that the switch is actively sending or receiving data over that port.

Physical Specifications

Dimensions (W x D x H)	232 x 153 x 44 mm
Weight	1.15 kg





Unit: mm

Product Features

Dashboard	Providing the at-a-glance view of system, power, traffic, system statistics and device event statuses.
Device List	Providing devices status overview and managed function
Setup Wizard	Easy-to-use step-by-step guidance.
Node Discovery	Management is carried out once a BSP-360-powered device is detected.
App-like Device Viewing	App-like devices that are compliant with SNMP, MQTT, and Smart Discovery.
Event Table	The status of system can be reported via event alarm.

Alarm System	E-mail alerts for the administrator via the SMTP server.
Device Provisioning	Enabling BSP-360 to be configured and upgraded at the same time.
Site Map	Real-time site map of BSP-360 and IP cams on the user-defined map to optimize energy deployment.
Remote PoE control	Real-time remote PoE on/off to reboot connected devices.
User Control	Allowing on-demand account creation and user-defined access policy.
Scalability	Free system upgrade and BSP-360 firmware bulk upgrade capability.
Maximum Scalability	1 site map, 512 nodes, 2048 managed IP cameras.

Specifications

Product	NMS-360
	Renewable Energy Management Controller
Platform	
Form Factor	Desktop
Physical Specifications	
I/O Interface	Five 10/100/1000BASE-T RJ45 ports with auto-MDI/MDI-X
	2 USB 3.0 ports (They cannot be used at the same time.)
	1 RS232-to-RJ45 console port (115200, 8, N, 1)
	1 DC jack power input
	1 power switch
	1 reset button

Storage	8GB EMMC5.1, 15nm/2 eMLC
Dimensions (W x D x H)	232 x 153 x 44 mm
Weight	1.15 kg
Enclosure	Metal
Power Requirement	60W adapter 12V 5A with DC jack
	AC 100~240V, 3~1.5A, 60~50Hz.
Environment & Certification	
Temperature	Operating: 0 ~ 40 degrees C Storage: -20 ~ 75 degrees C
Humidity	Operating: 10 ~ 85% (non-condensing) Storage: 10~85% @ 40 degrees C (non-condensing)
MTBF (Hours)	120,000 @ 25 degrees C

Remarks: Hold the **Reset Button** for < 5 sec for System reboot; hold the button > 5 sec for Factory default.

Devices Management	
Number of Managed Devices*1	512 BSP-360 (V2)
Number of IP Cameras	2,048
Network Management Feature	
Dashboard	Providing the at-a-glance view of system, power, traffic, and device event statuses
Setup Wizard	Easy-to-use step-by-step guidance
Node Discovery	Management is carried out once a BSP-360-powered device is detected .
App-like Device Viewing	App-like devices that are compliant with SNMP, MQTT, and Smart Disco very
Event Table	The status of system can be reported via event alarm
Alarm System	E-mail alerts for the administrator via the SMTP server
Device Provisioning	Enabling BSP-360 to be configured and upgraded at the same time
Site Map	Real-time site map of BSP-360 and IP cams on the user-defined map to optimize energy deployment

Remote PoE Control	Real-time remote PoE on/off to reboot connected devices
User Control	Allowing on-demand account creation and user-defined access policy
Scalability	Free system upgrade and BSP-360 firmware bulk upgrade capability
Maximum Scalability	1 site map, 512 nodes, 2048 managed IP cameras.
Backup/Restoration/Read	Provides system and profile backup/restoration/read raw data from USB
User Account Management	Supports on-demand account creation per user-defined access policy

Remarks: *1 BSP-360 Hardware version 2 is required and please also refer to the PLANET Web site for the latest firmware that supports NMS Control features.

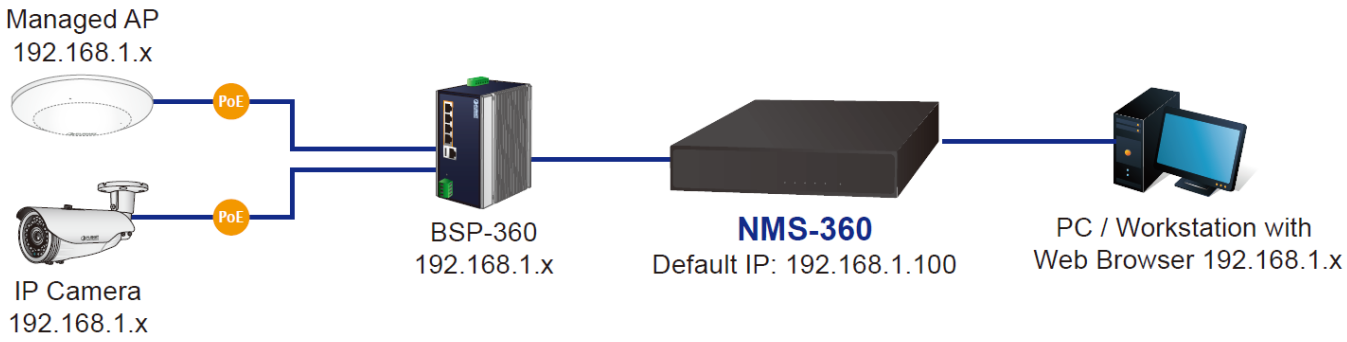
Network Services		
Network	DDNS	Supports PLANET DDNS/Easy DDNS
	DHCP	Built-in DHCP server for auto IP assignment to APs
	Management	Console; Telnet; SSL; Web browser (Chrome is recommended); SNMP v1, v2c, v3
	Discovery	Supports SNMP, ONVIF, PLANET Smart Discovery
Maintenance	Backup	System backup and restore to local or USB HDD
	Reboot	Provides system reboot manually or automatically per power schedule
	Diagnostic	Provides IPv4/IPv6 ping and trace route

Standards Conformance	
Regulatory Compliance	CE, FCC
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab Gigabit 1000BASE-T

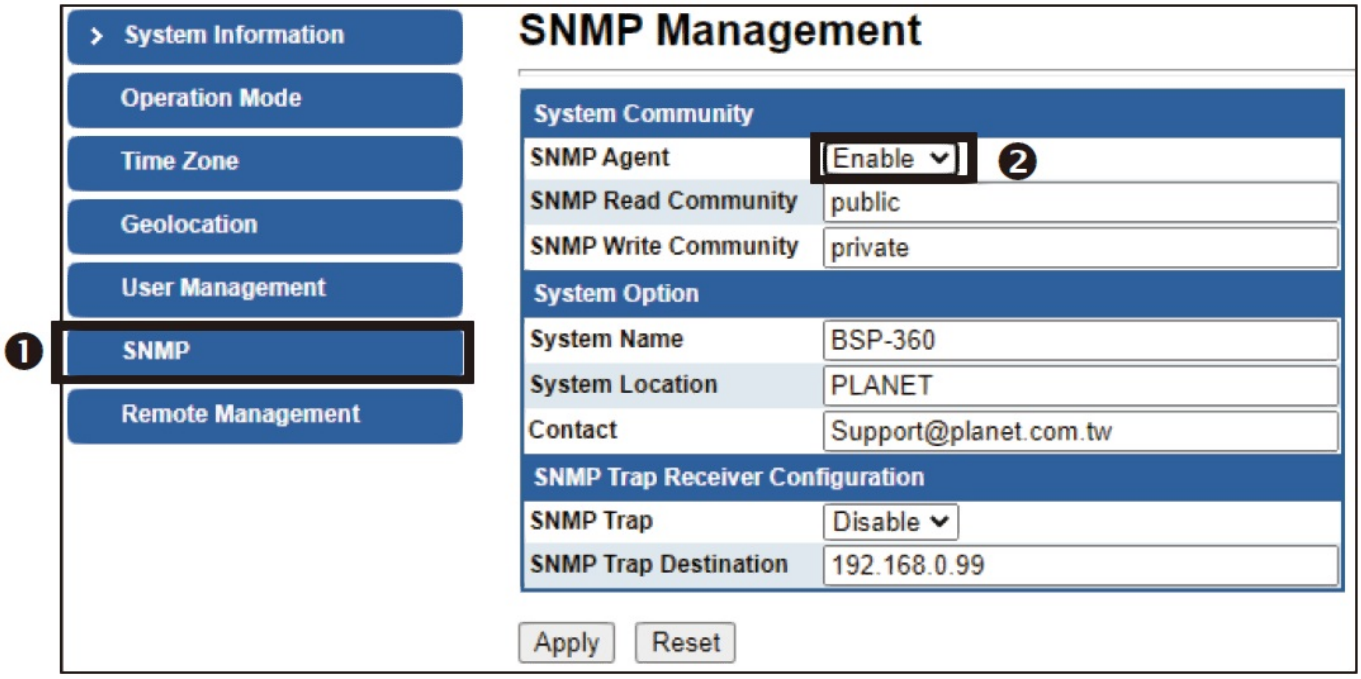
Deployed Devices Monitored via NMS-360 Controller

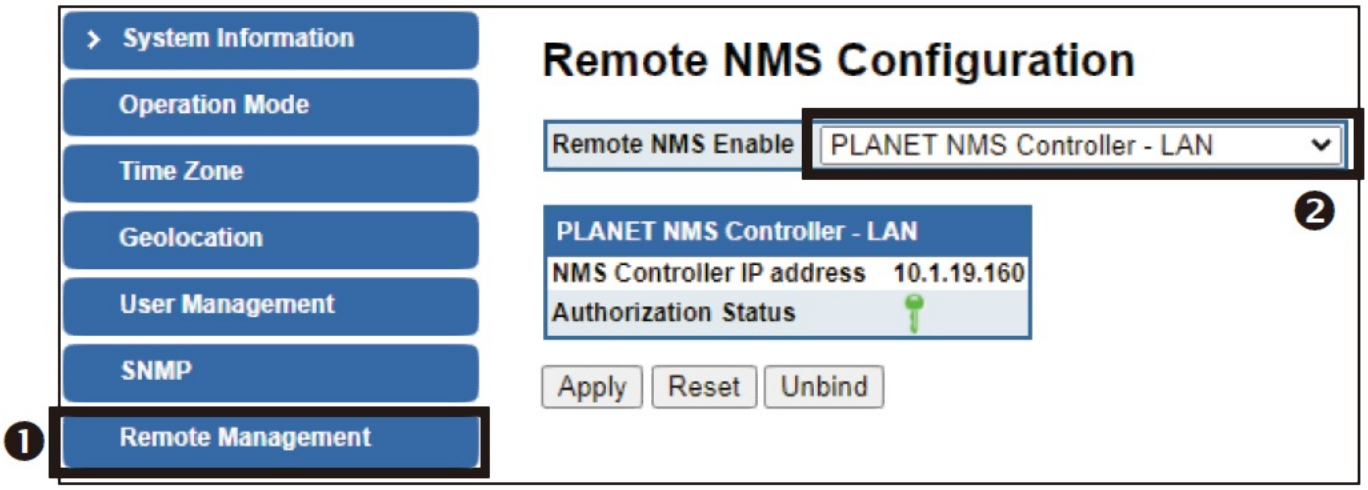
Prior installation
The NMS-360 is used to centrally manage a large number of BSP-360s(V2). Therefore, you need to upgrade the BSP-360(V2) firmware before using NMS-360.
Please download and use the latest BSP-360(V2) firmware from the website so that setting can be completed smoothly.
The NMS-360 incorporated in a workstation or PC can monitor the BSP-360s compliant with the MQTT Protocol, SNMP Protocol, ONVIF Protocol and PLANET Smart Discovery utility.

Follow the steps below to set up the NMS-360 and BSP-360(V2) accordingly.
Step 1. Connect the devices, NMS-360 Controller and your computer, to the same network.



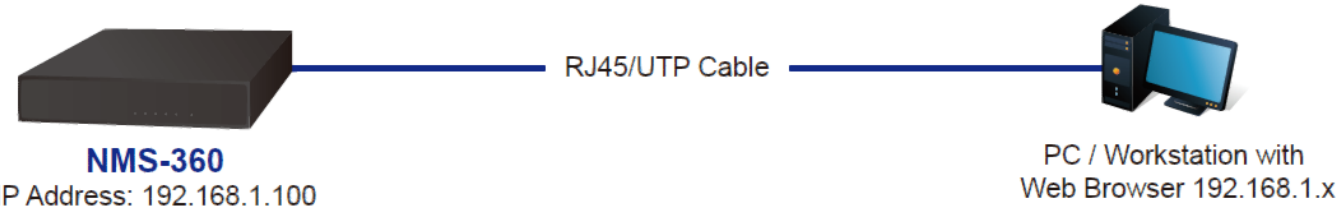
Step 2. BSP-360: Log in to the Switch's Web User Interface and enable the SNMP and NMS controller functions.



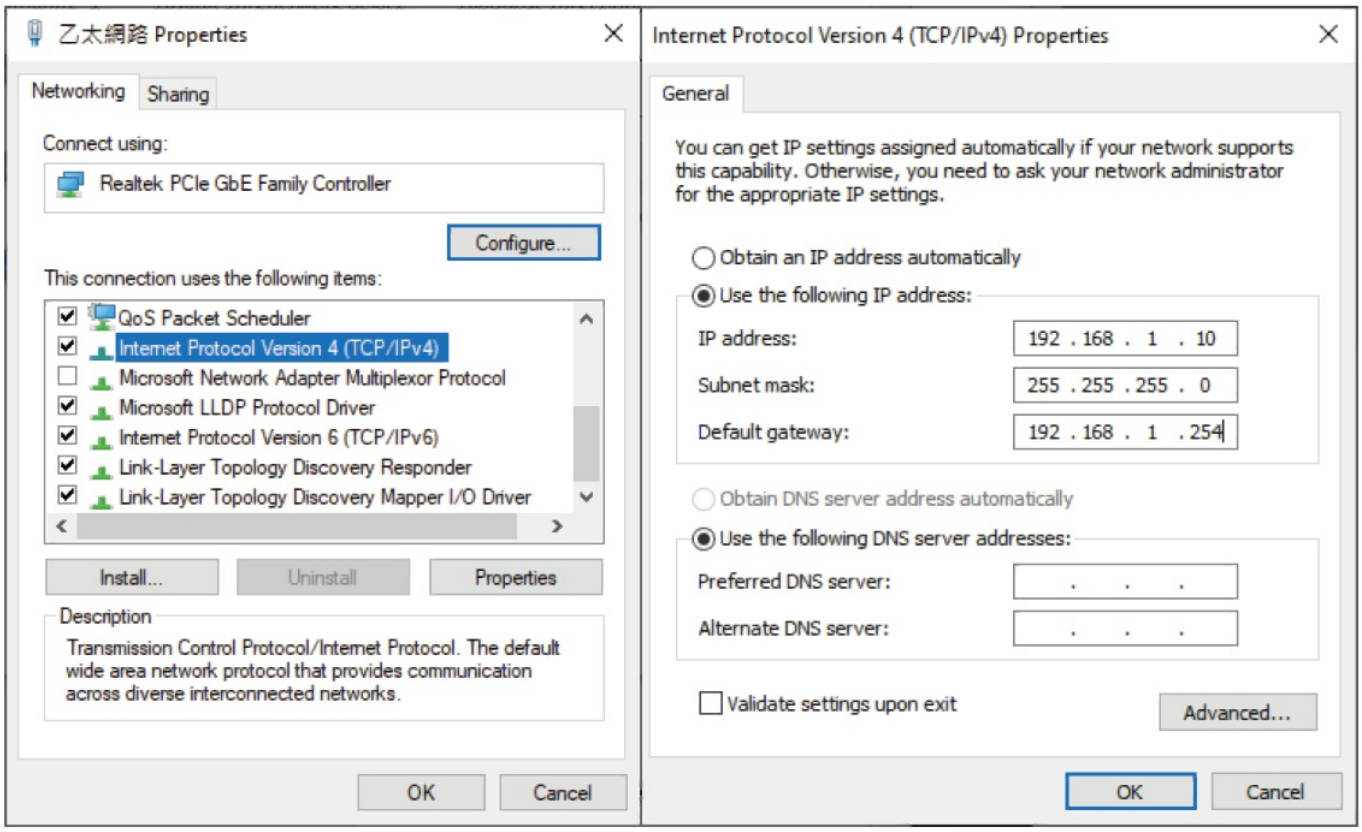


Wired Network Configuration

A computer with wired Ethernet connection is required for the first-time configuration of the **NMS-360 Controller**.



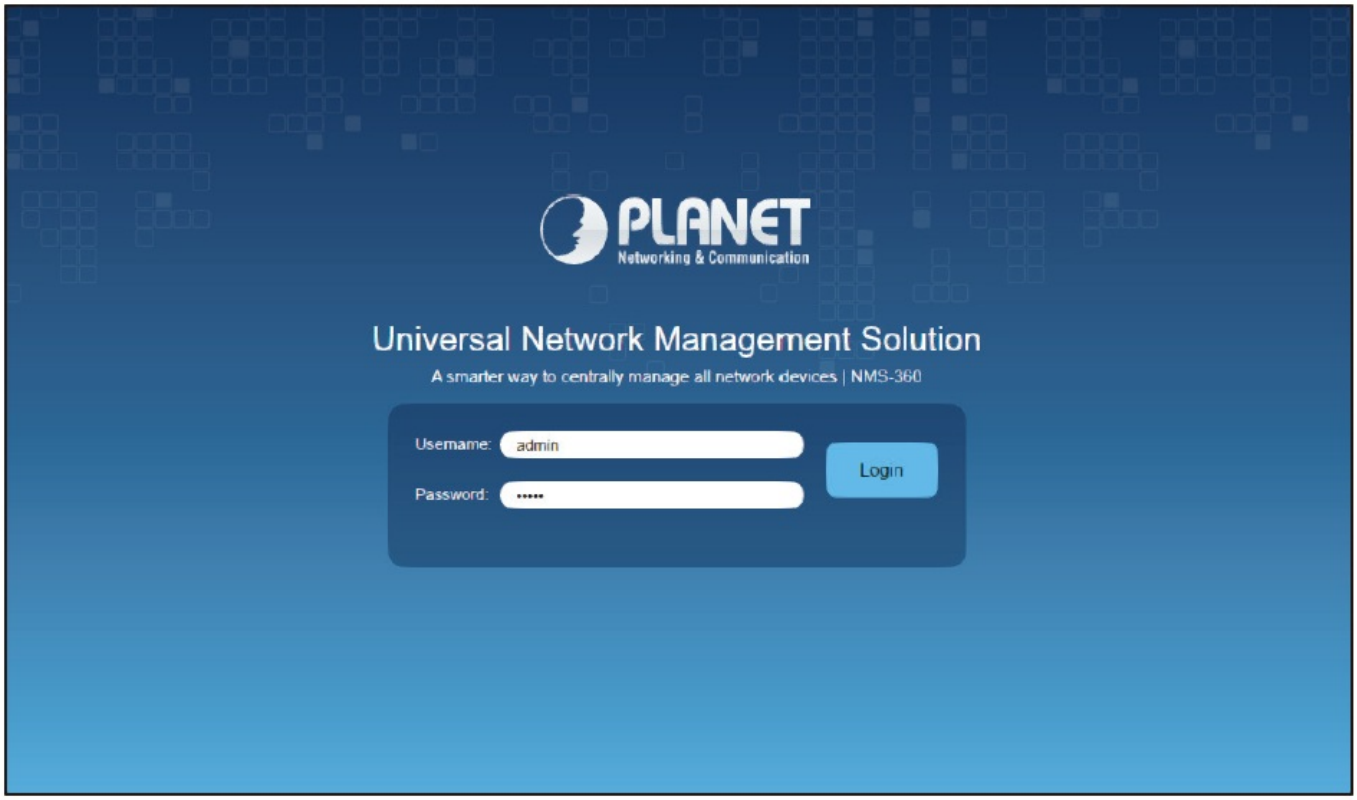
1. Go to “Control Panel-> Network and Sharing Center-> Change Adapter Settings”.
2. Double-click **“Local Area Connection”**.
3. Select **“Internet Protocol version 4 (TCP/IPv4)”** and click **“Properties”**.
4. Select **“Use the following IP address”** and then click the **“OK”** button twice to save the For example, the default IP address of the NMS-360 Controller is **192.168.1.100**, then the manager PC should be set to **192.168.1.x** (where x is a number between 1 and 254, except 100), and the default subnet mask is 255.255.255.0.



Entering into the Web Management

Default IP Address: **192.168.1.100**
Default Management Port: **8888**
Default Username: **admin**
Default Password: **admin**

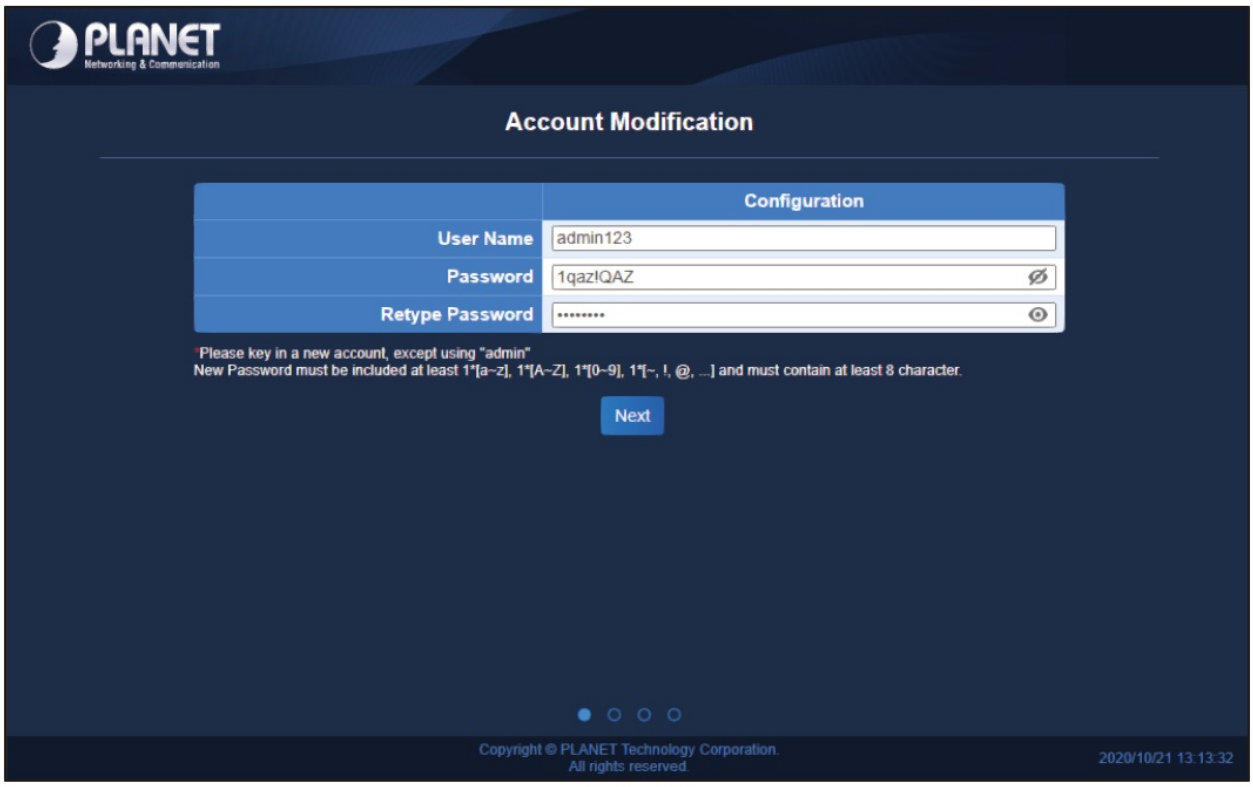
Launch the Web browser (Google Chrome with seamless mode is recommended.) and enter the default IP address “https://192.168.1.100:8888”. Then, enter the default username and password shown above to log on to the system.
The secure login with SSL (HTTPS) prefix is required.



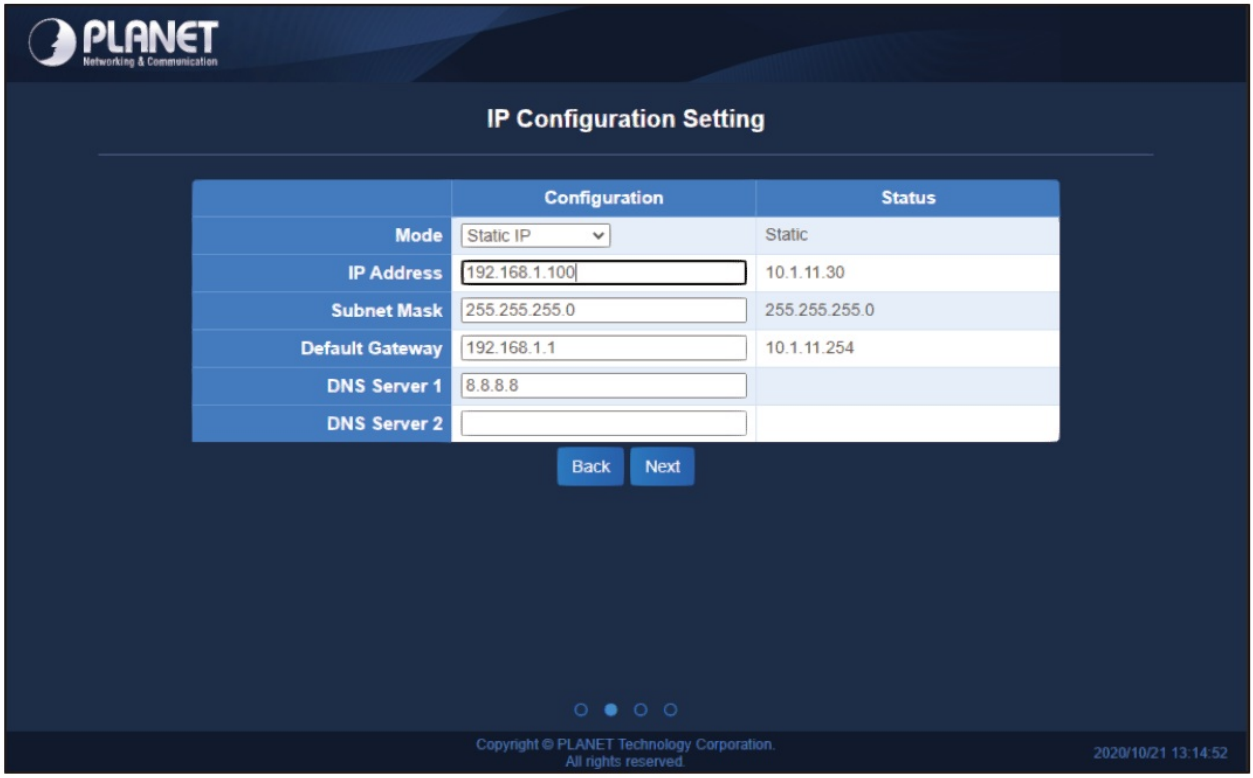
After logging on, connect the NMS-360 Controller to the managed network to centrally control PLANET managed devices.

Setup Wizard

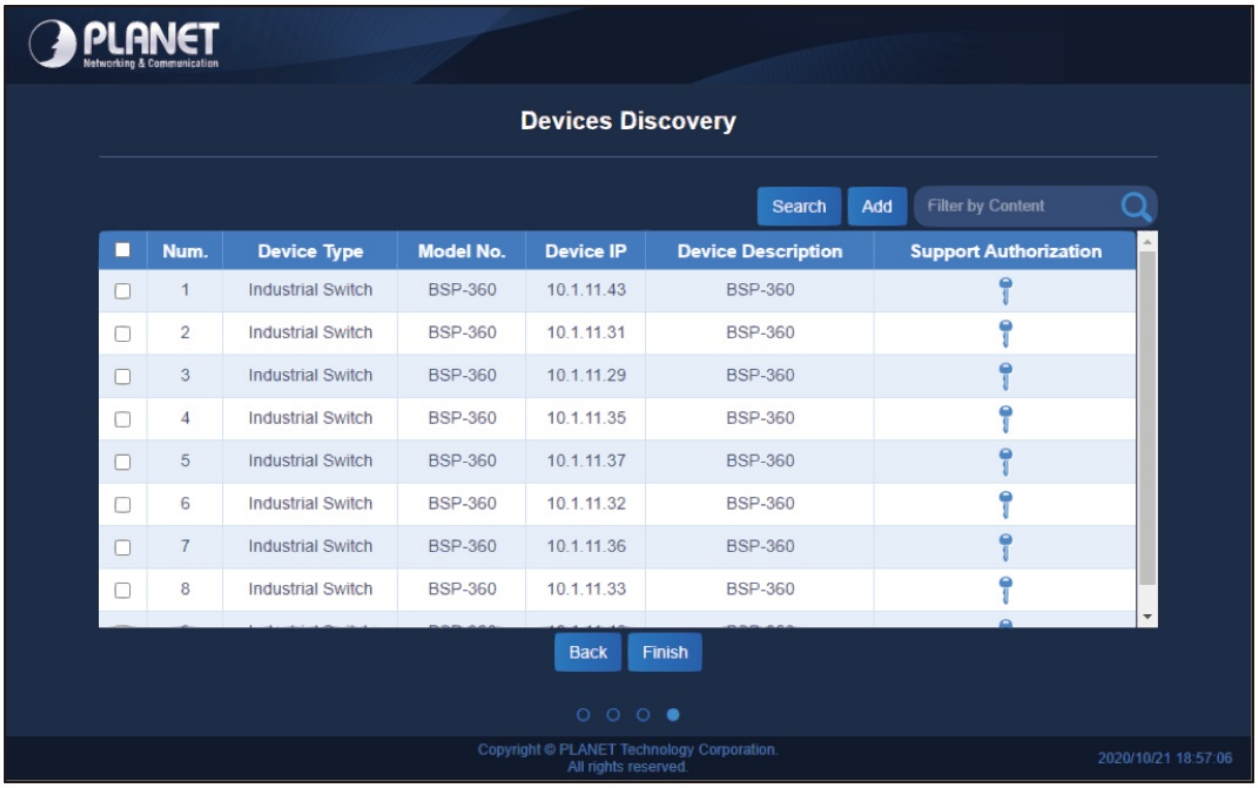
1. **Account Modification:** Set a new account and password for security.



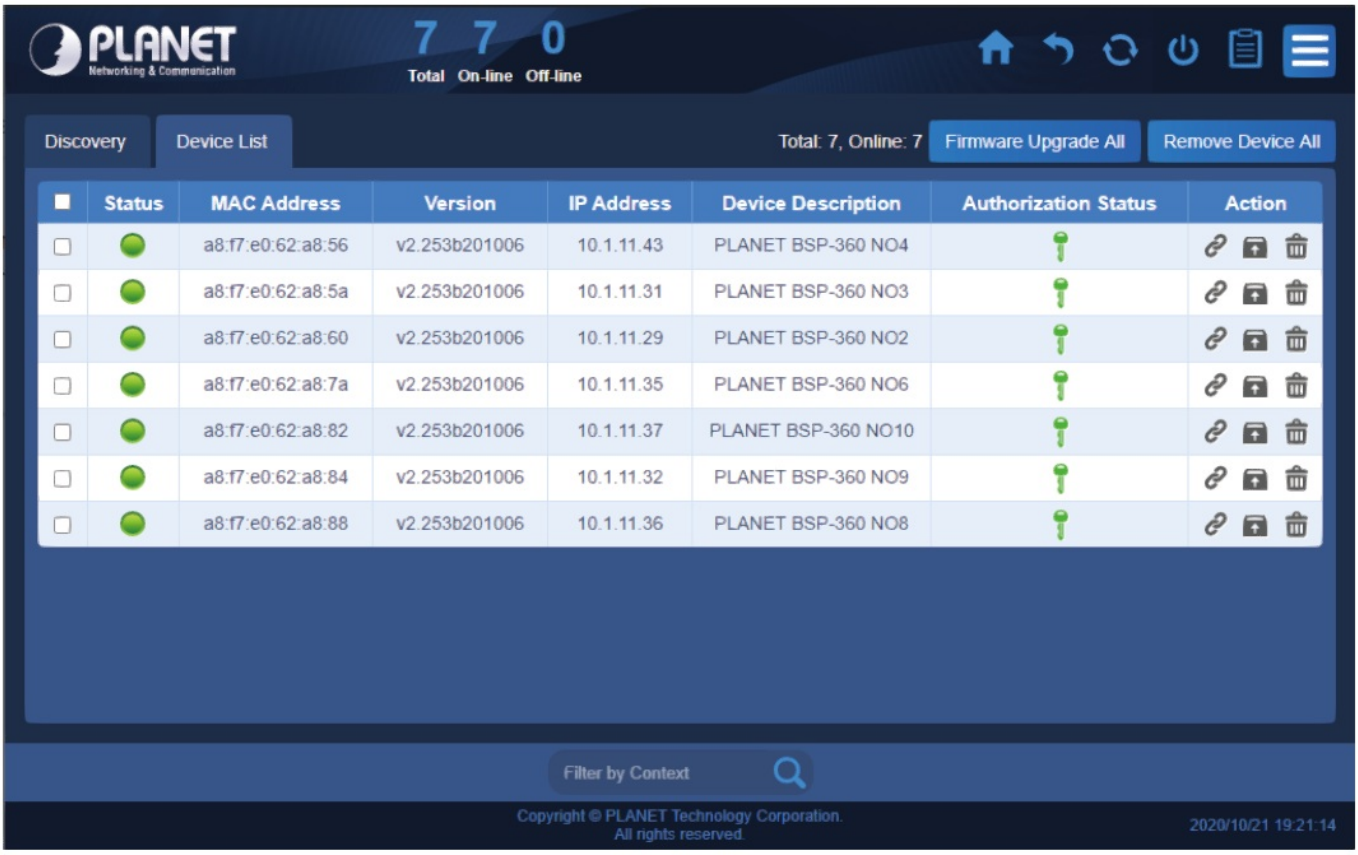
2. **IP Configuration Setting:** Set the NMS-360's IP into the same local network segment.



3. **Devices Discovery:** Search the managed devices and add to (Finish Wizard)



4. If added devices are successful, you can see them in Device List / Management page.



Further Information

The above steps introduce the simple installations and configurations of the NMS- 360 Controller. For further configurations of PLANET NMS-360, please refer to the user manual, which can be downloaded from the website.
PLANET online FAQs: http://www.planet.com.tw/en/support/faq
Support team mail address: support@planet.com.tw
User's Manual: https://www.planet.com.tw/en/product/nms-360

(Please select your model name from the Product Model drop-down menu.)
If you have further questions, please contact the local dealer or distributor where you purchased this product.

Documents / Resources

	**PLANET Renewable Energy Management Controller NMS-360** [pdf] Installation Guide PLANET, NMS-360, Renewable, Energy, Management, Controller