**Renewable Energy Management Controller** 

# NMS-360

Quick Installation Guide

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# 1. 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.

# 2. Hardware Description



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

#### 2.1 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 management 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	Green	Lights	To indicate the port is successfully established at 1000Mbps.
LNK/ACT		Blinks	To indicate that the switch is actively sending or receiving data over that port.
100	Orange -	Lights	To indicate the port is successfully established at 100Mbps.
LNK/ACT		Blinks	To indicate that the switch is actively sending or receiving data over that port.

### 2.2 Physical Specifications

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





PLANET	Renewable Energy Management Controller
 NM5360	* LUK 0 0 0 0 0 0 ⊕ACT 2 4 3 2 1 PMR



Unit: mm

#### 2.3 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.

### 2.4 Specifications

Droduct	NMS-360
Product	Renewable Energy Management Controller
Platform	
Form Factor	Desktop
Physical Specifications	
	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.)
I/O Interferer	1 RS232-to-RJ45 console port (115200, 8, N, 1)
1/O Intenace	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		
Dowor Doguiromont	60W adapter 12V 5A with DC jack		
Power Requirement	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 Featu	re		
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 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.
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			
	DDNS	Supports PLANET DDNS/Easy DDNS	
	DHCP	Built-in DHCP server for auto IP assignment to APs	
Network	Management	Console; Telnet; SSL; Web browser (Chrome is recommended); SNMP v1, v2c, v3	
	Discovery	Supports SNMP, ONVIF, PLANET Smart Discovery	
	Backup	System backup and restore to local or USB HDD	
Maintenance	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	

### 3. 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.

	> System Information	SNMP Management System Community			
	Operation Mode				
	Time Zone	SNMP Agent	Enable 💙 🛛		
	Coologation	SNMP Read Community	public		
	Geolocation	SNMP Write Community	private		
a l	User Management	System Option			
	SNMP	System Name	BSP-360		
		System Location	PLANET		
	Remote Management	Contact	Support@planet.com.tw		
		SNMP Trap Receiver Configuration			
		SNMP Trap	Disable V		
		SNMP Trap Destination	192.168.0.99		
		Apply Reset			

	> System Information	Remote NMS Configuration
	Operation Mode	
	Time Zone	Remote NMS Enable PLANET NMS Controller - LAN
	Geolocation	PLANET NMS Controller - LAN
	User Management	NMS Controller IP address         10.1.19.160           Authorization Status              ¶
	SNMP	Apply Reset Unbind
0	Remote Management	

#### 4. 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 configuration. 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.

📱 乙太網路 Properties	×	Internet Protocol Version 4 (TCP/	/IPv4) Properties	Х
Networking Sharing		General		
Connect using: Peatek PCIe GbE Family Controller Configure		You can get IP settings assigned this capability. Otherwise, you n for the appropriate IP settings.	l automatically if your network supports eed to ask your network administrator	
This connection uses the following items:    Constraints of the following items:   Constraints of the following items:   Constraints of the following items:   Constraints of the following items:	•	O Use the following IP address:         192 . 168 . 1 . 10           Subnet mask:         255 . 255 . 255 . 0           Default gateway:         192 . 168 . 1 . 254		
Link-Layer Topology Discovery Mapper I/O Driver		Obtain DNS server address Obtain DNS server Obtain DNS server	automatically er addresses:	
Install Uninstall Properties		Preferred DNS server:		
Description Transmission Control Protocol/Internet Protocol. The default	Alternate DNS server:			
wide area network protocol that provides communication across diverse interconnected networks.		Validate settings upon exit	Advanced	
OK Cance	ł		OK Cancel	

## 5. 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.

# 6. Setup Wizard

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

Acc	count Modification					
	Configuration					
User Name	admin123					
Password	1qaz!QAZ	ø				
Retype Password	••••••	<b>O</b>				
Please key in a new account, except using "domin" New Password must be included at least 1*[a-2], 1*[A	Z], 1109], 11-, 1, @,] and must contain at least 8 character.					
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**2. IP Configuration Setting:** Set the NMS-360's IP into the same local network segment.

PLANE Retworking & Communi	ST			
		IP Configuration Settin	g	
		Configuration	Status	
	Mode	Static IP 🗸	Static	
	IP Address	192.168.1.100	10.1.11.30	
	Subnet Mask	255.255.255.0	255.255.255.0	
	Default Gateway	192.168.1.1	10.1.11.254	
	DNS Server 1	8.8.8.8		
	DNS Server 2			
		Back Next		
		Copyright © PLANET Technology Corporat	tion.	

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

PLANET									
	Devices Discovery								
						Search	Add Filter by Content		
		Num.	Device Type	Model No.	Device IP	Device Description	Support Authorization	<b>^</b>	
		1	Industrial Switch	BSP-360	10.1.11.43	BSP-360	7		
		2	Industrial Switch	BSP-360	10.1.11.31	BSP-360	1		
		3	Industrial Switch	BSP-360	10.1.11.29	BSP-360	7		
		4	Industrial Switch	BSP-360	10.1.11.35	BSP-360	7		
		5	Industrial Switch	BSP-360	10.1.11.37	BSP-360	7		
		6	Industrial Switch	BSP-360	10.1.11.32	BSP-360	7		
		7	Industrial Switch	BSP-360	10.1.11.36	BSP-360	1		
		8	Industrial Switch	BSP-360	10.1.11.33	BSP-360	7		
	-	-		<b>DOD 000</b>		202.000	9	-	
					Back	Finish			
0 0 0 •									
	Copyright © PLANET Technology Corporation. 2020/10/21 18:57.06 All rights reserved.								

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

9	PLA Networking & C	NET	7 7 Total On-line Of	0 f-line		<b>n</b> 5 0	ს 🗎 🚍		
Disco	overy	Device List			Total: 7, Online: 7	Firmware Upgrade All	Remove Device All		
	Status	MAC Address	Version	IP Address	Device Description	Authorization Status	Action		
	•	a8:f7:e0:62:a8:56	v2.253b201006	10.1.11.43	PLANET BSP-360 NO4	Î	e 🖬 🏛		
	•	a8:f7:e0:62:a8:5a	v2.253b201006	10.1.11.31	PLANET BSP-360 NO3	Ť	e 🖬 🏛		
	•	a8:f7:e0:62:a8:60	v2.253b201006	10.1.11.29	PLANET BSP-360 NO2	1	e 🖬 🏛		
	•	a8:f7:e0:62:a8:7a	v2.253b201006	10.1.11.35	PLANET BSP-360 NO6	Ť	e 🖬 🏛		
	•	a8:f7:e0:62:a8:82	v2.253b201006	10.1.11.37	PLANET BSP-360 NO10	1	e 🖬 🏛		
	•	a8:f7:e0:62:a8:84	v2.253b201006	10.1.11.32	PLANET BSP-360 NO9	Ť	e 🖬 🏛		
	•	a8:f7:e0:62:a8:88	v2.253b201006	10.1.11.36	PLANET BSP-360 NO8	Ť	e 🖬 🏛		
	Filter by Context Q								
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# 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: <a href="mailto:support@planet.com.tw">support@planet.com.tw</a>

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.

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