Renewable Energy Management Controller with LCD Touch Screen (10”/12”)



Intelligent Renewable Energy Management Controller

PLANET NMS-360V Renewable Energy Management Controller can automatically detect up to 512 remote devices powered by PLANET BSP-360 Industrial Renewable Power Unit in ways that solar PV, battery and PoE port usage are recorded. Besides, traffic logs that are compliant with SNMP, MQTT Protocol and PLANET Smart Discovery utility are managed. It thus enables administrator to centrally manage a network of up to 512 nodes from a central office, greatly boosting network and power management efficiency. Moreover, the NMS-360V can support up to 2,048 PLANET IP cameras where snapshots are taken through the ONVIF Protocol.



Watch Over Energy Usage Level, and System and Device Events within Minutes

The home page displays the statuses of system and device events to oversee whether or not they are within the threshold set by the administrator. This can help the administrator quickly know whether the system is operating stably or not. The system event function offers the on-time event statistics table and you can filter the event device with one touch. The event devices section shows which devices are low in energy, not working properly and off the line. A graph of the current energy usage level and the green power utilization shows the power traffic statuses of the selected devices. Thus, it enables you to have a valuable information on the current energy statuses and other situations at a glance. With that, the administrator can immediately address whatever problem these devices may have.

Industrial-grade Physical Hardware

- 2x10/100/1000BASE-T Gigabit Ethernet RJ45 ports
- 2xUSB 3.0 ports for configuration backup and restoration
- 1 x audio line out (reserve)
- 1 x HDMI interface
- 2 x DB-9 COM1,COM2 (reserved)
- 1 x 3-pin DC power input terminal
- 1 x 2-pin connector for power on/off button (reserved)
- VESA (100 x 100) panel mount

BSP-360 Management

- **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.

Network Management Characteristics

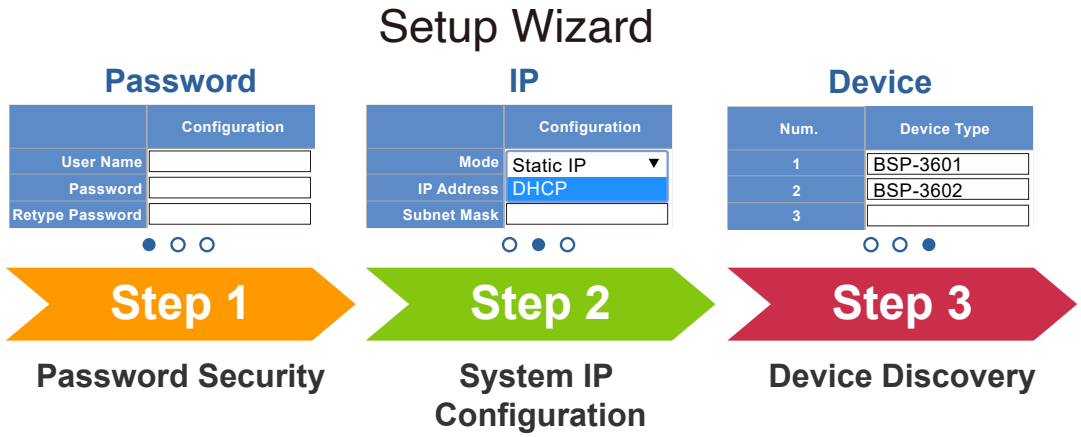
- Built-in DHCP Server
- SSL secure access
- Web-based GUI management interface
- SNMP v1, v2c, and v3 management
- Supports PLANET DDNS/Easy DDNS





User-friendly Setup Wizard

The NMS-360V enhances user experience by providing a more user-friendly setup wizard with a step-by-step guidance on how each related function is to be set. Just like an app, it reduces training time and allows even non-technical users to be able to set up management network system within minutes.



App-like Device Table to Directly Oversee Energy Usage Status, etc.

The NMS-360V interactive device table includes the statuses of system PoE usage, per port PoE usage, battery capacity, and linkup port traffic for each BSP-360-powered device. Just like an app, the administrator can see at a glance the status of each BSP-360-powered device at the same time. For a quick check on a specific function, the administrator can use the “Threshold Selector”, “Status Selector” and “Filter by Context” function.

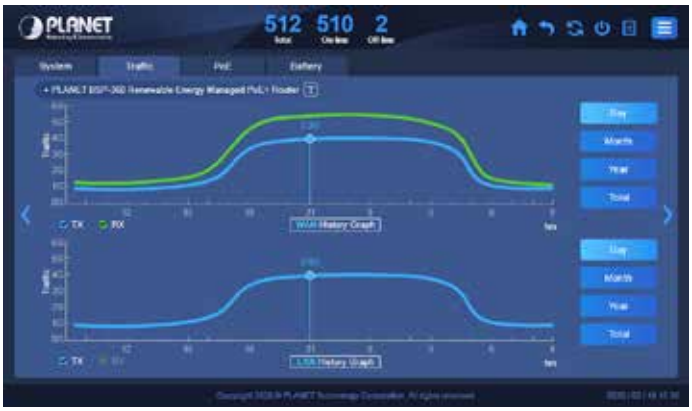


Real-time Centralized Monitoring with Configuration of PoE

As the NMS-360V comes with a detailed system view of the BSP-360-powered devices, it enables to configure each powered device like turning on IP cam 1, turning off IP cam 2, etc. The history graph records the status of each device’s generator power, power usage and traffic. If the BSP-360 detects a PLANET camera, you can add it to the ONVIF IP cam list for monitoring purposes.









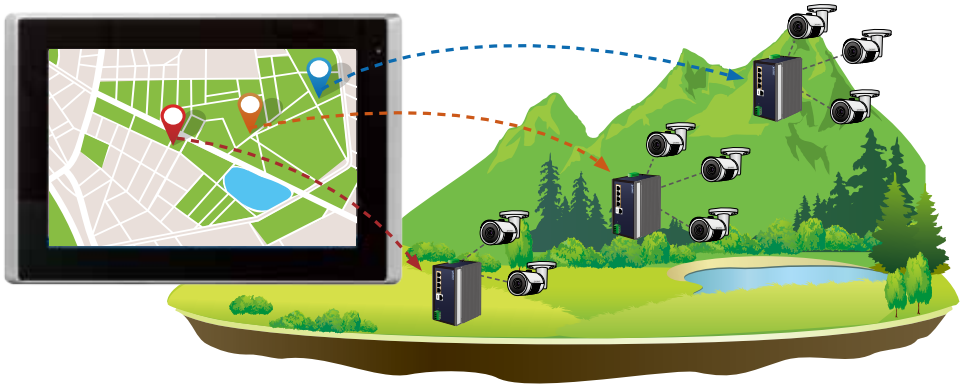
Instant E-mail Alarm Function

The NMS-360V e-mail alarm function is designed to send an email alert to the administrator via the SMTP server where syslog information can be found once an abnormality is detected. This can prompt the administrator to quickly fix the identified problem in the network.



Optimizing Energy Deployment with Site Maps

With the site maps, the BSP-360 can be located according to the field deployment, thus saving your time and cost of on-site support and monitoring. The current statuses of devices are shown in real time and the IP cam snapshot function is able to show the real onsite image. If the generator power is low, you can through the real-time image see if it is cloudy or raining, or other factors are involved.



HDMI Screen Synchronization Projection and Remote Login

The NMS-360V It supports HDMI interface that can easily connect to another bigger size screen, so that user can easy to monitor the network more clearly. It also can be operated from anywhere via Web browser to open more monitor screen that are able to access managed nodes on a DHCP-enabled network, thus controlling multiple devices through the other PC, laptop or tablet.

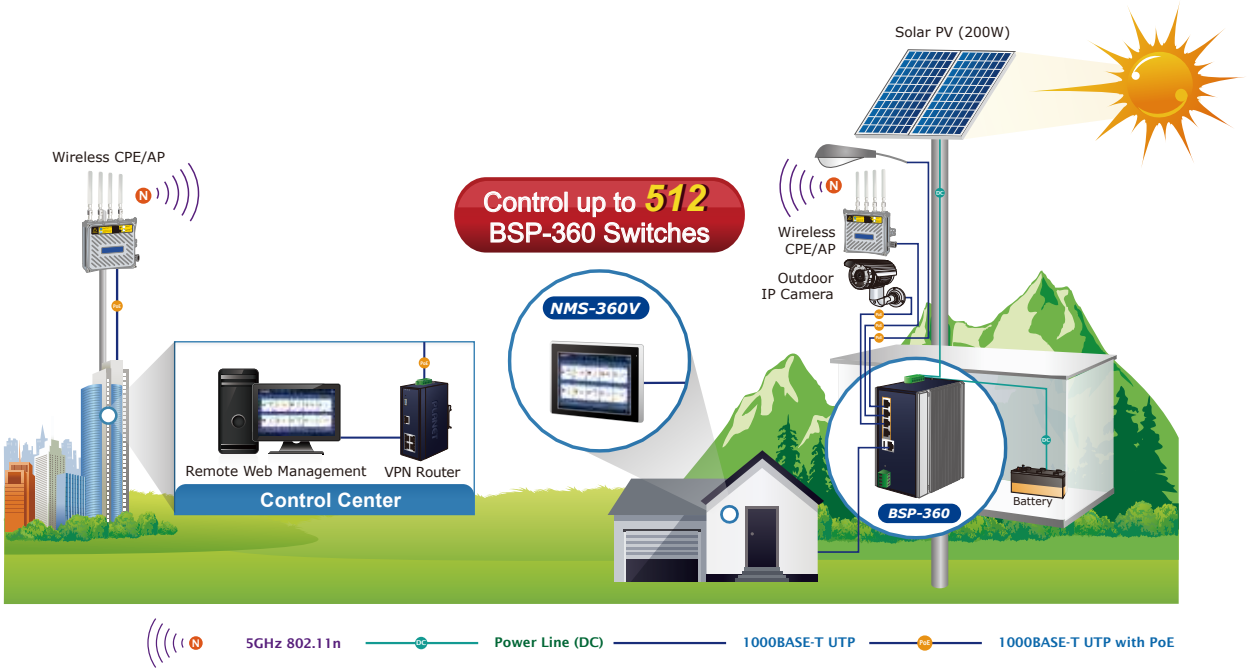


Applications

Economical Central Energy Management Solution for SMBs

PLANET NMS-360V Renewable Energy Management Controller allows users to remotely monitor the statuses of the BSP-360-powered devices in real time, including green power status, average power usage, instant PoE usage, and so on. Through the remote web management, the administrator at the headquarters is able to monitor and control those remote powered devices powered by the BSP-360.

The BSP-360's built-in four 802.3at/802.3af PoE ports allow the administrator to flexibly install PoE wireless APs in remote areas, without worrying about locating extra electric outlets. When functioning with a pair of the wireless transmission units, the BSP-360 Renewable Energy PoE Switch/Router can be efficiently managed from a remote control center.



Specifications

Product		NMS-360V-12	NMS-360V-10
Form Factor		Panel Mount, VESA 100 x 100	
Physical Specifications			
I/O Interface		2 10/100/1000BASE-T Gigabit Ethernet RJ45 ports 2 USB 3.0 ports (They cannot be used at the same time.) 1 Audio Line Out (reserved) 1 HDMI interface 2 DB-9 COM1,COM2 (reserved) 1 3-pin DC power input terminal 1 2-pin connector for power on/off button (reserved)	
Storage		2.5" 32G SATA3 HDD	
Touch LCD Size		12.1" TFT-LCD	10.1" TFT-LCD
Touch Type		Resistive Touch Window Projected Capacitive Touch	
Display Resolution		1024 x 768	1280 x 800
Display Luminance (cd/m²)		500	350
Display Viewing Angle (H°/V°)		160(H)/140(V)	160(H)/160(V)
Display Contrast		700:1	800:1
Display Backlight Lifetime (hrs)		30,000 hrs	40,000 hrs
Light Transmission (%)		Resistive Touch Window: over 80% Projected Capacitive Touch: over 90%	
Dimensions (W x D x H)		12": 319 x 51.7 x 245 mm	10": 285 x 49 x 189 mm
Weight		12": 2.9 kg	10": 2 kg
Enclosure		Aluminum Die-casting Chassis	
Power Requirements		DC IN 9~36V 60W adapter 12V 5A with terminal block AC 100~240V, 2.0A, 60~50Hz.	
Environment & Certification			
IP Rating		IP66 compliant front bezel	
Temperature		Operating: 0 ~ 50 degrees C Storage: -30 ~ 70 degrees C	
Humidity		10 ~ 90% relative humidity (non-condensing)	
MTBF (Hours)		100,000	
Network Management			
Number of Managed Devices		512	
Number of IP cameras		2,048	
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	
Network Services			
Network	DDNS	Supports PLANET DDNS/Easy DDNS	
	DHCP	Built-in DHCP Server for auto IP assignment to APs	
	Management	SSL; Web browser (Chrome is recommended); SNMP v1, v2c, v3	
	Discovery	Supports SNMP, ONVIF and 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 IEEE 802.3x Flow control and back pressure

Ordering Information

NMS-360V-10	Renewable Energy Management Controller with 10" LCD Touch Screen
NMS-360V-12	Renewable Energy Management Controller with 12" LCD Touch Screen

Related Products

BSP-360(V2)	Industrial Renewable Power 5-Port Gigabit Managed Switch with 4-Port 802.3at PoE+
NMS-360	Renewable Energy Management Controller

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