



UPS Accessory SNMP Card User Manual

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Revision Record

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Initial Version.	January 2021
Modified the email Settings in section 4.2.5A.	Sep 2021
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Modified the login description in section 3.1 Managing the Login Page.	Jul 2022
	Initial Version.Modified the email Settings in section 4.2.5A.Modify the description of product functions and features in Chapters 1.2 and 1.3.Modified the login description in section 3.1

1. Product Introduction

1.1. Overview

KPM220 is a built-in network SNMP card independently. It supports SNMPv1/v2 and v3 protocols, features e-mail alarm, historical events and historical data storage. Picture is shown as below:



1.2. Functions

- Support multiple operating systems (Windows, Mac, Linux)
- UPS can be monitored remotely through the network;
- Can realize web-based user interface;
- Support e-mail alarm;
- Multi-user permission management;
- Support DHCP;
- Support remote self-testing, shutdown and restart UPS functions (UPS support required);
- Support scheduled tasks (timed self-test, power on/off);
- Historical events and historical data storage functions;
- Remote UPS monitoring and management can be performed through HTTP, SNMP, Modbus TCP/IP;
- Complete equipment event handling (including event recording and notification);

1.3. Features

- Networking methods: IP-based LAN, WAN, Internet, wireless Ethernet, etc.;
- > User permission management, safe, confidential and reliable;

- Support Web page configuration;
- Support scheduled task function, allow setting scheduled UPS on/off, scheduled battery discharge, etc.
- Support storage of 50, 000 historical data and 5, 0000 historical event records;
- Built-in ultra-long-life system clock, support automatic timing to achieve time synchronization;
- Support SNMP V1/V2/V3, HTTP, Modbus TCP/IP and other network protocols;
- Support IPV6;

1.4. Network Interface

10/100M RJ45 Ethernet interface, used to connect to the switch.



1.5. Definition of Indicator Lights

Power indicator yellow (Power), always on; Status indicator red (Status), off when normal, always on when failure; Run indicator green (Run), flashing when the program is running normally.

2. KPM220 Installation

2.1. KPM220 Installation & Connection

KPM220 Installation & Connection



2.2. SNMP-Tool Installation & Usage

A. Download installation files from

https://www.hikvision.com/en/support/download/software/ups-software/, execute "SNMP_Tool_20xxxxxx_V1.x.x.exe" to start the install the software, users can find the icon of



software in "Start menu--All Programs--SNMP_Tool" after installation.

B. Device IP address searching

If the CURRENT IP address of the SNMP card cannot be determined because the IP address is changed or the IP mode of the shipped device is DHCP, you can search the IP address of SNMP card by installed "SNMP-Tool", the specific methods are as follows: ①Click"Device Search", ② Choose current network port, click"Refresh"to query the SNMP card IP in the LAN.

	IP 10.2.20.165	Netmask 255.255.255.0	18:25:03:00:00:47	1		
	IP	Netmask	MAC	1		
				1		
ethu	10.2.20.105	200.200.200.0	18:25:03:00:00:47			
	3			J		
		2 Interface: Mark	are Network Adapter VMnet)		Refre:	sh
		Ű	2	2	(2) Interface: Wilsere Network Adapter Wineti 💌	2

C. Software version upgrade

(1) Connect the device, input the IP of the device that needs upgrade, click "Connect" After the connection is successful, there will be a green font in the lower left corner of the tool interface that displays "Connected to device".

SNMP Tool					1		_2		×
Tool Window Help			/		1	ĩ			
	Device	IP: 10.2.20.16	5 🥌	Di	sconnect Clear	history			
Programming Settings	Host	Product	Interface	IP	Netmask	MAC			
Fixed Parameters Display Log Serial Port Test Device Search	 □ 10.2.20.165 □ 10.2.20.113 □ 10.2.20.188 □ 10.2.20.188 □ 10.2.20.166 □ 10.2.20.78 	SNMP 182501000425 666 SNMP Mini	eth0	10.2.20.165	255.255.255.0	18:25:03:00:00:47			
					Interface: VM	ware Network Adapter VM	netl 💌	Refre	sh
Connected to device									

(2) Upgrade the firmware, select the new version file (file type is firmware -20xxxxx-v1.x.x.bin), and click "Programming", it will prompt "Programming finish".

SNMP Tool	
Tool Window Hel	
Programming Settings Fixed Parameters Display Log Serial Port Test Device Search	Bevice IF: [10.2.20.165 Disconnect Clear history Programming type : Firmware Current version : v1.2.6 built on 14:16:32 Sep 24 2020 Programming file : D://Sers/Desktor/firmware-20200924-v1.2.6. bin Programming progress: Disconnect Clear history Backup Read Programming Frogramming Batch Programming Programming progress:
Connected to device	
SNMP Tool	X
Tool Window Hel	
Programming Settings Fixed Parameters Display Log Serial Port Test Device Search	Device IF: 10.2.20.165 Connect Clear history Programming type : Firmware Current version : v1.2.6 built on 14:16:32 Sep 24 2020 Programming file : D://Users/De Information Programming progress: Programming finisht Sure Sure
Disconnect with device	

Check whether the firmware upgrade is successful, as shown in the figure below: Programming --Programming type--select "Firmware"-- Read -- check the current program version.

SNMP Tool						<u></u>		×
Tool Window Help								
Programming Settings Fixed Parameters Display Log Serial Port Test Device Search	Device I Programming type Current version Programming file Programming progres	2: 10.2.20.165	3	ear history	2 Programing	Batch	Backu Read	
Connected to device								

(3) Upgrade the application, Programming type select "APP" ② select the new version file (file type is snmp-20xxxxx-v1.x.x.bin), ③ click "Programming", wait about 30 seconds, it will prompt "Programming finish". And then log in the background of SNMP card to check the software version.

SNMP Tool					×
Tool Window Help					
Programming Settings Fixed Parameters Display Log Serial Port Test Device Search	Device IP: 10.2.20.165	 lear history	gramming Batch	Backu Read Program	
Connected to device					1

SNMP Tool							\times
Tool Window Help							
Programming Settings Fixed Parameters Display Log Serial Port Test Device Search	Bevice IP: 10.2.20.165	Connect	Clear history				1
		a 09:37:15 Feb 25 2021 Information × 1.bin		1		Backup Read	
	Programming file : D:/Vsers/De Programming progress:	Programming finish!		Programming	Batch F	'r o gr anm	Ing Ing

Check whether the application upgrade is successful, as shown in the figure below: Programming - Programming type select "APP"- Read - check the current software version.

😵 SNMP Tool		– 🗆 ×
Tool Window Help		
Tool Window Help Device IP: Programming Settings Fixed Parameters Display Log Serial Port Test Device Search Programming type : Current version :	10.2.20.165 Disconnect Clear history Image: Clear history Image: Clear history Image: Clear history	Programming Batch Programming
Connected to device	APR-118-11 8	/

3. Web Login

3.1. Logging in Management Page

Connect the PC and SNMP card to the router, and use SNMP_Tool to search for the IP address of the device (see <u>2.2 B.Device IP address searching</u>). Device IP address search, and Then enter the IP address in the browser to log in(The default user name and password are admin) to the SNMP monitoring system.

Note: Before login, modify the PC IP address and ensure that the PC IP address and SNMP card IP address are in the same network segment.

SNMP Monitor System
Login

The method to modify the computer IP is as follows:

Open "Network & Internet", ①Select "Ethernet", ②Click "Change adapter options", double click the Ethernet connected, ③Click "Properties", ④Double click "Internet protocol version 4(TCP/IPv4)", ⑤Select "Use the following IP address:", fill in the IP address information of the same network segment as the SNMP card(for example: The device IP address is 192.168.137.100, Then set the COMPUTER IP address to 192.168.137.101, subnet mask is 255.255.255.0, default gateway is 192.168.137.1, If you are not sure about the gateway, you do not need to set the gateway.) ⑥Click "OK".



3.2. Changing IP Address

Parameter settings - Network -- IPV4, set to automatically obtain IP (select On for DHCP) or static IP address (select Off for DHCP), set the static IP address of SNMP card, and fill in the corresponding subnet mask and gateway; when domain name resolution is used, you need to set the DNS server; click "Submit" to confirm after completing the settings, as shown in the figure below:

	Param Settings 希 Home			⊖ Exit
Real-time Info		Network SNMP E-Mail		
Param Settings	IPv4	IP Address		
History Record	IPv6	DHCP	Close	
About	Network Link	IP Address Netmask Gateway DNS Server Primary DNS Server Secondary DNS Server Secondary DNS Server	192.168.137.100 255.255.0 192.168.137.1 8.8.8.8 114.114.114.114	

4. Web Monitoring Management

4.1. Real-time Information

A. UPS Basic Information

This item allows viewing basic UPS information, including UPS information, battery information and rated information, as shown in the following figure:

	Real-time Info					
	UPS Basic Info SNMP System Info					
Param Settings	LIPS Information					
History Record						
About						
	UPS Basic for VPS Running for VPS Control Data Case Case UPS Information UPS Information UPS Information UPS Information Battery Information UPS Information Cuartity: 1 Battery Voltage: 0:00V Battery Voltage: 0:01V Rated Information UPS Information Rated Reactifying Information Information Information Rated Bogaas Information Information Information Information Rated Bogaas Information Information Rated Bogaas Information Information Information Information Information Information Rated Bogaas Information Information Information Information Information Information Information Information Information Information Information					
	Quantity :	1				
	Battery Voltage :	0.00V				
	Battery Capacity :	0%				
	Last Replace Date :	01/01/00				
	Rated Information	UPS Information UPS Vender: UPS Medel: UPS Medel: Hardware Venion: Battery Information Quantity: 1 Eattery Voltage: 0.00V Eattery Capacity: 0% Last Replace Date: 01/01/00 Rated Information Eattery Rated Voltage: 0V Rated Information Rated Input Frequency: 0% Rated Input Frequency: 0% Rated Spass Information Rated Duput Info: Rated Duput Inf				
	Battery Rated Voltage :	ov				
	Rated Rectifying Information :					
	Rated Input Frequency :	OHz				
	Rated Bypass Information					
		0Hz				
	Rated Output Frequency :	0.00V 0% 01/01/00 0% 0%				
	Rated Power :	kVA				

B. SNMP System Information

This item allows viewing system information (software version), network information (IP information), as shown in the figure below:

	Real-time Info 🖷 Home			⊖ Exit
💭 Real-time Info	UPS Basic Info SNMP System Info UPS Runnin			
• Param Settings	System Information	Software Version :	v1.0.1.1 built on 16:00:55 Dec 2 2020	
G History Record	Network Information	Serial Number :	SNMPTEST1024	
O About		System Name :	SNMP Agent	
		System Contact :	Administrator	
		System Location :	Office	
		System Time :	2020-12-11 11:20:00	
		Running Time :	8day(s) 19:12:39	
		Last Self-test Date :	-	
		Next Self-test Date :	73).	
		UPS Load Alarm Value :	0%	
		UPS Temp Alarm Value :	0°C	
		UPS Batt. Voltage Low Value :	0.00V	
	Real-time Info 🎢 Home			G Exit
	UPS Basic Info SNMP System Info UPS Running			
Param Settings				

Real-time Info	UPS Basic Info SNMP System Info UPS Running Info UPS Control Data Chart
• Param Settings	System Information Link Information
🗟 History Record	Network Information MAC Address : 002518100018 Link Status : 100M Full Duplex
About	
	Network Server
	E-Mail Server: NTP Server: pool ntp org
	19v4
	IP Address : 192.168.137.100 Netmask : 255.255.0 Geteway : 192.168.137.1 Primary DNS Server : 88.8.8
	Secondary DNS Server: 114.114.114
	IPv6
	IP Address: LinkLocal Address: fe00.0000.0000.0225.10ff4f0.0012/64 IPv6To4 Address: Gateway: fe00.u164
	Primary DNS Server : Secondary DNS Server :

C. UPS Operation Information

The content of UPS operation information is different according to the selected communication protocol. Taking MegaTec1:1 protocol as an example, UPS operation information includes input information, output information, and battery information, as shown in the following figure:

Input information:

Kistory Record Kout Information Input Voltage: 0.0/ About About About
Bittory Record Output Information Input Veltage: 0.0V About Battery Information Max Input Veltage: 0.0V About Battery Information Max Input Veltage: 0.0V
About Battery Information Max Input Voltage: 0.0V Min Input Voltage: 0.0V
About Min Input Voltage: 0.0V
Min Input Voltage : 0.0V
Input Frequency : 0.0Hz

Output information:

	Real-time Info 者 Home		G Exit
🗔 Real-time Info.	UPS Basic Info SNMP System Info UPS I	Running Info UPS Control Data Chart	
Param Settings	Input Information	Output Voltage : 0.0V	
Contract History Record	Output Information	Output Status : Main Power Supply	
About	Battery Information	UPS Load : 0%	J

Battery information:

	Real-time Info 🖷 Home		⊖ Exit
📮 Real-time Info	UPS Basic Info SNMP System Info UPS Running Info		
Param Settings	Input Information	Temperature : 0.0°C	
C History Record	Output Information	Battery Status : normal	
About	Battery Information	Battery Voltage : 0.00V	1
		Battery Capacity : 0%	
		Last Self-test Time :	
		Next Self-test Time :	

D. UPS Control

The UPS control content is different according to the selected communication protocol. Take the MegaTec1:1 protocol as an example, it includes manual UPS self-check, manual power on/off and buzzer on/off control, as shown in the figure below;

	Real-time Info # Home	⊖ Exit
	UPS Basic Info SMMP System Info UPS Running Info UPS Control Data Chart	
Param Settings History Record About	UPS Self-text Cancel 10s To EOD Cautor 1-90 Minute(s) Record	
	UPS Power Control Operation UPS Buzzer Control Buzzer Control Swebch Swebch	

E. Data Chart

This item can be used to query the single day operating data change curve of the equipment by selecting a specific date. The data types include temperature (°C), output voltage, and load (%). You can select or cancel the type to be displayed by clicking the mouse. The curve recording interval is 90 minutes.

	Real-time Info # Home	G Exit
🖵 Real-time Info	UPS Basic Info SNMP System Info UPS Running Info UPS Control Data Chart	
• Param Settings	Date 2020-12-01	
B History Record	-Q- temperature (C): -Q- solut solvey (V): -Q- load (N).	
About	×1	
	8	
	22-	
	15-	
	10-	
	5	
	0. อออร์ร อาโรร ออร์รร อล์สร อลอีรร อร์รร อล์สร อลอีรร อลโรร รอล์สร รอร์รร รอโรร รอโรร รอโรร รอโรร รลโลย	

4.2. Parameter Settings

4.2.1. Parameter Settings

A. UPS Parameter Settings

Here you need to ①Select the UPS protocol according to the actual situation on site, ②Fill in the battery information, device ID ③Data store cycle, ④Customize communication parameters (no need to be set by default), after parameter setting, ⑤Click "Submit" and it's Effective, as shown in the figure below:

	Param Settings # Home		G Exit
Real-time Info	UPSPara Set UPS Time Switch Network SNMP		
Param Settlings	UPS Param	Basic Parameters	
Pa History Record	Self-test	UPS Protocol Magazec-11 V	
About	UPS Alarm Value	Device ID 1 Quantity of Batteries 1 Number of Single Batteries 1 Rattery fundt Change Voltages (Units 0.011) 2.28 Battery fundt Change Voltages (Units 0.011) 1.87 Battery Last Replice Date 2806-0-107 UBS Data Store Cycle (Units 1min) 1 Custom Communication Planemeters	
		Custom Communication Frable Ben Band 1000 Boord 1000 Parity Check Non Data Bits Stop Bits Stop Bits 1	

B. Self-check Settings

This function depends on whether the UPS host has a self-check function. The UPS self-check cycle can be weekly/monthly, and the self-check time can be customized, 10 seconds or until the battery voltage is low. Click [Submit] after completing the setting, as shown in the figure below:

	Param Settings 希 Home				⊖ Exit
🗔 Real-time Info	UPSPara Set UPS Time Switch				
 Param Settings Hintory Record About 	UPS Param Self-text UPS Alarm Value		Self-test Cycle Self-test Day Self-test Start Time Self-test Last Time UPS Custom Test Time (Unit: Timin) Room Gubrant	Weekly Ban Weekly Monthly Self-desking 10 Seconds © c= number <= 60	
	Param Settings 希 Home				⊖ Exit
Real-time Info	Param Settings 🖷 Home UPSPara Set UPS Time Switch	Network SNM	E-Mail >>		⊖ Exit
 Real-time Info Param Settings 		Network SNM	E-Mail >> Salf-text Cycle	I Ateritriy	& Exit
	UPSPara Set UPS Time Switch	Network SNM		Marthy V 1 V	⊖ Exit

C. UPS Alarm Value Setting

This item allows customizing the UPS communication loss time (for example, if 30 seconds is set, the UPS is offline when the communication is lost for 30 seconds), load alarm value, temperature alarm value, battery voltage low alarm value, UPS input/output voltage alarm Value, UPS alarm activation times (for example, if the setting value is 3, it will output alarm information when the program returns 3 consecutive polls); after completing the settings, click [Submit] to confirm.

Note: Except UPS communication loss time and UPS alarm activation times, when other custom alarm values are set to 0, means this type of alarm is not enabled.

	Param Settings 🖶 Home			@ Exit
Real-time Info	UPSPara Set UPS Time Switch N			
Param Settings	UPS Param	UPS Communication Lost Time (Unit: 1s)	30000	
History Record	Self-test	UPS Load Alarm Value (Unit: 1%)	0	
About	UPS Alarm Value	UPS Temperature Alarm Value (Unit: 1°C)	0	
C Hoodi		 UPS Battery Voltage Low Alarm Value (Unit: 0.01V)	0.00	
		UPS Input Voltage High Alarm (Unit: 0.1V)	0.0	
		UPS Input Voltage Low Alarm (Unit: 0.1V)	0.0	
		UPS Output Voltage High Alarm (Unit: 0.1V)	0.0	
		UPS Output Voltage Low Alarm (Unit: 0.1V)	0.0	
		Battery Capacity Low Alarm (Unit: 1%)	0	
		Battery Remain Time Alarm (Unit: 1min)	0	
		UPS alarm activate times	3	
		 Reset Submit		

4.2.2. UPS Time Switch

A. UPS Shutdown Action

This function allows selecting the time period of shutdown, shutdown conditions, and execution time of shutdown. After setting, click [Set] to confirm:

		Param Settings 🐐 Home 🛛 🔿 Exit
Q	Real-time Info	UPSPara Set UPS Time Switch Network SNMP E-Mail >>
•		UPS Shutdown Action Add Event
6	History Record	Weekly Time Switch When between 00:00 ~ 23:59 , if All UPS Events 🗸 will in
0	About	Specific Time Switch WOL UPS Overload UPS Verload UPS Verload UPS Verload UPS I to Potential UPS Verload UPS I to Potential UP

B. Weekly Time Switch

This setting takes one week as a cycle. You can set the specific time of one day or several days in the cycle to perform the power on/off action, and you can set the minutes of sending an alarm before shutdown. After completing the setting, click [Submit] to confirm, as shown below:

	Param Settings 希 Home			⊖ Exit
Real-time Info	UPSPara Set UPS Time Switch			
• Param Settings	UPS Shutdown Action		Power On(hh:mm)	Power Off(hh:mm)
🗟 History Record	Weekly Time Switch	Sunday	00:03	00:01
About	Specific Time Switch	Monday		
	WOL	Tuesday		
		Wednesday		
		Thursday		
		Friday		
		Saturday		
		Send Alarm 1	minute(s) before power off.	
		Reset		

C. Specific Time Switch

This item allows setting the specific date and time to perform the power on/off action, and can set the minutes of sending an alarm before shutdown. After completing the setting, click [Submit] to confirm, as shown below:

	Param Settings 🎢 Home			@ Exit
📮 Real-time Info	UPSPara Set UPS Time Switch Network			
	UPS Shutdown Action	Date(YYYY-MM-DD)	Power On(hh:mm)	Power Off(hh:mm)
🗟 History Record	Weekly Time Switch	2020-12-11	00:03	00:01
About	Specific Time Switch			
	WOL			
		Send Alarm 10	minute(s) before power off.	
		Reset Submit		

D. WOL

This item allows setting wake-up of specific host (the computer mainboard should support wake-up setting function), set to wake up when the power is restored or wake up when the power reaches the set percentage. After completing the settings, click [Submit] to confirm, as shown below:

	Param Settings 🖷 Home					⊖ Exit
Real-time Info	UPSPara Set UPS Time Switch N					
	UPS Shutdown Action	Host				
Co History Record	Weekly Time Switch		IP	Mac	Operation	
About	Specific Time Switch	Host1 Host2	10.2.20.206	E8-B6-34-E5-55-35	test test	
		Host3 Host4			test	
		Host5 Host6 Host7			test test	
		Host8			test	
		Wake Up Condition				
		Wake up when por Wake UP according		Enable	>	
		Wake Up Capacity	(Unit: 196)	10		
		Recet	-			

4.2.3. Network Settings

This item allows setting the static IP address of the SNMP card, filling in the corresponding subnet mask and gateway, and setting the DNS server when using the domain name resolution function; click [Submit] to confirm after completing the settings, as shown below:

	Param Settings 🏾 Home			⊖ Exit
📮 Real-time Info		Network SNMP E-Mail >		
Param Settings	IPv4	IP Address		
© About	IPv6 Network Link	DHCP	Close	
		IP Address Netmask Gateway	192.168.137.100 255.255.255.0 192.168.137.1	
		DNS Server Primary DNS Server Secondary DNS Server	8888	
		Reset Submit		

4.2.4. SNMP Settings

A. System Settings

This item allows changing the system information (system name, system administrator, system location), and setting the SNMP port. The default Agent port is 161 (the data transmission port for uploading real-time data when the platform issues polling instructions), and the Trap

port is 162 (data transmission port for real-time upload of alarm information). After completing the settings, click [Submit] to confirm, as shown in the figure below:

	Param Settings 🏘 Home			⊖ Exit
📮 Real-time Info		Network SNMP		
• Param Settings	System	System Information		
යි History Record	NMS	System Name	SNMP Agent	
◎ About	Ттар	System Contact System Location SNMP Port Agent Port Trap Port MIB Library Type	 Administrator Office	
		Reset		

B. NMS Settings

If no IP address is set, the card has no access restrictions. Any IP can obtain the SNMP card operating data by visiting the SNMP card; if the IP, community string and version are set, only the IP added in the settings can visit the device;

	Param Settings 🎢 Home				⊖ Exit
Real-time Info		Network SNMP E-M			
• Param Settings	System	IP	Version	Community	Username
G History Record	NMS	192.168.137.205	v1 & v2C 🗸	public	
About	Trap		All V		
			All V		
			All 🗸		
			All 🗸		
			All 🗸		
			All 🗸		
			All 🗸		
		.e.,			
		Reset			

C. Trap Settings

This item allows setting the monitoring server IP and version (SNMPv1 Trap, SNMPv2 Trap, SNMPv2 Inform, SNMPv3 Trap, SNMPv3 Inform), and filling in the community string (can be understood as the transmission password of the SNMP protocol, the SNMP card and the connected monitoring platform should have consistent setting). After the above settings are completed, the alarm information of the SNMP card can be uploaded to the designated monitoring platform in real time, and the number of retries and retry interval can be set. After completing the settings, click [Submit] to confirm, as shown below:

	Param Settings 希 Home		⊖ Exit
Real-time Info		work SNMP E-Mail >>	
	System	IP Version	Community Username
යි History Record	NMS	10.2.2.2 SNMPv2 Trap 🗸	pubic
About	Ταρ	none v none v	
		Retry Times Retry Times Retry Interval (Unit: 1s) Retroit Soutomit	,

4.2.5. E-Mail Settings

A. Server Settings

This item needs to set the e-mail server address (Only SMTP mail servers are supported, POP3 and IMAP are not supported), server port number (For example, the default port number of the non-encrypted mailbox is 25, and the default port number of the SSL/TLS encrypted mailbox is 465 or 587), sender address (same as the sending e-mail account), sending e-mail account and sending e-mail password. In addition, you can check whether the e-mail is encrypted and whether to send a test email. After completing the settings, click [Submit] to confirm, as shown below:

	Param Settings 🖷 Home		⊖ Exit
💭 Real-time Info		Network SNMP E-Mail	
 Param Settings History Record About 	Sever Alarm User Data User	Server Address Server Port Encrypt Sender Address Need to Auth? Account Password Send test mail?	mall kstar.com.cn 25 None abc@kstar.com.cn Yes ebc@kstar.com.cn sending e-mail account
	Param Settings # Home		Ģ Exit
Real-time Info		NAP EMA >>	Q Exit
Real-time Info Param Settings		NNP EMail >> Server Address matista	
	UPSPara Set UPS Time Switch Network SI Server Alarm User	Server Address mail tata Server Port 25	K (0h, 0)
Param Settings	UPSPara Set UPS Time Switch Network SI	Server Address mail hits Server Port 25 Encrypt Nore	r on n
Param Settings History Record	UPSPara Set UPS Time Switch Network SI Server Alarm User	Server Address mail hits Server Port 25 Encrypt Nore	K (0N, 0)
Param Settings History Record	UPSPara Set UPS Time Switch Network SI Server Alarm User	Server Address matista Server Port 25 Encrypt New Sender Address Endogist Need to Auth? Ver Account endogist	K GARLAR V Marcons co W Cons co
Param Settings History Record	UPSPara Set UPS Time Switch Network SI Server Alarm User	Sever Address matista Sever Port 25 Encrypt Nore Sender Address Cacigation Need to Auth? Ver Account accigation Passnord	
Param Settings History Record	UPSPara Set UPS Time Switch Network SI Server Alarm User	Server Address matista Server Port 25 Encrypt New Sender Address Endogist Need to Auth? Ver Account endogist	K GARLAR V Marcons co W Cons co
Param Settings History Record	UPSPara Set UPS Time Switch Network SI Server Alarm User	Server Address mat stat Server Port 25 Encrypt Address atog Sender Address atog Need to Auh? Ve Account feed atog	
Param Settings History Record	UPSPara Set UPS Time Switch Network SI Server Alarm User	Server Address mat stat Server Port 25 Encrypt Address atog Sender Address atog Need to Auh? Ve Account feed atog	
Param Settings History Record	UPSPara Set UPS Time Switch Network SI Server Alarm User	Server Address mat stat Server Port 25 Encrypt Address atog Sender Address atog Need to Auh? Ve Account feed atog	

B. Alarm User Settings

This item needs to fill in the e-mail account that will receive the alarm email and select "Yes" for Enable to activate the e-mail alarm function. After completing the settings, click [Submit] to

confirm, as shown below:

	Param S	iettings 👫 Home									O Exit
Real-time Info				E-Mail							
Param Settings		Server			Enable	Yes 🗸	*				
B History Record		Alarm User			Account1	lalala@kstar.com.cn	-				
About		Data User	_		Account2)				
- Auta					Account3]				
					Account4]				
					Account5		ĺ.				
					Account6		1				
					Account7)				
					Account®)				
					Reset Submit						

C. Data User Settings

This item is to regularly receive the operating history data of the previous day (00:00 to 23:59) of the device. Enable this function by selecting "Yes", selecting the sending time, and filling in the e-mail account that receives the data. After completing the settings, click [Submit] to confirm, as shown below:

	Param Settings 🏘 Home		© Exit
Real-time Info		E-Mail >>	
• Param Settings	Server	Enable Yes V	
History Record	Alarm User	Send Time 12:00	
About	Data User	Account latata@kstar.com.cn	
		Account2	
		Account4	
		AccountS	
		Accounts	
		Account?	
		Accounts	
		Reset	

4.2.6. System Users

A. User Settings

This item allows adding users, filling in user name and password, and setting user permissions (read & write). After completing the settings, click [Submit] to confirm, as shown below:

	Param Settings 🎢 H	ome			@ Exit
🖵 Real-time Info	<< System User				
Param Settings	User		User	Password	Privilege
යි History Record	SSL		admin		Read & Write 🗸
Ø About			ups	[Read & Write 🗸
C ADOUL					Read V
					Read V
					Read 🗸
					Read 🗸
					Read
					Read V
		Resul	Submit		

B. SSL Settings

This setting enables HTTPS access mode, and SSL public key and SSL certificate need to be uploaded.

	Param Settings 希 Home			⊖ Exit
💭 Real-time Info	< System User System Time			
Param Settings	User	SSL Public Key		
 History Record About 	SSL	Upload SSL Public Key Public Key File	(*key) Choose Upload	- 1
		SSL Certificate		
		Upload SSL Certificate Certificate(*.pem,*	.ca or *.crt) Choose Upload	
		нттру		
		HTTPS Enable Close V	Submit	
		prompt: The maximum size of the uploaded file is 40M1		
		prompts the non-mentione of the OPROMOUNIE of TOTAL		

4.2.7. System Time

This item allows setting the system time and selecting the system restart method:

① Network time server settings: Fill in the time synchronization period, time server address, time zone, and click [Submit] to confirm;

② Manual setting: Click [Current PC Time], and then click [Submit] to manually synchronize the current computer time;

③ Automatic restart: Fill in the automatic restart period in minutes;

④ System restart: Click [Reboot] for 30 seconds to restart the device.

	Param Settings # Home G E	xit
Real-time Info	<< System User System Time Language	
 Param Settings History Record About 	Network Time Server Time Syne Cycle Units 1h) 0 Time Server Address good mp arg Time Zone 8 Time Zone 8 Time Sone 8	
	Manual Settings Current System Time 2005-01-55 52:47:11 Current IPC Time 2	
	Auto Reboot Auto Reboot Cyle (Urix Tainuar) Come System Reboot	
	Rebox System in 30 Seconds. RBboxe	

4.2.8. Language

This item allows setting the system language (Simplified Chinese/English) and the message language (Simplified Chinese/English). After completing the settings, click [Submit] to confirm, as shown below:

	Param Settings # Home 😔	Exit
💭 Real-time Info	<< System User System Time Language	
Param Settings	System Language	
යි History Record	Language: 圖体中文 V	
About		
	Email/Message Alert Language	
	Language: (箇件中文 v)	
	Read Subme	

4.3. History

Historical record capacity: 60, 000 data logs (if the historical data recording interval is 1 minute, the historical data can be saved for 40 days), 5, 000 event logs and setting logs, and 10, 000 environmental logs.

4.3.1. Data Log

By filtering the time period, you can query the equipment running data log.

	 Date/Time	InVol (V)	AbnorlV (V)	OutVol (V)	Load (%)	InFreq (Hz)	BattVol (V)	DevTemp (°C)
ut	2020-12-11 14:44:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:43:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:42:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:41:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:40:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:39:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:38:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:37:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:36:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:35:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:34:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:33:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:32:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:31:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2020-12-11 14:30:36	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.3.2. Event Log

By filtering the time period, you can query the equipment event log.

Param Settings			
Time : 2005-01-0	01 ~ (2021-03-01 Cluery		
	Date/Time	Event	State
About	2005-01-01 08:00:48	UPS communication lost	tion of the second s
	2005-01-01 08:00:47	UPS communication lost	

4.3.3. Set Log

By filtering the time period, you can query the equipment setting log.

eal-time Info aram Settings	Data Log Ever						-
istory Record	Time 1 2005-01-01	~	2021-03-01 Query Date/Time	Event	Set value1	Set Value2	
bout			2005-01-05 02:55:55	Battery self-test	0	0	
			2005-01-05 02:55:50	Battery self-test	1	0	

4.3.4. Export Log

By filtering the time period, select the log type to be exported, and click [Export] to download the log file in Excel format. After the download is successful, click [Close] to complete the log export.

	History Record 🐐 Home O E	xit
📮 Real-time Info	Data Log Event Log Export Log	
Param Settings	Time: 2000-12-11 ~ 2000-12-11	
History Record	Export Type Data Log V Export	
About	Data tog Event Log Set Log Env Ibala Log	



4.4. About

4.4.1. Web Page Upgrade

[System Information] allows viewing the current software version. When there is a version update, ① Click [Select]; ② Select the upgrade file named snmp-mini-2020xxxx-v1.0.x.bin; ③ Click [Upgrade]. It will prompt "File Upload Complete!".

	About # Home		2021-03-01 14:21:59	UPS communication lost	G Exit
Real-time Info	About				
Param Settings	System Information		/		
Record	22 227		- current software version		
	Software Version :		- current software version		
	Serial Number :	123456			
	Web Version :	v1.0.1 2020-01-29			
		2	1 3		
	Software Upgrade				
	Firmware Upgrade :	25-v10.9.5.bin	Select		
		-	Upload Complete! File Upload Complete!		
			File Optoad Complete!		
	Export Settings				
	Export File :	e Be	Select Download		
	Export rive :		Select Download		
	Import Settings				
			and a second		
	Import File :	File(*.config)	Select. Import		
	Factory Reset				
		-			
	Factory Reset :	Restore			

4.4.2. Export/Import Settings

Export settings file: Export a file containing all the configuration information of the current equipment (suffix format .config);

Import settings file: Import a file containing equipment configuration information (suffix format .config);

ĺ	About 💏 Home				
Real-time Info	About				
Param Settings	System Information				
History Record	Serial	Number :	v1.0.2.5 built on 09.38:04 Feb 25 2021 320167977AC0569300032 v1.0.1 2020-01-29		
	Software Upgrade				
	Farmware	Upgrade :	Upgrade Fills(*, bia)	Select	Upgrade
	Export Settings				-
	E	oport File :	File	Select	Download
	Import Settings				
	-	iport File :	File(* config)	Select	Import
	Factory Reset			1	
	Facto	ary Reset :	Restore		

4.4.3. Reset

About -- Factory Reset, 1 click [Restore], 2 when a confirmation box pops up, click [Confirm] to restart the equipment and restore the factory settings.

	About		
Real-time Info	System Information		
Param Settings	Software Version :	v1.0.2.5 built on 09:38:04 Feb 25 2021	
B History Record	Serial Number :	320167977AC0569300032	
About	Web Version :	v1.0.1 2020-01-29	
	Software Upgrade		
	Firmware Upgrade :	Upgrade File(*.bin)	Select Upgrade
			Prompt X
	Export Settings		(?) This operation will restart the device. Do y ou want to continue?
	Export File :	File.	Confine Cancel
	Import Settings		
	Import File :	File(*config)	Shice Input
	Factory Reset	(1)	
	Factory Reset :	Rostore	

5. Shutdown Protection Software--SNMP_Protector

SNMP_Protector is a shutdown protection software used with UPS and SNMP card.After installing SNMP_Protector on Windows, it will shotdown the computer when "Main circuit abnormal、 battery low、 ups abnormal shotdown "occurs.

5.1. SNMP_Protector Installation

① Download the installation file from https://www.hikvision.com/en/support/download/software/ups-software/, execute "SNMP_Protector_V1.xxxx.exe" to install the SNMP_Protector; ② After installation, users can find "SNMP_Protector" in Windows "Start", click "protector"

to start.

Microsoft Office	
Microsoft Office Tools	
PremiumSoft	
RedisDesktopManager	
SNMP Management	
SNMP Protector	
🙂 protector 🖕	
🞯 Uninstall	
Website	
SNMP Tool	
Start-up	
VMware	
Windows Accessories	
Windows Administrative Tools	
Windows Ease of Access	
Windows System	•
< Back	
	o

5.2. SNMP_Protector Usage

The software interface is mainly divided into three parts: (1) Menu setting bar, (2) Device list, (3) Alarm information list; as shown below:

10.2.20.26	Time	Object 10.2.20.7	Event Communication connected
10.2.20.7 🕒	1 2021-02-26 17:32:10 2 2021-02-26 17:32:10	10.2.20.7	Communication connected

A. Language Setting

The default language is English, users can, 1Click [Language], 2Select the interface language type as English or Chinese.

0.2.20.26 🔘		Time	Object	Event
	1	2021-02-26 17:32:10	10.2.20.7	Communication connected
0.2.20.7 🔘	2	2021-02-26 17:32:10	10.2.20.26	Communication connected

Β. Host Addition

①Click Setting icon, ②Click [Add], ③Select SNMP v1/v2(default), ④Fill in the host(SNMP card)IP address, (5)Click [Sure] to complete the device addition.

Note: Since the software provides shutdown protection by receiving Trap messages from SNMP cards, continue to run SNMP_Protector on the computer that needs shutdown protection. In addition, set the IP address of the computer to be shut down on the SNMP card page. The path is as follows: Parameter setting -- SNMP-trap, enter the IP address of the computer to be shut down, and set the version to SNMPv2 Trap. The community character is the same as the public



2021-02-26 17:36:29

Hodify Renove

ninute(s

Sure Cancel

bbA

gram Files (x86)/ESTAR-Tool/ESTAR-Tool.exe Browse... execution time: 89

Run application before shutdown

Log Query and Export C.

Forning m Popup warning me

(1) Click Log icon, (2) Select the query time, click [Read], (3) Display the query results, (4) Click [Save as] to Excel file.

Host: 10.2.

port: 16

(5).

Query

Sure Cancel

Sure Cancel

2021-02-26 17:37:24

mity: publi

	U Event log			
N 1	2	Start date: 2021	-02-26 V End date: 2021-02-26 V	Read
10.2.20.2	Date	Host address	Event	_
0.2.20	1 2021-02-26 17:39:2	8 10.2.20.165	Communication connected	
10.2.20	2 2021-02-26 17:32:1	0 10.2.20.26	Communication connected	
10.2.20.165 🔘	3 2021-02-26 17:32:1	0 10.2.20.7	Communication connected	
1	4 2021-02-26 11:57:5	7 10.2.20.7	Communication connected	
	5 2021-02-26 11:57:5	7 10.2.20.26	Communication connected	
	6 2021-02-26 11:57:4	1 10.2.20.26	Communication connected	
	7 2021-02-26 11:57:4	1 10.2.20.7	Communication connected	
		3		
			Save as Clear	OK

	😻 Event log		
% 1124	_	Start date: 2021-02-	26 🗸 End date: 2021-02-26 🗸 Read
0.2.20.26 🔘	Date	Host address	Event
	1 2021-02-26 17:39:28	10.2.20.165	Communication connected
0.2.20.7 🔘	2 2021-02-26 17:32:10	10.2.20.26	Communication connected
0.2.20.165 🔘	3 2021-02-26 17:32:10	10.2.20.7	Communication connected
	4 2021-02-26 11:57:57	10.2.20.7	Communication connected
	5 2021-02-26 11:57:57	10.2.20.26	Communication connected
	6 2021-02-26 11:57:41	10.2.20.26	Communication connected
	7 2021-02-26 11:57:41	10.2.20.7	Communication connected
		4	

D. Version Information

Click [Help]--[About], software version will be shown in the pop-up window.

SNMP Protector Settings Language Help	lbout		x	SNMP Protector Settings Language	Help)
1022026 • 102207 • 10220.165 •	Time 1 2021-02-26 17:32:10 2 2021-02-26 17:32:10 3 2021-02-26 17:39:28	Object 10.2.20.7 10.2.20.26 10.2.20.165	Event Communication connected Communication connected Communication connected	10.2.20.26 • 10.2.20.7 • 10.2.20.165 •	Time 1 2021-02-26 17:3: About	Object 2:10 10.2.20.7 SNEP Protecto built on Feb 5 2021 The program is used protection by 3007.	10:36:52
			2021-02-26 17:43:57				2021-02-26 17:45:2

6. Centralized Monitoring Software--SNMP Management

SNMP Management is a software for batch unified management of SNMP devices. After adding SNMP devices, the software can record the running data and configuration of the UPS, and can perform remote control such as shutdown and self-checking of the UPS.

6.1. SNMP Management

 Download installation file from https://www.hikvision.com/en/support/download/software/ups-software/, execute

"SNMP_Management_20xxxxxx_V1.xxxxx.exe";

② After installation, users can find"SNMP_Management" in Windows "Start", click "SNMP Management" to start.



6.2. SNMP Management Usage

The software interface is mainly divided into three parts: ①Menu bar, ②Management station ③Main data interface, as shown in the figure:

B SNMP Management System Language Tool Window Help 1		<u>177</u> 5)	×
Management station			
Search station			^
Net Agent			
2			
~	3		
			~
٤			>

A. Language Setting

The default language of the software is English, and the user can choose from the menu bar, "Language", to select the language type displayed on the interface.

NMP Management	- 0	×
m Language Tool Window Help		
emer English		
中文(简体) ch station		ŕ
Net Agent		
		- 1
<		>

B. System Setting

System settings are used to set the communication parameters of the software and SNMP

devices:

- SNMP Version: SNMP protocol version, this software supports SNMP v1 and SNMP v2c;
- Polling cycle: Cycle of software polling device data;
- Polling timeout: Timeout of polling single device;
- Store data cycle: Cycle of storing device data;
- Polling retry: Number of retries after polling failed.

ment station		
arco station		
NetAgent	System Settings ×	
	SNMP Version : v2c •	
	Polling oyole : 5000 ms	
	Polling timeout : 100 ms	
	Store data oycle: 60 s	
	Polling retry : 1	

C. Station Addition

When using, firstly need to add the corresponding station in the Net Agent category: right-click the Net Agent item on the left side of the interface, select "Add", after completing the station name, click the "Sure" to complete the addition of the main station;

System Language Tool Window	Help	-	
Management station			
Search station			1
Net Agent			
Add			
Delete			
Rename			
Attribute			
Refresh			

Management station			
Search station			
Net Agent	Add station Station name: test	× re	

D. Device Addition

After completing the addition of the master station, you need to add the device under the corresponding station, click the name of the added station, right-click on the device data interface on the right, and then select "Add", the software will pop up the device addition interface, fill in. Then, click "Sure", the device will be added to the corresponding station, and the software can monitor the device in real time.

	B SNMP Management		- D X
SNMP Management	- 🗆 🗙 System Language Too		
System Language Tool Window Help	Management station		
Management station			^
Search station.	Search station		
	Y Net Agent		
V Net Agent test	test	test	
test Settings		test	
Browser device		Add device X	1
Add			
Delete		Device name: hello	
Attribute		Admin: joy Position: AA	
Refresh		*IP Address: 10.2.20.165	
		*Community: [public	
		Continuous adding device: 2 0	
		Three phase input	
		Sure	
			· · · · · · · · · · · · · · · · · · ·
4	*	<	>
	2021-02-26 17:56:28		2021-02-26 17:58:12

E. Device Panel

Click "Window--Device panel" to open the data panel, select the device to view the related data;



① Chart: Display the dynamic curve diagram of the input and output voltage of the device, and can visually observe the changes of input and output voltage in real time.



2 Real time data: Display specific data of battery $\$ input and output information of the device.

agement station							1
earch station							
^r Net Agent							
test		353 411					
	test	hello					
	<						
							>
	Current Device: 10						
	Chart Real t	ime data Da	talog Setlog	Dev info			
	Battery	- \	Input		Output		
	10000 Exection 2000 Sec.	100 %	Line voltage:	235.5 V	Voltage:	220.1 V	20
	Voltage: [Temperature:]	13.68 V	Line max voltage Line min voltage		Frequency:	0.0 }	{z
	1.0 C BODY CONTRACTOR	0.0 A	Frequency:	50.0 Hz	Load:	0 9	1
	1		\	3 		512 - 320	
			0				

③ Data log: Users can choose to read the data records within the time range by themselves. First select the start date and end date of the data record to be queried, and then click the "Sure" button to query the data records within the selected date range. The software supports exporting data records to various types of Excel files. Click the "Export" button to export the currently read data records. Click the "Clear Logs" button to clear all data records of the currently selected device.

lanagement station						
Search station						
✓ Net Agent test	test	hello				
(4)	Current Device: 10.2 Chart Real time Clear Lags Start			v info	2 3 Sure Ex	port
1000 000	Date			ittery temperatu		-
			buttery voltage	intery temperatu	buttery current	npe
	1 2021-02-26 1	100	13.62	27.0	0.0	
	1 2021-02-26 1 2 2021-02-26 1	100 100	13.62 13.62	27.0 27.0	0.0 0.0	
	2 2021-02-26 1	100	13.62	27.0	0.0	
	2 2021-02-26 1 3 2021-02-26 1	100 100	13.62 13.62	27.0 27.0	0.0 0.0	
	2 2021-02-26 1 3 2021-02-26 1 4 2021-02-26 1	100 100 100	13.62 13.62 13.62	27.0 27.0 27.0	0.0 0.0 0.0	
	2 2021-02-26 1 3 2021-02-26 1 4 2021-02-26 1 5 2021-02-26 1	100 100 100 100	13.62 13.62 13.62 13.62 13.62	27.0 27.0 27.0 27.0 27.0	0.0 0.0 0.0 0.0	

④ Set log: Record software settings record.

(5) Dev info: Display current device information connected to SNMP card.

- Model: Device model connected to SNMP card;
- Name: Device name connected to SNMP card;
- UPS firmware version: UPS connected to SNMP card;
- Date of manufacture: Device's date of manufacture;
- Serial number: Device's manufacture serial number;
- Agent firmware version: Agent version number of SNMP card.

F. Version Information

Click [Help]--[About], can view the software version information in the pop-up window, including software name, version number, build date of the program, copyright attribution and application introduction.

P Tanagement v1.0.3
on Feb 5 2021 10:40:24
rogram is used for device ement and settings by SNMP.