

3. Remove the cover of Intelligent Slot located on Inverter or UPS. Retain the screws for further use. (Diagram 2-5).

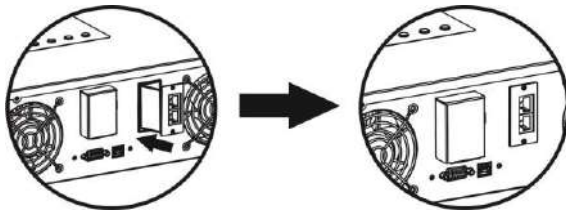


Diagram 2-5

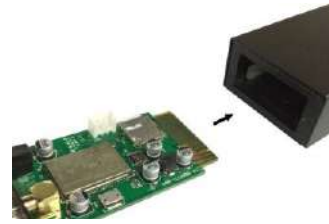


Diagram 2-6

4. Insert SIM Card and fix it with screws.

For GPRS/3G Box:

1. Same Step 1 and 2 as GPRS/3G card.
2. Insert GPRS card into GPRS/3G Box, and fix it with screws. (Diagram 2-6)
3. Connect DB9 terminal of data cable to GPRS/3G Box. (Diagram 2-7)




Diagram 2-7



Diagram 2-8

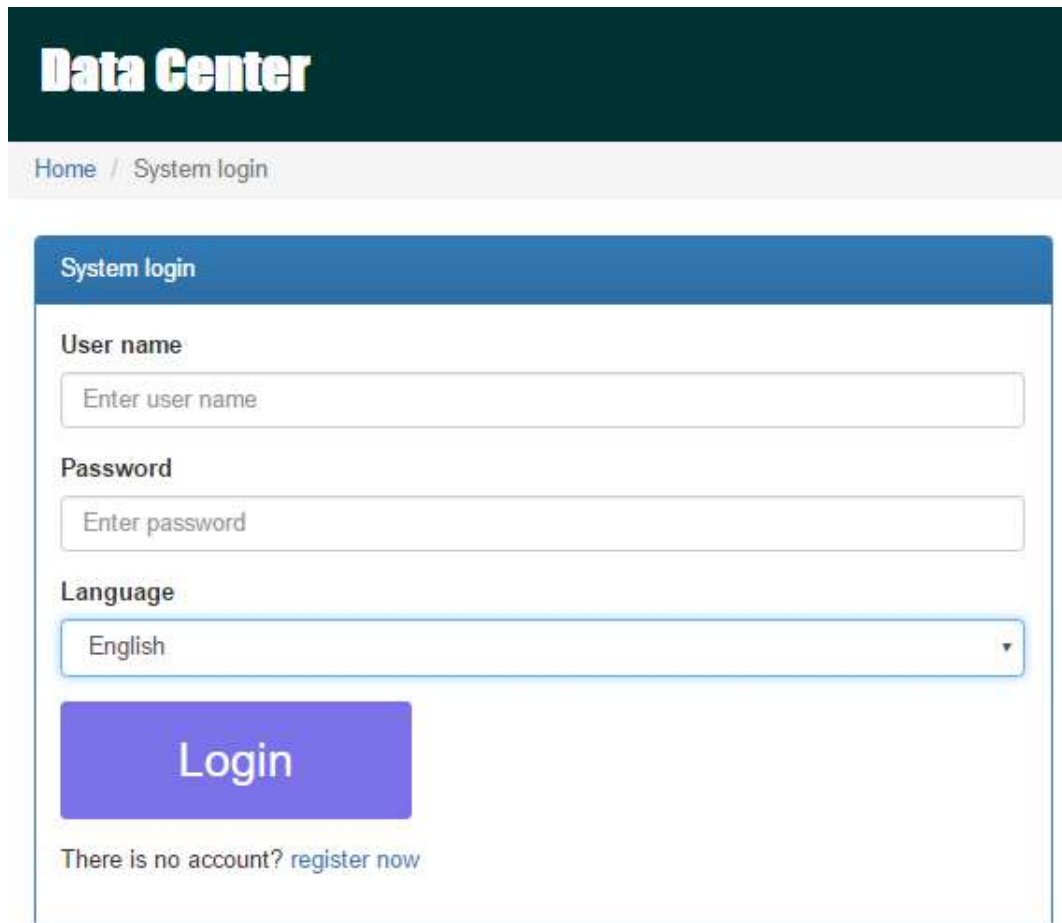
4. Connect data cable RJ-45 to Inverter or UPS. Please refer to the terminal of DB9 in Diagram 2-7 and RJ-45 in Diagram 2-8.
5. Use one input power cable to connect to **6** of GPRS Box.

- Password : It contains 6 ASCII characters, including number, capital letter and lower case letters.
- Confirm password : Re-enter the password which should be consistent with the one in Password.

2. Click  button to complete the registration

3.2 Login

After registration, you can log in the data center. The login page is shown as follow:



The screenshot shows the 'Data Center' header in white text on a dark green background. Below the header is a breadcrumb trail: 'Home / System login'. The main content area is titled 'System login' in a blue header. It contains three input fields: 'User name' with the placeholder 'Enter user name', 'Password' with the placeholder 'Enter password', and a 'Language' dropdown menu currently set to 'English'. A large purple 'Login' button is positioned below the input fields. At the bottom of the form, there is a link: 'There is no account? [register now](#)'.


After logging in, the main page of data center will be shown as below:


3.4 Device Manager

The screenshot shows a web interface for the Device Manager. At the top, there are two tabs: 'Bind device' and 'Assign device'. The 'Assign device' tab is active. Below the tabs is a form with four input fields: 'Device' (text input with value '92931312100028'), 'Device name' (text input with value 'Inverter 5KVA'), 'Device type' (dropdown menu with value 'Hybrid Inverter'), and 'Location name' (dropdown menu with value '5#4F'). Below the form are two buttons: 'Browse' (orange) and 'Bind' (blue). Below the buttons is a blue bar with the text 'List'.

1. Bind Device: Assign device to the location.

- Device: Fill in the serial numbers of the monitored device. (Serial number label is on the monitored device).
- Device name: Assign a name so that the users can directly identify which card or device it is.
- Device type: Select the type of monitoring device.
- Location name: Select the bound location of monitored device.

Click  to complete the assignment.

Click  to list the information of bound device.

2. Assign device

Please refer to section 3.6 under User management for detail instruction.

3.5 Monitor

Location : TestLocation

Card ID	12344678
SN	55355535553555

GPRS ✓

2016/11/15 09:51:48 0 minutes ago

PV input power	0	W
Grid voltage	0	V
Battery capacity	100	%

[Browse](#) [Delete](#)

Location : TestLocation2

1. It's grouped by locations, and all device in that location will be listed.
2. The message will be updated once every 5 minutes.
3. Click on [Browse](#) to show detail information on a new page.

Close

Monitor ☰

Status

Data

Event log

- Click on [Close](#) to close the window.

		Begin time	End time
Year	<input type="text" value="2016"/>	<input type="text" value="2016/11/15"/>	<input type="text" value="2016/11/15"/>
Per page	<input type="text" value="15"/>	<input type="text" value="00:00"/>	<input type="text" value="23:59"/>
			<input type="button" value="Browse"/>

	Device mode	Time	PV input voltage	PV input power	Grid voltage	Grid frequency	Battery voltage	Bat capacity
1	Battery	2016/11/15 09:56:57	0.0	0	0.0	0.0	55.6	10
2	Battery	2016/11/15 09:51:48	0.0	0	0.0	0.0	55.6	10
3	Battery	2016/11/15 09:46:45	0.0	0	0.0	0.0	55.5	10

➤ Event log: Historical events of currently monitored device.

		Begin time	End time
Year	<input type="text" value="2016"/>	<input type="text" value="2016/11/15"/>	<input type="text" value="2016/11/15"/>
Per page	<input type="text" value="15"/>	<input type="text" value="00:00"/>	<input type="text" value="23:59"/>
			<input type="button" value="Browse"/>

	Level	Time	Event	
1		2016/11/15 09:46:45	LINE_FAIL	<input type="button" value="Delete"/>


➤ Power generation data log: Power generation data of currently monitored device.

User list

Create Browse

*User name	end-user
Role	View
*Password	
* Company/Name	end-user-company
Address	end-user-address
Contact	end-user-contact
Telephone	end-user-tel
*E-mail	end-user-email
Create Close	

- After filling in the required fields, click on **Create** to complete the operation.

intended receiver. Check "Email notification" box and then click on  to confirm your input.

E-mail



Create time 2016/09/02 01:45:13



4 System Configuration

4.1 SMS Setting

4.1.1 SMS Format

The SMS starts with "GPRS+password" and ends with "APPLY." The default password is "12345678," and it is adjustable through "C^CPWD". One SMS can include several commands, and every command should be independently listed in single row. The response message will start with "GPRS" and its content might vary depending on different commands.

4.1.2 Command Format

Every command starts with "C^" or "C+." The setting starting with "C^" will be saved and permanently valid. The setting starting with "C+" is normal command, and will be invalid after GPRS/3G card resumes.

Every command has three possible applied methods. "CMD" stands for concrete commands, and "C_VALUE" stands for current value. "VALUE" represents setting value.

1. "CMD" or "CMD?" means you can search for the current value and trigger command set as default. For example: "C^CPWD" or "C^CPWD?" means you can search for current passwords for SMS setting. "C^RESTART" or "C^RESTART?" is an executive command which will restart GPRS/3G card.
2. Set "CMD=VALUE" as the top of the page.
For example, "C^CPWD=12345678" means the password is "12345678."

3. "CMD=?"

According to different command, it indicate the ranges of setting value (Refer to 4.1.3).

4.1.5 Command List

Command	Description	CMD/CMD? (Default)	CMD=?	CMD=VALUE
C^CID	ID of GPRS/3G Card	CID: XXXXXX ¹	CID:(1-100)	OK/ERROR
C^SURL	IP Address of server	SURL:http://www.power-datacenter.com/cmmq/dataCenter	SRUL:(8-100)	OK/ERROR
C^UPS	Duration of data update (second)	UPS:300	UPS:(5,10...86400)	OK/ERROR
C^BURL	IP address of transmitting update data	BURL:power-datacenter.com:58081	BRUL:(3-100)	OK/ERROR
C^BPS	Duration of transmitting data update (Second)	BPS:30	BPS:(5,10...600)	OK/ERROR
C^SNTP	SNTP Server	SNTP:time-a.nist.gov	SNTP:(1-100)	OK/ERROR
C^DBGL	Adjusted Level. It is not suggested to adjust.	DBGL:0	DBGL:(0,1...10)	OK/ERROR
C^FWV	Firmware version	FWV: XXXXXX ¹	FWV:(!)	ERROR
C^SMMG	Message Management. Multiple telephone numbers can be set to send the alarm and version update notification. Different numbers are separated by "," .	SMMG:	SMMG:(0-100)	OK/ERROR
C^SMAD	Messages contains added information. When GPRS/3G Card automatically sends messages to Message Management, it will add extra information.	SMAD:	SMAD:(0-100)	OK/ERROR
C^SMAR	Switch of alarm notification	SMAR:OFF	SMAR:(ON,OFF)	OK/ERROR
C^CPWD	Password for message. When the password is correct, the message will be read by GPRS/3G card.	CPWD:12345678	CPWD:(4-10)	OK/ERROR
C^UURL	Update address of firmware. After sending C+UPDATE, the system will get the device's firmware and update it.	<u>URL:http://www.power-datacenter.com/fw/gprs/GPRSFw.jad</u>	UURL:(10-100)	OK/ERROR
C^NITZ	Acquire system time with NITZ protocol.	NITZ:ON	NITZ:(ON,OFF)	OK/ERROR
C^TIMZ	Set up time zone. If C^NITZ is OFF, it will get GMT time from assigned time server through SNTP server (C^SNTP command). It will auto transfer to local time zone.	TIMZ:GMT+00:00	TIMZ:(3-9)	OK/ERROR

GPRS+12345678
C^UPS=60
APPLY

GPRS
OK

5. Set the password of SMS

GPRS+12345678
C^CPWD=87654
APPLY

GPRS
OK

6. Inquiry of daily generated power.

GPRS+12345678
C+QED?
APPLY

GPRS
ED,
12312312312312,2016,8,
00000000,00000000,0
0000000,00000000,00
000000,00000000,000
00000,00000000,0000
0000,00000000,00000
000,00000000,0

0000000,00000000,00
000000,00000000,000
00000,00000000,0000
0000,00000000,00000
000,00000000,000000
00,00000510,00002584
,00002549,-,-,-,-



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