



# HYX-DCS-WL/4G DATA COMMUNICATION STICK



Carefully read this inverter user instructions before using. Read and save these instructions.



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## **1. Safety Instructions**

In order to ensure the safety of the user's person and property when using the product and to use the product more efficiently and optimally, the manual provides relevant, the following symbols are used to highlight the information.

The following is a list of symbols that may be used in this manual and should be read carefully for better use.

#### 🚹 DANGER

 This symbol indicates a hazardous condition that may cause a risk of fatal electric shock, serious personal injury or fire.

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• This symbol indicates that in order to avoid potential safety hazards, the corresponding instructions must be strictly followed.

#### 

• This symbol indicates that the operator should pay careful attention and fully understand before performing the relevant operation.

Symbol	Description	Symbol	Description
X	Do not dispose of the inverter as household waste.	CE	CE mark of conformity.
	The symbol indicates DC voltage.	IP66	Degrees of protection against solid foreign objects and water IP66.

#### This product should be used with the following in mind:

- Before installation, ensure that all power flow to the inverter is disconnected.
- The site should be chosen away from flammable and explosive materials.
- It should not be forcibly disassembled or scrapped.
- Children should be supervised to ensure they do not play with
- Please note that only professional personnel should install or replace the DCS Smart Communication Stick.
- Do not attempt to repair the DCS Smart Stick without the permission of Huayuxin, as this may
  affect the warranty of the device. If there is damage, please send the product back to the Hyxi
  distributor for repair or replacement.
- Please read all instructions and warnings in this manual carefully before using this equipment.
- Please use the device in accordance with the installation or use instructions in this document, otherwise it may result in personal injury or equipment damage.

## **2. Product Introduction**

### 2.1 Product Description

HYXIPOWER Data communication stick (DCS) is equipped with HYXIPOWER inverter for use, and the inverter's power generation data is transmitted to HYXIPOWER monitoring platform through WiFi, Ethernet, and 4G.HYXIPOWER DCS comes in two versions: WLAN and 4G.

### 2.1.1 Product Highlights

### **Convenient installation**

- Plug-and-play, easy to install.
- Up to 10 inverters can be connected.

### Safe and Reliable

- Data transmission is encrypted to protect data security.
- Supports intermittent transmission to ensure no data loss.

### Intelligent Operation and Maintenance

- Support 4G, Ethernet, WiFi.
- Support local and remote software upgrade, parameter configuration, and alarm fault analysis.

## 2.2 Appearance Introduction



Indicator	Status	Description	
POWER ON		Power ON	
POWER	OFF	Power OFF	
	Solid Green	Connected to the server	
NET         Flashing         Connecting to the server           OFF         Disconnected from the server		Connecting to the server	
		Disconnected from the server	
	Solid Green	Normal communication with inverter	
COM.	Flashing	Communicating with the inverter	
	OFF	Communication with inverter failed	

### 2.2.1 Introduction of Indicator Lights and Key Functions

#### \* Reset button:

Press 2 times to restart, Press 3 times to enable local configuration (AP mode), Press 4 times to restore factory settings (Within 1 second between pressing).

### 2.3 Network Application

The DCS can monitor the operation information in the PV system in real time and upload this information to the backend.

The DCS can be directly connected to the Hyxi Smart Cloud Platform via Ethernet, wifi, 4G as shown in the figure below.



## 3. Installation

### 3.1 Install the smart communication stick (WIFI module)

- Step 1: Remove the waterproof cover at the communication interface of the inverter;
- Step 2: Insert the communication stick into the corresponding communication terminal at the bottom of the inverter and tighten it to make sure it is secure.



### 3.2 Install the smart communication stick (4G module)

- Step 1: Remove the protective cover of the stick and insert the SIM card;
- Step 2: Install the waterproof cover of the communication stick;
- Step 3: Remove the waterproof cover at the communication interface of the inverter;
- Step 4: Insert the communication stick into the corresponding communication terminal at the bottom of the inverter and tighten it to ensure it is secure.



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## 3.3 Installing the Smart Communication Stick (LAN Module)

- Step 1: Replace the bottom plug of the communication stick with the LAN plug;
- Step 2: Insert the network cable connector into the network terminal;
- Step 3: Remove the waterproof cover at the communication interface of the inverter;
- Step 4: Insert the communication bar into the corresponding communication terminal at the bottom of the inverter and tighten it to ensure it is secure.







## 4. Human-Computer Interaction

## 4.1 Installing the App

### Method 1

Download and install the App through the following application stores:

- App Store (iOS).
- Google App market (Android, users other than mainland China ones).

### Method 2

Scan the following QR code to download and install the App according to the prompt information:



### 4.2 APP User manual

For more information on using the HYXiPower APP, please refer to the user manual "HYXiPower APP".



## 4.3 System debugging

For system configuration and debugging, please refer to the user manual "HYXipower Local Debugging APP".



## 5. Troubleshooting

Code	Description	Solution	
1	Unable to search for WiFi signal	<ol> <li>Check and confirm that the inverter is powered on and running, the WiFi module is firmly installed, and the pow light is on.</li> <li>Try to move your smartphone close to the inverter to confirm whether the signal can be successfully searched signal can be successfully searched.</li> </ol>	
2	Unable to search home router's wireless network	<ol> <li>Refresh the router list.</li> <li>Try to move the router closer to the inverter, make sure there is no metal object between them between them.</li> <li>Confirm that the router supports WiFi2.4GHz band and the wireless signal covers to the location of the inverter.</li> </ol>	
3	Unable to connect home router's wireless network	<ol> <li>Confirm that the access password of the router is correct, and pay attention to distinguish between upper and lower case letters.</li> <li>If the user has modified the router's wireless network name or access password, please reconnect to the router's wireless network. Please reconnect to the router's wireless network.</li> <li>Try to move the router closer to the inverter to make sure the distance between them is within the valid range, within the effective range.</li> <li>If there are multiple routers in the home, make sure each router wireless network name is not the same. If the same wireless network name exists, please change it.</li> </ol>	
4	Cannot view any operational data	1. Check the NET indicator light on the DCS module. If the indicator light is not on, please check if the router can connect to the network normally, if the 4G card is plugged in properly, and if the 4G card is not overloaded.	

# 6. Appendix

## 6.1 Technical Parameter

Product Model	HYX-DCS-WL	HYX-DCS-4G		
General Data				
Max. Inverters Supported	10	10		
Data Acquisition Interval	Default: 5 mins (1-1	Default: 5 mins (1-15 mins Configurable)		
Connection interface	L	JSB		
Installation	10M / 100M Ethernet	/		
Enthernet Interface	Plug-and-play	Plug-and-play		
Indicator	LED	LED		
Dimensions (W*H*D)	144*41*33mm	122*41*33mm		
Weight	68g	64g		
Enclosure Rating	IP66	IP66		
Power consumption	1W	2W		
Input	5V/1A	5V/1A		
Wireless Parameter				
Supported standards & frequencies	802.11b/g/n	4G: LTE-FDD / LTE-TDD 3G: SCDMA 2G: GSM / GPRS		
Environment				
Operating Ambient Temperature	- 30 to +65°C			
Relative humidity range	0 ~ 100%RH,	0 ~ 100%RH, Non-condensing		
Storage temperature range	-40 te	-40 to +70°C		
Max. operating altitude	400	4000mm		

## 6.2 Frequency Range & Transmitted Power

	Frequency Range		Transmitted Power
	B1	1920MHz2170MHz	<24dBm
	В3	1710MHz1880MHz	<24dBm
	В7	2500MHz2690MHz	<24dBm
LTE	B8	880MHz960MHz	<24dBm
	B20	791MHz862MHz	<24dBm
	B28	703MHz803MHz	<24dBm
	B38	2570MHz2620MHz	<24dBm
	B40	2300MHz2400MHz	<24dBm

	Frequency Range		Transmitted Power
WCDMA	B1	1920MHz2170MHz	<24.5dBm
VVCDIMA	B8	880MHz960MHz	<24.5dBm
GSM	900	870MHz960MHz	<33.5dBm
	1800	1710MHz1880MHz	<30.5dBm
WiFi	2400MHz2483MHz		<14dBm

### 6.3 Contact Information

If you have any questions about this product, please contact us.

In order to provide you with faster and better after-sales service, we need your assistance in providing the following information.

- Equipment model: \_\_\_\_\_\_
- Serial number of the device:
- Fault code / name: \_\_\_\_\_\_
- A brief description of the fault phenomenon: \_\_\_\_\_\_

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The manual is subject to change without notice while the product is being improved.



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