# Single-phase Remote Control Meter (WiFi) Quick Guide Model: DDZY422-D2

### 1. Product Introduction

Single-phase Remote Control Meter (WiFi) (DDZY422-D2) is applied for energy management purpose, and it works to measure and control electricity consumption of PV system, power system, construction industry and etc,. A real-time, accurate and quick measurement of voltage, current, active power, frequency, power factor, positive/negative active energy and etc, has been realized.

## 2, Parameters

	Parameter	Value
Commun i	Wireless Type	WiFi
cation	Working Frequency	2. 412GHz~2. 484GHz
	Local COM	R\$485
	Serial Parameter	Address 001、9600bps、E、8、1
	Data Interval	5 mins
Meter	Rated Voltage	AC 230V 5(60) A 50/60Hz
	Power Range	0∼999999. 99kWh
	Accuracy Class	1.0
	Consumption	<b>≪3.5</b> ₩
Environ	Working	−30°C~+70°C
ment	Temperature	
	Relative Humidity	$\leqslant$ 85%(No condensation), Altitude<3000m
	Atmospheric	70kPa~106kPa
	Pressure	
	Transportation &	Temperature: -40°C∼85°C, Relative Humidity≤85%
	Storage	

## 3、Display

3.1 Display Panel (Note: "\*" represents single number, "#" represents "-" .) Flip-screen Mode: Auto-flip in 2s/Click to flip the screen.

No.	Content	Display	Unit	No.	Content	Display	Uni
		Form				Form	t
1	Positive Active Total	****	kWh	5	Current	L #**	Α
	Energy (High 4-bit)						
2	Positive Active Total	** <sub>.</sub> **	kWh	6	Power	P #**	kW
	Energy (Low						
	4-bit)(Two decimal )						
3	MODBUS COM Address	A ***		7	Power Factor	PF *.*	
4	Voltage	U ***	V	8	Frequency	F **.*	

3.2 Display of Positive Active Total Energy (4-bit liquid crystal, 2 decimal)

Data is less than 99.99,	Data is greater than 99.99,
E,g. "68.52":	E.g. "220968.52":
0000 68.52	2209 68.52

# 4. Interface Instruction

U		Switch	Close: Press for 3s
	В	RS485 A Receive&Send Data	Address 001, 9600bps, E, 8, 1
- + B A	Α	RS485 B Receive&Send Data	
	+	Pulse Port	
	_	Pulse Port	Calibration Interface
LI LI	L↓	L-Line In	L-line Interface
	LŤ	L-Line Out	
N	N	N-Line In&Out	N-Line Interface
485B485A	485B	RS485 B Receive&Send Data	
<u> </u>	485A	RS485 A Receive&Send Data	Address 001、9600bps、E、8、1
485 A 485B	Pin1	RS485 A Receive&Send Data	
	Pin2	RS485 B Receive&Send Data	Address 001、9600bps、E、8、1

Notice: RS485A, RS485B of Pin, Female Header are directly connected.

# 5. Indicator Lights

Indication	Identification	Status
<b>U</b>	ON/OFF Switch (Green)	1.On: Close 2.Off: Open
P	Electric Energy Pulse (Red)	1. Flash: According to consumption status. (1200 times means 1kWh)
СОМ	Communicate with Meter (Green)	<ol> <li>1. On: Connect to meter.</li> <li>2. On 400ms/Off 1600ms: Initializing.</li> <li>3. On 400ms/Off 400ms:Data transmitting between module and meter.</li> <li>4. Off: Fail to connect to meter.</li> </ol>
SER	Communicate with Server (Green)	<ol> <li>1. On: Connect to server.</li> <li>2. On 400ms/Off 1600ms: Initializing.</li> <li>3. On 400ms/Off 400ms: Fail to connect to server.</li> </ol>
NET	Running status	<ol> <li>1. On 64ms/Off 2000ms: Running normally.</li> <li>2. On/Off: WiFi module abnormal.</li> </ol>

# 6. Installation Diagram

6.1 Installation Position: Grid Side



6.2 Installation Position: Production Side



6.3 Installation Position: Consumption Side



# USER MANUAL for SOLARMAN APP

1. Download app



You can also login via WEB as below: pro.solarmanpv.com home.solarmanpv.com

#### 2. Registration on SOLARMAN SMART

Go to SOLARMAN SMART and register. Click "Register" and create your account here.

		English 🗸	← Reg	gister
	🌀 SOLARMAN Sn	nart	Phone Number	E-mail
E-m E-m	nail Phone Number Usern nail	ame	E-mail Please enter E-mai	11
Pas	ssword	(See	Verification Code Please enter verifica	ation code Retrieve Xa
			Password	
			Password	فيعط
	Log In		Password length must be grea	iter than 6 bits
Register		Forgot Password?		

### 3. Create a Plant

Click "Add Now" to create your plant. Please fill in plant basic info and other info here.

My Plants	+	<	Plant Details	
		Basic Info		
		Plant Name	Demo plant-Commercial >	
		Plant Loc	Zhwjiang yuyao 🔅	
111		Time Zone	((UTC+08:00)Beijing,Chongqing, HongKong,Urumqi	
111		Creation Date	2019-05-04 >	
You have no plants for now.		Founder	Clavin >	
		System Info		
Add Now		Plant Type	Residential Rooftop >	
		System Type	All on Grid >	
		Installed Capacity	(kWp) 18350 >	
Plant Mu			Finish	

4. Add a Device

Method 1: Enter logger SN manually.

Method 2: Click the icon in the right and scan to enter logger SN You can find logger SN in the external packaging or on the logger body.

10:14 AM		10:14 AM		•••••
My Plants	+	$\leftarrow$	Add a Logger	
and all	☆ Create a Plant	Please enter will calculate	the logger SN belongs to the plant data according to the	ne plant. System logger.
Prof.	Add a device	SN Please		Э
Demo plant-Micro 88.00W	inverter		Cannot Fi	nd SN/Barcode?
Current Production Power	roduction-Today			
45.38K CNY 7 Anticipated Yield- Today	73.30K CNY Icipated Yield-This Month			
	05 200			
	13.030			

### 5. Meter Configuration

The aim of meter configuration is to send meter data to platform and calculate meter data.

### 5.1 Add a meter to plant via logger

SOLARMAN platform does not support adding a meter directly. Users can add a logger first and logger will send meter data to platform.

Connect the devices first. After logger is powered on and data is transmitting, target meter will be listed on device list.

$\leftarrow$	Device info	+					
Inverter	No. of Connections:1						
Logger	Meter 0	nline					
Meter	Meter config	juration					
	Loaded						

5.2 Meter Configuration

Go to  $\ \lceil \ Device \ Info \ \rfloor$  and click "Configure" button. Configure the meter according to installation location



#### 6.Network Configuration

After the logger is added, please configure the network to ensure normal operation.

Go to "Plant Details"-"Device List", find the target SN and click "Networking".

10:14 AM		·····	
$\leftarrow$	Device Details	+	
Inverter	No. of Connections: 2		
Logger	Logger SN:123341245	Normal	
Meter	Select associated device Device	Networking	
Module	Logger	Office	
	Devic	Networking	

### Step 1: Confirm Wi-Fi Info

Please make sure your phone has connected to the right WiFi network. And click "Start".

Motice: 5G WiFi is not supported	
Avoid the use of special characters in Wi	Finetworks (, ; = """)
	Halitani www.∎ ← SN:2312423 ≓
	Password  App_only Change network
	6 ******
	50 finaciancy leard is not supported Please connect to 2.45 frequency land. Start to configure
	Reminder 1. Please make sure the signal strength of WI-FI is good 2.During the configuration, some Android phones will prompt that the current network is not available. Please ignore the prompt.

Click "Go to connect" and find the right "AP\_XXXXX" network (XXXXX refers to logger SN).

If the password is required, you can find the password on the logger body.

Go back to SOLARMAN Smart APP, after connecting to AP network.

Go to WLAN Setting and connect the	< settings WLAN				
following network manually	WLAN	≜ 奈 ①			
Android 🗣 🛈	MY NETWORKS				
AP_622602179	Android	<b>?</b> 0			
KODASG A 🕈 O	ChinaNet	<b>≜ 奈</b> ()			
Some devices might need a password	AP_622602179	<del>ç</del> ()			
to connect the network. You can find the password on the device enclosure.	HYH123	â <del>?</del> 0			
Onnected.	IGEN-5G	≜ 奈 ①			
Go to connect	OTHER NETWORKS				
	act-blue	<del>?</del> 0			
Cancelar	ChinaNet-igen	<b>≜ 奈</b> ①			

### Step 3: Auto Configuration

Please wait for a while to complete the configuration. Then system will switch to the following page.

Click "Done" to check plant data. (Usually, the data will be updated in 10 mins)

10:14 AM			10:14 AM	
<del>(</del>	Device Configuration			
	A A			
			Configu	uration succeeded
Please	e shorten the distance between the or router and phone.	levice,	Device data will be you can check	displayed in 10 mins. After that, device status in device list.
<b>o</b> c	Connect to device			
€) (	Configuring			
•	lestart			
•	/erified		-	
				Done

If configuration failure occurs, please check the following reason and try it again.

- (1) Make sure WLAN is ON.
- (2) Make sure WiFi is normal.
- (3) Make sure wireless router does not implement the white-black list.
- $(4)\,$  Remove the special characters in Wi-Fi network.
- (5) Shorten the distance between the phone and device.
- (6) Try to connect to other Wi-Fi.