Specifications

MS-W-09

## Contents

1. Product description

The Wi-Fi Plug Pro-22 wireless accessory product is used to extend the Wi-Fi wireless network data transmission channel of the device. It is fixed on the device through a four-pin aviation interface (RS-485), has an IP65 protection level, and is easy to install , Strong anti-interference ability, no need to configure additional power supply and other advantages;and supports remote control, remote debugging, remote upgrade and other functins of the device; access to the cloud server with the help of a router ,so as to provide users with a complete remote, low-cost and visual monitoring solution.

Wi-FiPlugPro-22Productnetworking solution

Inverter	Inverter	Inverter	Inverter
RS-485	RS-485	RS-485	RS-485
MS-W-09	MS-W-09	MS-W-09	MS-W-09
Wi-Fi	Wi-Fi	Wi-Fi	Wi-Fi

router

Ethernet

Cloud server — 4G — camera

Ethernet | Wi-Fi | Wi-Fi/4G

Web | Center | APP
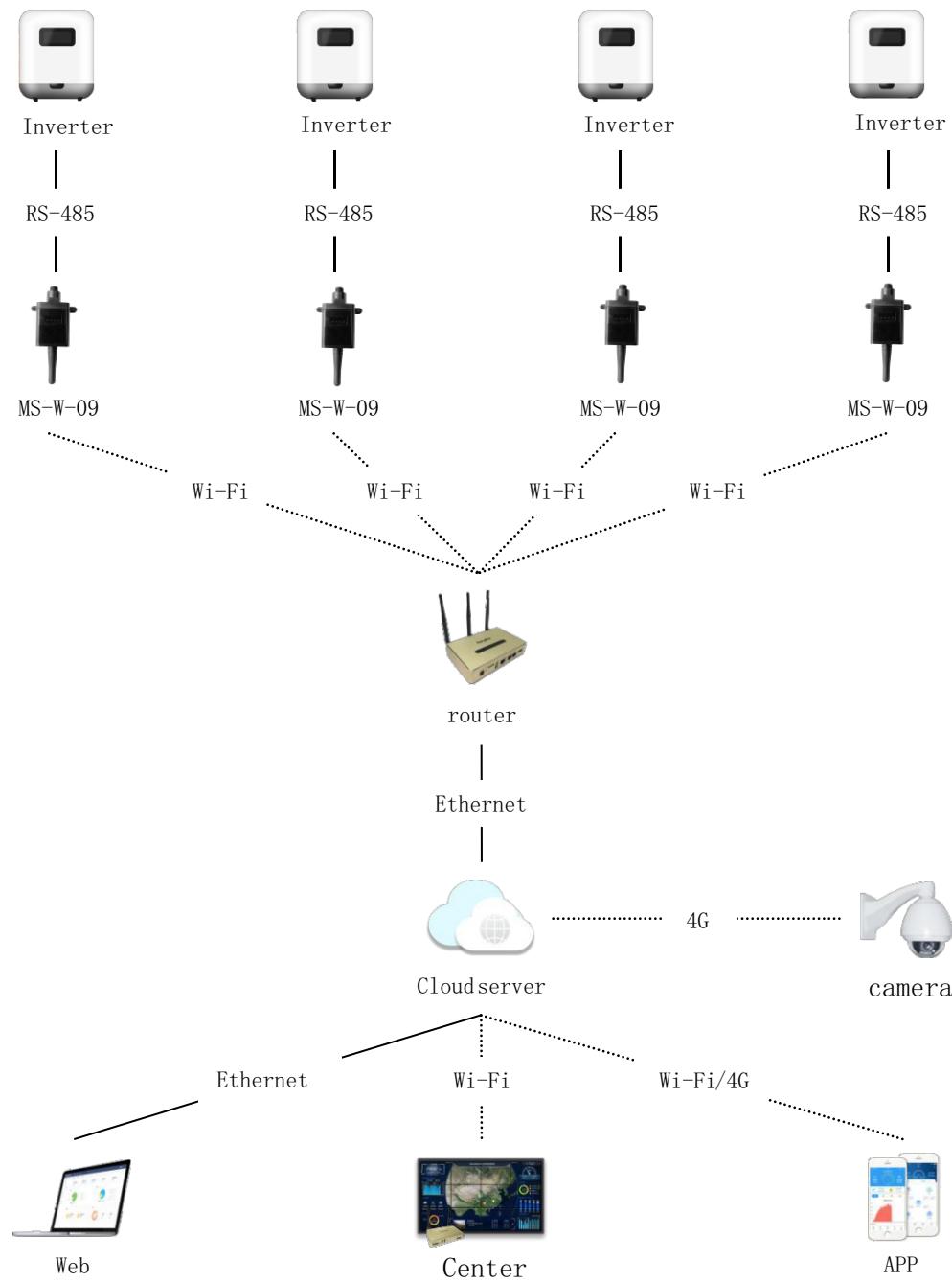
2. Product Features

2.1Easytouse

1、Simple installation: plug and play；

2、Simple replacement loss: external plug type, no need to disassemble the equipment, safe and fast;

3、Simple configuration: proximal setting (APP), remote setting；

4、Simple maintenance: remote debugging, remote firmware upgrade (including inverter)；

5、Easy to use: Power up first, second is networking, third is registration；

6、Convenient power supply: direct power from the device end, without external power supply；

7、Simple barrier arrangement: direct light transmittance LED, intuitive understanding of the working state；

2.2 General

1、Device selection：Industrial grade device, workable in - 30 ~ + 85 ℃ for a long time；

2、Protection measures：Undervoltage protection + lightning protection design, software watchdog + hardware watchdog；

3、Stability mechanism：Heartbeat detection, networking retry, automatic repair of device disconnection；

4、Data security：Private protocol, data verification, network disconnection and continuous transmission（Not afraid of network outages）；

5、Wide - pressure design：DC5 ~ 12V wide voltage design, built-in power supply reverse connection function；

6、Waterproof outdoor：IP65 protection class, suitable for outdoor environment。

2.3 Flexible

1、Protocol adaptation: support a variety of communication protocol automatic recognition and switching；

2、Remote and local: with APP, remote and local monitoring can be realized simultaneously；

3、On-site matching parameters: With APP, device parameters can be viewed and configured on site。

3. Product appearance

20.11

16.50

59.00   50.00   9.00

45.22

21.00   32.00

27.00
70.00

Ø9.8

54.2

WIFI — ①

② Ø13.8

1 red line
2 black line
3 null
4 null
5 null
6 null
7 green line
8 blue line

Stickers

100±5

1000±20

44.6

④

⑤

③②

Ø5

red
black

blue
green

Front view of female head
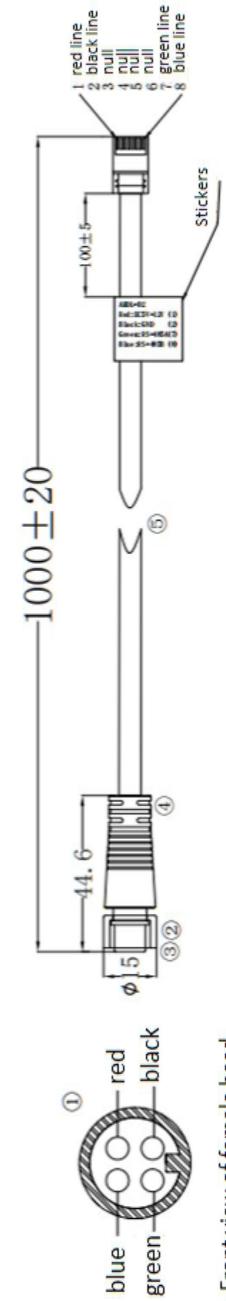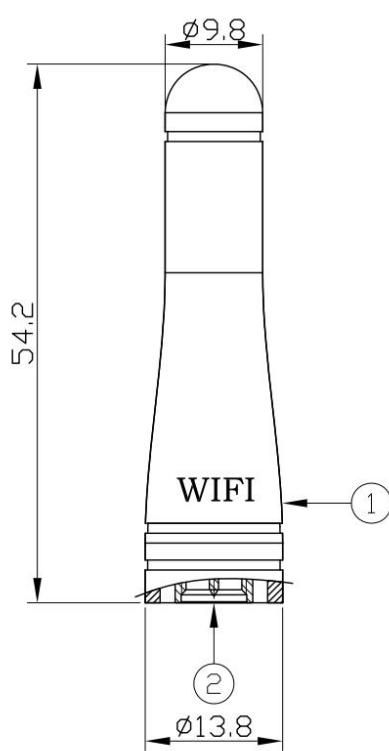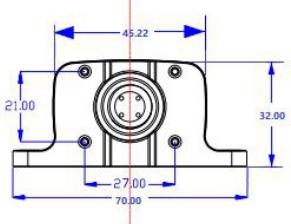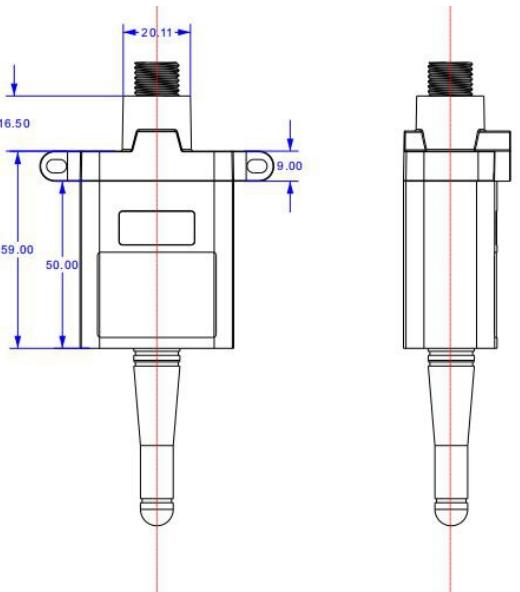
AHDL-02
Red:DC5V-12V (1)
Black:GND   (2)
Green:RS-485A(7)
Blue:RS-485B   (8)

4. Product interfaces

4.1 Port definitions

Pin	RS485 Communication	Description
1	VCC	External DC voltage DC5V~12V
2	RS485A/+	RS485 portA/+
3	RS485B/-	RS485 portB/-
4	GND	Power ground

4.2 Indicator light definition

Number	STAIN	Description
1	PWR/power	ON : External power input
2	COM/equipment	ON : Subordinate devices respond
3	NET/networking	ON : Connect to Base Station
4	SRV/Cloud server	ON : Connect to the specified server

4.3 Crystal Head definitions

PIN	Pin definition	Describe
1	VCC	Red line External DC voltage DC5V~12V
2	GND	Blackline Power ground
3	NC	NC
4	NC	NC
5	NC	NC
6	NC	NC
7	RS485A/+	Green line RS485 portA/+
8	RS485B/-	Blueline RS485 portB/-

5. Product specification

category	entry	parameters
General parameters	Dimensions	70*27*137mm
	Weight	66g
	Protection class	IP65
	Rated voltage	DC5V~12V
	Maximum current	800mA(DC5V)
	Operation temperature	-30℃ ～ +85℃
	Storage temperature	-40℃ ～ +90℃
External interface	Mode of docking	HKJ(Aviation joint)
	work indicating lamp	Indicator light: power supply, equipment, router, server, always on normal, off abnormal
Hardware	Data entry mode	RS-485
	Data output mode	Wi-Fi
	RS-485 Baud rate	9600bps(default)
	Hardware watchdog	support
Wi-Fi	Working frequency	2.4GHz
	WLAN STANDARD	802.11b/g/n
	Antenna gain	2.5dBi
	Antenna	External
	Data rate	11Mbps@11b, 54Mbps@11g, 72Mbps@11n
	Hardware encryption	WEP, WPA/WPA2
	Communication distance	100M (open environment)
	Operating mode	AP+STA(Coexistence pattern)
Software	Supported device protocols	Modbus-RTU (main current), Non Modbus-RTU
	Supported network layer protocols	Modbus-TCP
	Language	Chinese、English
	Software watchdog	support
	Data upload cycle	5min (default)
	Parameter configuration mode	APP or Built-in server
	Number of clients in AP mode	1 (preemptive)
	Cloud platform	Eybond Value Clouds
Others	Number of connected devices	1
	Warranty	2 years
	Certification	CE,ROHS