

## 微型不间断电源（风光储型）

## Micro Uninterruptible Power Supply Solution (Wind, Solar and Energy Storage Type)

WS-EPW 系列

WS-EPW Series

### 1、系统简介 System Introduction

本电源内置威胜自主研发的主备双回路自切换装置，默认通过市电作为主回路、微型不间断电源作为备用回路为物联网设备如表计、终端、安防、信号中继等负载供电。其中，备用回路的电能来源为风-光-储互补系统。当主回路断电后，不间断电源内置的自动切换装置快速切换至备用回路为负载供电，助力负载全年度 24 小时不间断运行。

This power supply has built-in main dual-loop self-switching device independently developed by Wasion. By default, it uses municipal electricity as the main circuit and micro uninterruptible power supply as the standby circuit to supply power for the load of Internet of Things devices such as meter, terminal, security, signal relay and so on. Among them, the power source of the standby circuit is the wind-photovoltaic Energy Storage complementary system. The built-in automatic switching device of uninterruptible power supply switches quickly to the standby circuit to supply power to the load once the main circuit is suddenly cut off, making that the load runs uninterruptedly all the year round.

### 2、系统组成 System Composition

主要由风力发电装置、光伏发电装置、不间断电源系统等组成。不间断电源系统内置电池、电池管理、控制、变流、双回路自切换、通讯、接地等装置；

The system is mainly composed of Wind and solar power generation device and uninterrupted power supply system. Uninterruptible power supply system has many device such as built-in battery, battery management, control, converter, dual-loop self-switching, communication, grounding and so on.

### 3、适用场景 Application

光照条件较差、连续阴雨天气超过 7 天、表计/终端/安防/信号中继等物联网设备需要 24 小时不间断运行的应用场景

Application scenarios in which the Internet of Things devices, such as meter, terminal security, signal relay equipment, need work continuously for 24 hours in the case of poor sunshine condition or continuous rainy weather more than 7 days.

### 4、系统特点 System Features

主备双回路供电，毫秒级快速切换

Main and standby dual-circuit power supply, millisecond fast switching

主备双回路相互独立，备用回路工作时不影响主回路供电和计量可靠性

Independent main and standby double loops, in which standby loop does not affect the reliability of power supply and measurement of the main loop.

风光储互补供电，真正实现 365 天\*24 小时不间断运行

Complementary power supply of wind, solar and battery storage, realizing uninterrupted operation of 365 days \* 24 hours

DC12V、DC24V、AC100V、AC220V 多种电压可选

Various voltage options for DC12V, DC24V, AC100V and AC220V

常温和低温两种版本，覆盖高低温应用场景

Normal and low temperature versions, covering high and low temperature application scenarios

体积小，重量轻，IP54 防水

Small size, light weight, Waterproof grade of IP54

8 年设计寿命

8-year designed life

**5、系统参数** System Parameters

微型不间断电源（风光储型）

Micro Uninterruptible Power Supply (Wind, Solar and Energy Storage Type)

型号：WS-EPW 系列

Model: WS-EPW Series

项目 Item	参数类型 Parameter Types	技术指标 Technical Indicators
微型不间断电 源  Micro Uninterruptibl e Power Supply	直流输入电压范围（V） DC Input Voltage Range (V)	10~70
	最大直流输入电流（A） Maximum DC input current  (A)	10
	最大交流输入电压（V）	250

Maximum AC Input Voltage (V)	
最大交流输入电流 ( A ) Maximum AC input current (A)	5
供电时间 ( 天 ) Power supply time (Day)	365 天*24h 不间断 365 days * 24 hours uninterrupted
额定输出电压 ( 电压可选 ) ( V ) Rated Output Voltage (Voltage Optional) (V)	AC100/220 , DC12/24
交流输出频率范围 ( Hz ) AC Output Frequency Range (Hz)	50±3
额定输出功率 ( W ) Rated output power (W)	25/50/100
系统最高效率 Maximum System Efficiency	92%
保护 Protection	过载保护、短路保护 Overload protection, short circuit protection
设计寿命 ( 年 )	8

	Design Life (Year)	
	工作温度范围 ( °C ) Working Temperature Range (C)	0~55 ( WS-EPW 系列常温型 ) 0-55 (WS-EPW series of room temperature type) -20~55 ( WS-EPW-C 系列低温型 ) -20-55 (WS-EPW-C series of low temperature type)
	主备切换时间 ( ms ) Master-standby switching time (ms)	≤70
	尺寸 ( 不含安装件 ) ( W*D*H ) Dimensions (excluding fittings) (W*D*H)	300*280*94.5
	本体重量 ( 不含安装件 ) ( kg ) Body weight (excluding fittings) (kg)	7
光伏发电 Photovoltaic Power Generation	最大输出功率 ( W ) Maximum Output Power (W)	100
	工作温度范围 ( °C ) Working Temperature Range (C)	-40~85
	重量 ( kg )	7

	Weight (kg)	
	尺寸 ( mm ) Dimension (mm)	920*670*50
风电 Wind Power Generation	最大输出功率 ( W ) Maximum Output Power (W)	100
	启动风速 ( m/s ) Start-up wind speed (m/s)	2
	额定风速 ( m/s ) Rated wind speed (m/s)	10
	安全风速 ( m/s ) Safe Wind Speed (m/s)	55
	重量 ( kg ) Weight (kg)	6
	风轮直径 ( m ) Wind wheel diameter (m)	1.1
	工作温度范围 ( °C ) Working Temperature Range (C)	-40~80℃
储能 Energy Storage	电池类型 Battery type	常温型：磷酸铁锂电池 Normal temperature type: lithium iron phosphate battery  低温型：钛酸锂或胶体铅酸电池

		Low temperature type: lithium titanite or colloidal lead-acid battery
	额定电压 ( V ) Rated voltage(V)	12
	额定功率 ( W ) Rated power(W)	100

## 6、产品图片 Product Pictures

风电 Wind Power

光伏 PV

电源 Power Supply



# 微型不间断电源（光储型）

## Micro Uninterruptible Power Supply Solution (Photovoltaic Energy Storage Type)

WS-EP 系列

WS-EP Series

### 1、系统简介 System Introduction

本电源内置威胜自主研发的主备双回路自切换装置，默认通过市电作为主回路、微型不间断电源作为备用回路为物联网设备如表计、终端、安防、信号中继等负载供电。其中，备用回路的电能来源为光-储互补系统。当主回路断电后，不间断电源内置的自动切换装置快速切换至备用回路为负载供电，助力负载全年度 24 小时不间断运行。

This power supply has built-in main dual-loop self-switching device independently developed by Wasion. By default, it uses municipal electricity as the main circuit and micro uninterruptible power supply as the standby circuit to supply power for the load of Internet of Things devices such as meter, terminal, security, signal relay and so on. Among them, the power source of the standby circuit is the photovoltaic Energy Storage complementary system. The built-in automatic switching device of uninterruptible power supply switches quickly to the standby circuit to supply power to the load once the main circuit is suddenly cut off, making that the load runs uninterruptedly all the year round.

### 2、系统组成 System Composition

主要由光伏发电装置、不间断电源系统等组成。不间断电源系统内置电池、电池管理、控制、变流、双回路自切换、通讯、接地等装置；

The system is mainly composed of photovoltaic power generation device and uninterrupted power supply system. Uninterruptible power supply system has many devices such as built-in battery, battery management, control, converter, dual-loop self-switching, communication, grounding and so on.

### 3、适用场景 Application

光照条件较好、连续阴雨天气不超过 7 天、表计/终端/安防/信号中继等物联网设备需要 24 小时不间断运行的应用场景

Application scenarios in which the Internet of Things devices, such as meter, terminal security, signal relay equipment, need work continuously for 24 hours in the case of good sunshine condition or continuous rainy weather less than 7 days.

### 4、系统特点 System Features

主备双回路供电，毫秒级快速切换

Main and standby dual-circuit power supply, millisecond fast switching

主备双回路相互独立，备用回路工作时不影响主回路供电和计量可靠性

Independent main and standby double loops, in which standby loop does not affect the reliability of power supply and measurement of the main loop.

风光储互补供电，真正实现 365 天\*24 小时不间断运行

Complementary power supply of wind, solar and battery storage, realizing uninterrupted operation of 365 days \* 24 hours

DC12V、DC24V、AC100V、AC220V 多种电压可选

Various voltage options for DC12V, DC24V, AC100V and AC220V

常温和低温两种版本，覆盖高低温应用场景

Normal and low temperature versions, covering high and low temperature application scenarios

体积小，重量轻，IP54 防水

Small size, light weight, Waterproof grade of IP54

8 年设计寿命

8-year designed life

**5、系统参数 System Parameters**

微型不间断电源（光储型）

Micro Uninterruptible Power Supply (Photovoltaic Energy Storage Type)

型号：WS-EP 系列

Model: WS-EP Series

项目 Item	参数类型 Parameter Types	技术指标 Technical Indicators
微型不间断电 源 Micro Uninterruptib le Power	直流输入电压范围（V） DC Input Voltage Range (V)	10~70
	最大直流输入电流（A） Maximum DC input current (A)	10
	最大交流输入电压（V） Maximum AC Input Voltage (V)	250



Supply	最大交流输入电流 ( A ) Maximum AC input current (A)	5
	供电时间 ( 天 ) Power supply time (Day)	365 天*24h 不间断 365 days * 24 hours uninterrupted
	额定输出电压 ( 电压可选 ) ( V ) Rated Output Voltage (Voltage Optional) (V)	AC100/220 , DC12/24
	交流输出频率范围 ( Hz ) AC Output Frequency Range (Hz)	50±3
	额定输出功率 ( W ) Rated output power (W)	25/50/100
	系统最高效率 Maximum System Efficiency	92%
	保护 Protection	过载保护、短路保护 Overload protection, short circuit protection
	设计寿命 ( 年 ) Design Life (Year)	8
	工作温度范围 ( °C ) Working Temperature Range (C)	0~55 ( WS-EP 系列常温型 ) 0-55 (WS-EP series of room temperature type) -20~55 ( WS-EP-C 系列低温型 ) -20-55 (WS-EP-C series of low temperature type)
	主备切换时间 ( ms ) Master-standby switching	≤70

	time (ms)	
	尺寸 ( 不含安装件 )( W*D*H ) Dimensions (excluding fittings) (W*D*H)	300*280*94.5
	本体重量 ( 不含安装件 )( kg ) Body weight (excluding fittings) (kg)	7
光伏发电 Photovoltaic Power Generation	最大输出功率 ( W ) Maximum Output Power (W)	100
	工作温度范围 ( °C ) Working Temperature Range (C)	-40~85
	重量 ( kg ) Weight (kg)	7
	尺寸 ( mm ) Dimension (mm)	920*670*50
储能 Energy Storage	电池类型 Battery type	常温型：磷酸铁锂电池 Normal temperature type: lithium iron phosphate battery 低温型：钛酸锂或胶体铅酸电池 Low temperature type: lithium titanite or colloidal lead-acid battery
	额定电压 ( V ) Rated voltage(V)	12
	额定功率 ( W )	100

	Rated power(W)	
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## 6、产品图片 Product Pictures

光伏 PV

电源 Power Supply



## 微型不间断电源（储能型）

# Micro Uninterruptible Power Supply Solution (UPS Type)

WS-E 系列 WS-E series

## 1、系统简介 System Introduction

本电源内置威胜自主研发的主备双回路自切换装置，默认通过市电作为主回路、微型不间断电源作为备用回路为物联网设备如表计、终端、安防、信号中继等负载供电。其中，备用回路的电能来源为 UPS 式储能装置系统。当主回路断电后，不间断电源内置的自动切换装置快速切换至备用回路为负载供电，助力负载全年度 24 小时不间断运行。

This power supply has built-in main dual-loop self-switching device independently developed by Wasion. By default, it uses municipal electricity as the main circuit and micro uninterruptible power supply as the standby circuit to supply power for the load of Internet of Things devices such as meter, terminal, security, signal relay and so on. Among them, the power source of the standby circuit is UPS energy storage device system. The built-in automatic switching device of uninterruptible power supply switches quickly to the standby circuit to supply power to the load once the main circuit is suddenly cut off, making that the load runs uninterruptedly all the year round.

## 2、系统组成 System Composition

主要由不间断电源系统等组成。不间断电源系统内置电池、电池管理、控制、变流、双回路自切换、通讯、接地等装置；

The system is mainly composed of uninterrupted power supply system. Uninterruptible power supply system has many device such as built-in battery, battery management, control, converter, dual-loop self-switching, communication, grounding and so on.

## 3、适用场景 Application

频繁停电，但单次停电时长不超过 3 天、表计/终端/安防/信号中继等物联网设备需要不间断运行的应用场景

Application scenarios in which the Internet of Things devices, such as meter, terminal security, signal relay equipment, need work continuously for 24 hours in the case of frequent electricity outages and no more than 3 days each time.

## 4、系统特点 System Features

主备双回路供电，毫秒级快速切换

Main and standby dual-circuit power supply, millisecond fast switching

主备双回路相互独立，备用回路工作时不影响主回路供电和计量可靠性

Independent main and standby double loops, in which standby loop does not affect the reliability of power supply and measurement of the main loop.

真正实现 3 天\*24 小时不间断运行

Realizing uninterrupted operation of 3 days \* 24 hours

DC12V、DC24V、AC100V、AC220V 多种电压可选

Various voltage options for DC12V, DC24V, AC100V and AC220V

体积小，重量轻，IP54 防水

Small size, light weight, Waterproof grade of IP54

8 年设计寿命

8-year designed life

**5、系统参数 System Parameters**

微型不间断电源（ ）

Micro Uninterruptible Power Supply (UPS Type)

型号：WS-E 系列

Model: WS-E Series

项目 Item	参数类型 Parameter Types	技术指标 Technical Indicators
微型不间断电源 Micro Uninterruptibl e Power Supply	输入电压范围（ V ） AC Input Voltage Range (V)	70~280
	最大直流输入电流（ A ） Maximum DC input current (A)	10
	供电时间（ 天 ） Power supply time (Day)	3 天*24h 不间断 3 days * 24 hours uninterrupted
	额定输出电压（ 电压可选 ）（ V ） Rated Output Voltage	AC100/220 , DC12/24

(Voltage Optional) (V)	
交流输出频率范围 ( Hz ) AC Output Frequency Range (Hz)	50±3
额定输出功率 ( W ) Rated output power (W)	25/50/100
系统最高效率(%) Maximum System Efficiency(%)	95
保护 Protection	过载保护、短路保护 Overload protection, short circuit protection
设计寿命 ( 年 ) Design Life (Year)	8 年
工作温度范围 ( °C ) Working Temperature Range (C)	0~55 ( WS-E 系列常温型 ) 0~55 (WS-E series of room temperature type) -20~55 ( WS-E-C 系列低温型 ) -20~55 (WS-E-C series of low temperature type)
主备切换时间 ( ms ) Master-standby switching	20~70

	time (ms)	
	尺寸 ( 不含安装件 ) ( W*D*H ) Dimensions (excluding fittings) (W*D*H)	300*280*94.5
	本体重量 ( 不含安装件 ) ( kg ) Body weight (excluding fittings) (kg)	5
储能 Energy Storage	电池类型 Battery type	常温型：磷酸铁锂电池 Normal temperature type: lithium iron phosphate battery 低温型：钛酸锂或胶体铅酸电池 Low temperature type: lithium titanite or colloidal lead-acid battery
	额定电压 ( V ) Rated voltage(V)	12
	额定功率 ( W ) Rated power(W)	100

## 6、产品图片 Product Pictures

电源 Power Supply



威胜集团  
Wosion Group

## 微型不间断电源



产品型号 (Model): WS-GP-20		
输入电压 (Input Voltage): AC100-240V (市电/Utility Supply)	输入电压 (Input Voltage): DC18V (光伏/PO)	
额定电压 (Nominal Voltage): AC220V / 15% (0.9Hz)	输出功率 (Output Power): 20W	

威胜集团有限公司  
⚠ 警告: 此装置, 需严格按照说明书接线, 避免触电!