

Wall Socket

Featuring LoRaWAN®

WS51x

Milesight



WS51x is an 86-type in-wall smart socket panel with a stylish and minimalist design that combines power control and electricity consumption statistics features. It can intelligently manage appliances and promote the scientific use of electricity. The product offers various power control methods, such as local button control and remote control through wireless LoRaWAN® network communication. WS51x is compatible with Milesight's LoRaWAN® gateway and IoT Cloud solution, which allows for remote monitoring and control via a webpage or mobile App, triggered by other Milesight sensors. Designed for in-wall installation, WS51x has broad applications in smart homes, smart offices, smart campuses, and other scenarios.

◆ Features

- Turn on/off devices and create delay switch-on/off schedules remotely
- Collect current, voltage, power, electrical consumption and support overload protection
- Elaborate structural and safety door design for both safe usage and convenient installation
- Ultra-wide-distance wireless transmission up to a line of sight distance of 15 km
- Equipped with NFC for one-touch configuration and support card emulation mode
- Function well with standard LoRaWAN® gateways and network servers
- Compliant with Milesight IoT Cloud and Milesight Development Platform
- Support Milesight D2D protocol to enable ultra-low latency control without a gateway
- Support multicast feature to control switches in bulk

◆ Specifications

Electrical

Socket Type	EU: Type F, with Safety Door FR: Type E, with Safety Door
Input Voltage	100~250 VAC, 50~60 Hz
Rated Current	16A (Max.)
Measurement	Voltage (VAC), Current (mA), Power Factor (%), Active Power (W), Power Consumption (kWh)
Measurement Accuracy	Typical $\pm 3\%$, Maximum $\pm 5\%$ ($\pm 1\%$ Customizable)
Wireless Communication	
Technology	LoRaWAN®, Milesight D2D
Frequency	IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
Tx Power	16 dBm (868 MHz)/22 dBm (915 MHz)
Sensitivity	-137 dBm
Working Mode	OTAA/ABP Class C
Software	
Configuration	Mobile App via NFC or Downlink
Power Control	Local Press Button or Remote Control
Advanced Features	Delay Switch, Button Lock, Overcurrent Protection/Alarm, Multicast, Milesight D2D Agent
Others	
LED Indicator	1 × Network/Power Status LED Indicator
Button	1 × Button for Power Supply On/Off or Reset
Physical Characteristics	
Ingress Protection	IP20
Material & Color	Polycarbonate (UL94 V0), White
Weight	98.8g
Operating Temperature	-20°C to +60°C (-4°F to +140°F)
Relative Humidity	0% to 95% (Non-condensing)
Dimensions	Type F: 86.3 × 86.3 × 45.8 mm (3.4 × 3.4 × 1.8 in) Type E: 86.3 × 86.3 × 43.3 mm (3.4 × 3.4 × 1.7 in)
Approvals	
Regulatory	CE
Environmental	RoHS, WEEE

