Product Specification

Product Name: Smart Touch Screen Gateway

Product Model: DSGW-130

Revision History

Specification		Sect.	Update Description	By
Rev.	Date			
1.0	2023-01-17		New version release	Li
2.0	2023-09-14		New version release	Xu

Approvals

Organization	Name	Title	Date

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Model List

Category A (In Stock, Lead Time: 1~2 Weeks)

Feature / Model	Wi-Fi 2.4G/5G	Zigbee 3.0
DSGW-130-1	●	●

1. Product Description

1.1. Purpose and Description

DSGW-130 Smart touch screen gateway is a multi-functional touch screen control panel with PX30 quad-core processor, designed for smart home automation. DSGW-130 supports Zigbee and Wi-Fi 2.4/5G, and supports voice function, which is suitable for all kinds of scenarios in smart home solutions.

DSGW-130 supports secondary development, which allows users to create their own applications to meet their specific needs based on the hardware with the help of development resources and documentation. The device is particularly suitable for smart home automation solutions.

1.2. Product Feature Summary

- **High-performance hardware components**

Featuring the powerful PX30 quad-core ARM Cortex-A35 processor, with a 4-inch IPS capacitive touchscreen, 1GB RAM and 8GB eMMC Flash, it delivers high-performance computing capacity and plenty of storage space for all your smart home needs.

- **Support multiple protocols for fast device access**

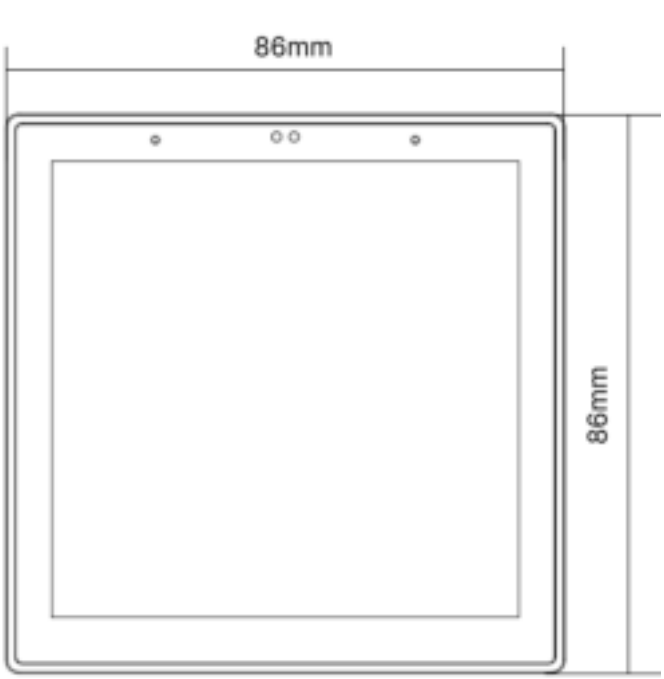
Supports communication via Zigbee 3.0, Wi-Fi 2.4/5G and other protocols.

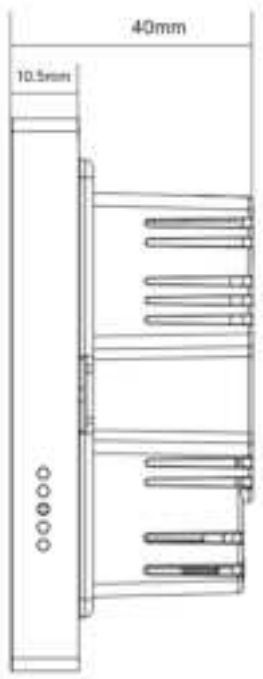
- **Built-in microphone and speaker**

With the built-in microphone and speaker, you can use voice commands to control smart devices (hardware support, software custom development).

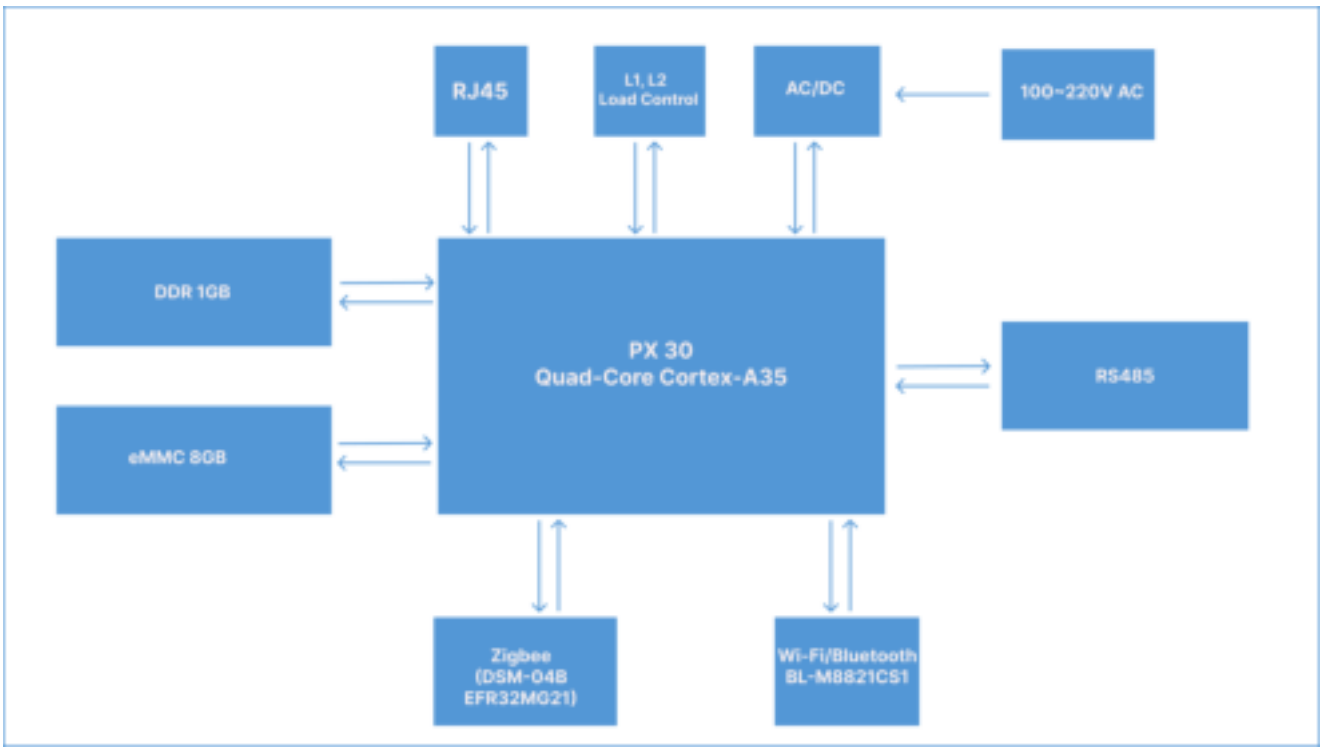
2. Product Detail

2.1. Interface and Dimension





2.2. Hardware Block Diagram



3. Specification

3.1. Technical Specification

Technical Specification	
Hardware & System Parameters	
CPU	PX30 Quad-Core Cortex-A35
Operating System	Android 11
RAM	1GB
eMMC	8GB
Electrical Characteristics	
Power supply	100~240V AC
Interface Description	
Ethernet	1* 10/100 Mbps WAN port
RS485	1xRS485
Power	220V L L1 L2 N
General	
Thermal Design	Thermal Grease and Stainless steel shield cover
Installation method	Wall mounting
IP rate	IP22
Dimension (W x D x H)	86 x 86 x 40 MM (with base) 86 x 86 x 10.5MM (without base)
Weight	225g
Operating Temperature	-10℃~60℃
Storage Temperature	-20℃~65℃
Operating Humidity	10%~90% non-condensing
Storage Humidity	5%~90% non-condensing

Communication Performance	
Wi-Fi Performance	IEEE Wireless LAN standard: IEEE802.11n, IEEE802.11g, IEEE802.11b ● Data Rate: IEEE 802.11b Standard Mode:1,2,5.5,11Mbps IEEE 802.11g Standard Mode:6,9,12,18,24,36,48,54 Mbps IEEE 802.11n: MCS0~MCS7 @ HT20/ 2.4GHz band MCS0~MCS7 @ HT40/ 2.4GHz band MCS0~MCS9 @ HT40/ 5GHz band ● Sensitivity: VHT80 MCS9: -60dBm@10% PER(MCS9) /5GHz band HT40 MCS9: -63dBm@10% PER(MCS9) /5GHz band HT40 MCS7: -70dBm@10% PER(MCS7) /2.4GHz band HT20 MCS7: -71dBm@10% PER(MCS7) /2.4GHz band

	● TransmitPower: IEEE 802.11n: 14dBm @HT20/40 MCS7 /5GHz band IEEE 802.11n: 16dBm @HT20/40 MCS0 /5GHz band IEEE 802.11n: 16dBm @HT20/40 MCS7 /2.4GHzband IEEE 802.11g: 16dBm @54MHz IEEE 802.11b: 18dBm @11MHz ● Wireless Security: WPA/WPA2, WEP, TKIP, and AES ● Working mode: Bridge, AP Client ● Range: 50 meters maximum, open field ● Highest Transmission Rate: 300Mbps ● Frequency offset: +/- 50KHZ ● Frequency Range (MHz): 2412.0~2483.5 ● Low Frequency (MHz):2400 ● High Frequency (MHz):2483.5 ● E.i.r.p (Equivalent Isotopically Radiated power) (mW)<100mW ● Bandwidth (MHz):20MHz/40MHz ● Modulation: BPSK/QPSK, FHSSCCK/DSSS, 64QAM/OFDM
Zigbee Performance	● TX Power: 17.5dBm ● Range: 100 meters maximum，openfield ● Receiving Sensibility: -94dBm ● Frequency offset: +/-20KHZ ● Frequency Range (MHz): 2400.0~2483.5 ● Low Frequency (MHz): 2400 ● High Frequency (MHz): 2483.5 ● E.i.r.p (Equivalent Isotopically Radiated power) (mW)<100mW ● Bandwidth (MHz): 5MHz ● Modulation: OQPSK

4. QA Requirement

Information Description	Standard(Yes) Custom(No)
ESD Testing	Yes
RF Antenna Analysis	Yes
Environmental Testing	Yes
Reliability Testing	Yes
Certification	CE,FCC,RoHS

5. Package Information

5.1. BOM List

Accessory	Quantity
Gateway	1
Mounting screw	2
User Manual	1

5.2. Package

Packing Quantity	1 Box（50pcs）
Packing MeGasurement	585*255*420mm
Gross Weight	17kg

FCC Statement

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

To comply with RF exposure requirements, a minimum separation distance of 20cm must be maintained between the user’s body and the device, including the antenna.