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Skylab M&C Technology Co., Ltd

VDB2606 Bluetooth High Power Gateway Datasheet

Document Information	
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Reversion History

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Revision	Description	Approved	Date
V1.01	Initial Release	George He	20171116
V1.02	Remove POE powered content	George He	20190220
V1.03	Change new shell and model name	Sherman	20190724

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Name	Model	Quantity	Remark
Bluetooth Gateway	VDB2606	1	VDB2606
AC-DC Adapter	BSF-137F	1	IN:AC100-240V/OUTPUT: 5.0V±10%

Contents

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1. General Description

VDB2606 is a Bluetooth High Power Gateway. It can be used in various scenarios flexibly. For example, the remote control BLE device, receives the data sent by the BLE device and sends it to servers.
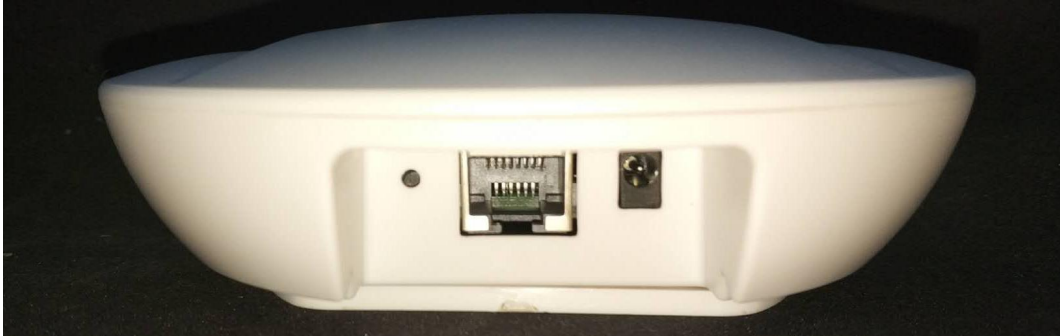

Figure1: VDB2606

1.2 Features

Supports the 4.5~12V adapter power supply.

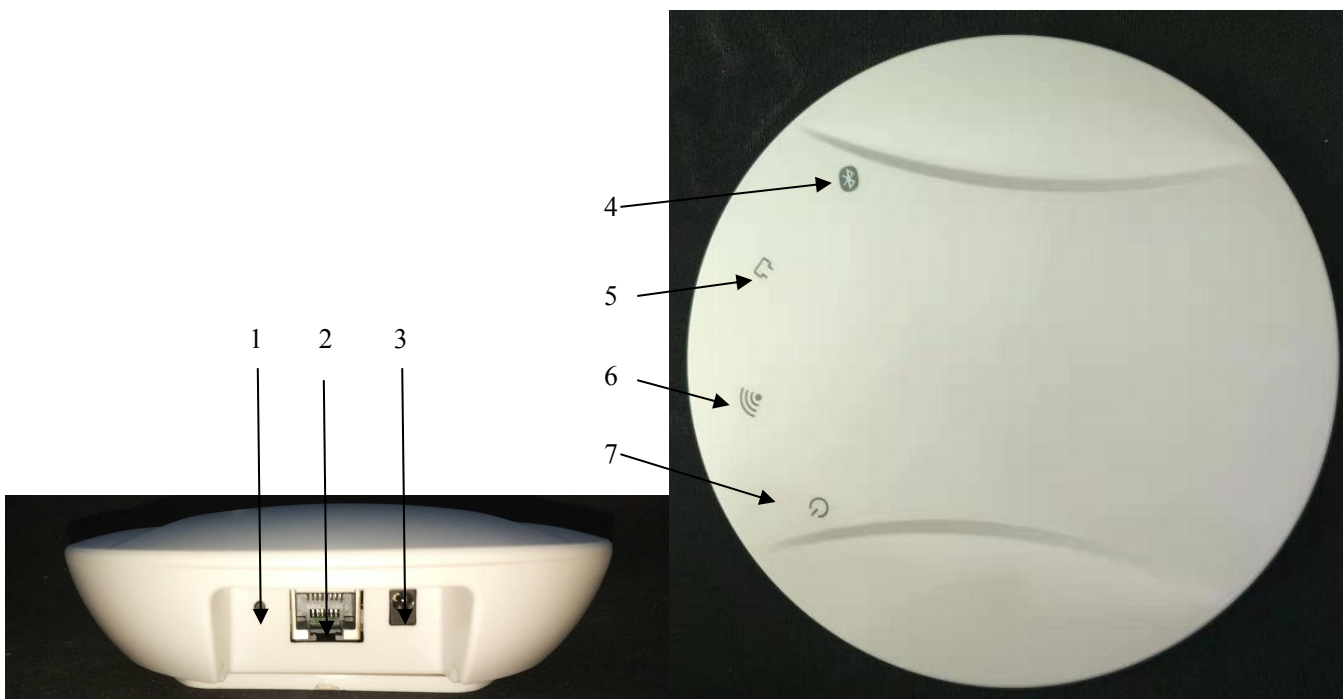Support IEEE 802.11n, IEEE 802.11g, IEEE 802.11b Protocol

Support Bluetooth ® 4.0

One WAN/LAN variable network port

RoHS compliance (Lead-free)

FCC,CE compliance

1.3 Interface

1：Reset

2：WAN/LAN Interface

3：Power Interface

4：Bluetooth LED

5：RJ45 LED

6：WiFi LED

7：Power LED

1.3.1 Power Supply Port

The VDB2606 power interface supports DC4.5~12V input, and the current is greater than 1000mA.The voltage interface adopts the DC-005 power socket, and power seat aperture is 5.5mm. The needle diameter is 2.1 mm and is positive.

Remark: The input voltage of the 5V power adaptor is AC 100-240V and 50/60Hz, output voltage is 5V 2A.The power connector is positive inside and negative outside.

1.3.2 Reset

The VDB2606 WiFi part will resume factory setting after pressing the reset button for more then 5 seconds.

1.3.3 LED

Power LED normally on when powered on

RJ45 POE LED normally on when connected

WiFi LED normally on after connecting to WiFi for 1-2sec

Bluetooth LED flashing once power on

1.4 Applications

1.4.1 Indoor Positioning:

1)VDB2606 Bluetooth module collects information about Beacon nearby, including RSSI, MAC, etc., once per second.

2)Bluetooth module send the Beacon information to WiFi module through UART serial port, once per second.

3)WiFi module transfers the Beacon information to the specified UDP server, and accepts the information returned by the server.

4)Beacon locations can be displayed on the front page after the UDP server analyze and calculate the beacon information. An order can also be delivered to the WiFi module, then sent to the bluetooth module to develop different functions (such as: Lighting lamps and lanterns etc.).

Schematic of Positioning:
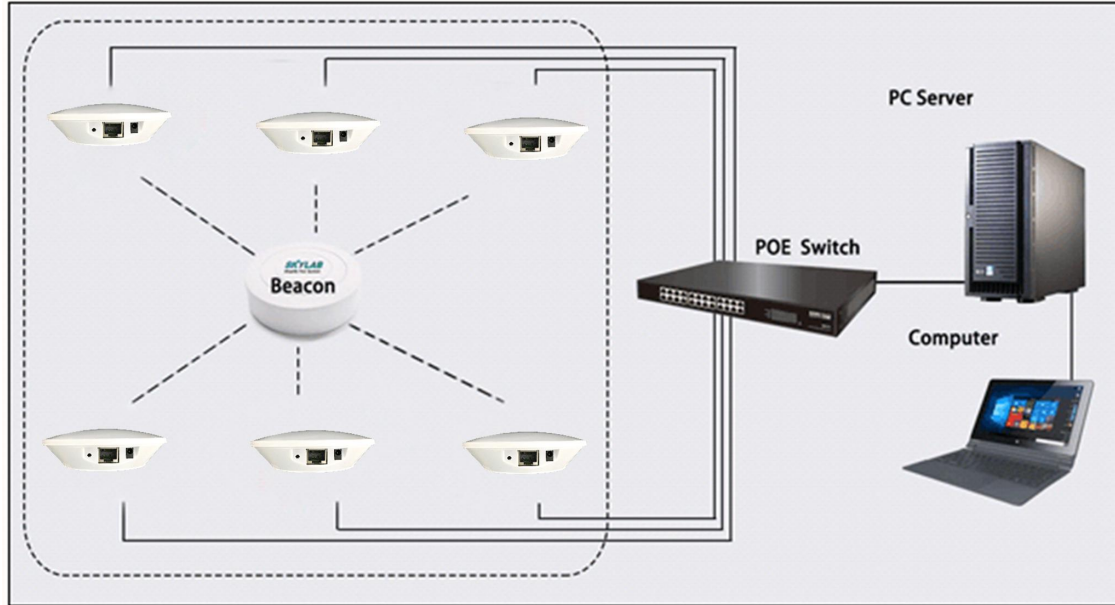
2. Module Specification

|	
Dimension	Diameter: 110mm; Height: 35mm
Power Supply	DC 4.5-12V
Currents	200mA@5V
Operating Temperature	-20℃~70℃
Interface	Power Supply Port
WiFi	
WiFi Protocol	IEEE 802.11n, IEEE 802.11g, IEEE 802.11b
Data Rate	IEEE 802.11 b Standard Mode: 1,2,5.5,11Mbps
	IEEE 802.11g Standard Mode: 6,9,12,18,24,36,48,54Mbps
	IEEE 802.11n : 72Mbps @ HT20 　　　　　 150Mbps @ HT40
Sensitivity	HT40 MCS7 : -67dBm@10% PER(MCS7)
	HT20 MCS7 : -73dBm@10% PER(MCS7)
	54M: -76dBm@10% PER
	11M: -91dBm@ 8% PER
Transmit Power	IEEE 802.11n: 15dBm @HT40 MCS7 　　　　　　 15dBm@HT20 MCS7
	IEEE 802.11g: 16dBm
	IEEE 802.11b: 18dBm
Wireless Security	WPA/WPA2, WEP, TKIP, and AES
Working mode	Bridge、Gateway、AP Client
Bluetooth	
Bluetooth Protocol	Bluetooth ® 4.2
Data Rate	1Mbps
Wireless Security	AES HW Encryption
Connection Distance	100m
Transmit Power	0~+20dBm
Receive Sensitivity	-94dBm

3. Configuration

3.1   Connect to VDB2606 by WLAN

3.2 Enter to the page http://10.10.10.254
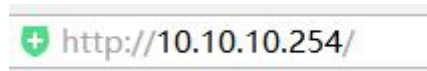
3.3 Input **Account** and **Password** <admin/admin>

3.4 Select Language

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3.5 Click **Administration->Settings Management**, then input the UDP Server address in **UDP Server Init IP Setting**, **UDP Server Init Port Setting** default is 3333.

3.6 Click **Administration ->Status** to check the Access Point Status.

4. Contact Information

Skylab M&C Technology Co., Ltd.

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FCC WARNING

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

Any 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 maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.