

WB01 User Manual

WiFi 11a/b/g/n/ac 2T2R and BT4.0 Module



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Agenda

- SOP- How to install WiFi Driver
- SOP How to WiFi Tool
- SOP- How to install USB BT Tool and Driver
 - Update USB driver:
 - Update USB driver_Method_A
 - Update USB driver_Method_B
 - **BT Tool in WCN Combo Tool:**
 - COM and Download patch
- SOP How to use BT Tool
 - BT Tool:
 - 1. Setting page for Bluetooth Test-Mode
 - 2. RF Test page for BR & EDR TX-Mode
 - 3. BLE Test mode page for LE TX/RX-Mode
 - 4. Non-signaling RX Test page for BR & EDR RX-Mode
 - 5. TX tone Test page for BR/EDR/LE continuous TX-Mode





SOP-How to install WiFi Driver (Only support win XP & win7)



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Update WiFi driver

- 1. Insert the WIFI module •
- 2. Select "WLAN" device to install WIFI driver.
- If there is any driver needed, please choose the folder mentioned by step3. (Skip the BT Hardware Installtion, the BT driver and WIFI driver should better be installed separately.)
- 4. The Installation is complete.





SOP - How to use WiFi Tool



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WiFi Tool

- Click the icon OMT7662UQA 2018/3/6 上午 03... 應用程式 4,463 KB
- 2. Enter the following interface

1.

Coretronic

3. Select the Channel / Rate / Bandwidth . According to the setup outline in red, click the start TX.(Repeat change to "0")

prosperizoonar	Set	信 道、 換入、 还	E T	KITOUI I	IIK EXTLMA -
annel 1 2412-MHz	Mode OFDM	▼ Rate MCS=7; 54	Mbps 💌 Band	width20 💌 TxBandSel	Lower 🔻
Frame Type [15] Data TX frame setting	▼ Set	TxD Aggregat Temp.	Com. TSSI	STBC 7 2.4G Side Band (SGI 7 A-MPDU Antenn	Dpti a diversity —
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Payloa Deb	d Payloa	d Repeat AA	SW CRC Check T	tal	
Repeat) L Start TX Transmitt	oopback IPG	200 TX P (0 Conti. 1 Carrier t	owerO TX Powe).5dB (0.5d	rl B 4E 	C Both DACs
Repeat D L Start TX Transmitt	ed IPG	200 TX P Conti. 1 Carrier t. Carrier Suppress: Ca	owerO TX Powe 0.5dB (0.5d 0A - librate Calib	rl Freq. Offset	C Both DACs G DAC 0 C DAC 1
Repeat D L Start TX Transmitt 	popback IFG ed 0	200 Conti. 1 Carrier t. Carrier Suppress: RX Okay	owerO TX Powe 0.5dB (0.5d 0A	rl Freq. Offset	C Both DACs C DAC 0 C DAC 1
Repeat D L Start TX Transmitt -RX Error (Dropped) -FCS error	oopback IPG at a standard of the standard of t	200 Conti. 1 Carrier t, Carrier Suppress: RX Okay U2M DATA :	owerO TX Powe 0.5dB (0.5d 0A	rl Freq. Offset dE alibrat sate SI tune SSI = xx dBmOffse 0	C Both DACs C DAC 0 C DAC 1 C Calibrate
Repeat Start TX Transmitt 	0 / 0 0 / 0	200 Conti. 1 Carrier t, Carrier Suppress: RX Okay U2M DATA : other DATA :	ower0 TX Powe 0.5dB (0.5d 0A → librate Calib 0 / 0 R 0 / 0 R	TI B Freq. Offset → → → alibrat SI tune SSI = xx dBmOffse 0 SSI2 = xx dBmOffse	C Both DACs G DAC 0 C DAC 1 Calibrate Calibrate
Repeat Start TX Transmitt 	00pback ed IPG 0 [0 [0] 0 / 0 0 / 0 0 / 0	200 Conti. 1 Carrier t, (0) Carrier Suppress: Carrier Suppress: RX Okay U2M DATA : other DATA : BEACON :	ower0 TX Powe 0.5dB (0.5d) 0A librate Calib 0 / 0 R 0 / 0 R 0 / 0 R 0 / 0 R 0 / 0 R	rl Freq. Offset dE alibrat SI tune SSI = xx dBmOffse 0 SSI2 = xx dBmOffse 0 SSI0 = xx dBmOffse 0	C Both DACs G DAC 0 C DAC 1 Calibrate Calibrate Calibrate
Repeat D L Start TX Transmitt RX Error (Dropped) FCS error RX overflow PHY error : False CCA	00pback ed IPG 0 / 0 0 / 0 0 / 0 0 / 0 0 / 0	200 Conti. 1 Carrier t, (0) Carrier Suppress: RX Okay U2M DATA : other DATA : BEACON : others (Mgmt/Cnt	ower0 TX Powe 0.5dB (0.5d 0A → librate Calib 0 / 0 R 0 / 0 R 0 / 0 R 0 / 0 R	rl B Freq. Offset 4E alibrat SI tune SSI = xx dBmOffse 0 SSI2 = xx dBmOffse 0 SSI0 = xx dBmOffse 0	C Both DACs G DAC 0 C DAC 1 C clibrate C clibrate C clibrate
Repeat Start TX Transmitt RX Error (Dropped) FCS error RX overflow PHY error : False CCA Frame Loss	00pback ed 0 / 0 0 / 0 0 / 0 0 / 0 0 / 0 0 / 0 0 / 0	200 Conti. 1 Carrier t, (0) Carrier Suppress: Carrier Suppress: Carrier t, (0) Carrier t,	ower0 TX Powe 0.5dB (0.5d 0A → librate Calib 0 / 0 0 Fr	rl Freq. Offset dE alibrat sate dE alibrat SI tune SSI = xx dBmOffse 0 SSI2 = xx dBmOffse 0 SSI0 = xx dBmOffse 0 eq. Deviation xx	C Both DACs G DAC 0 C DAC 1 Calibrate Calibrate Calibrate Calibrate

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SOP-How to install USB BT Tool and Driver (Only support win7 32 bit)



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Update USB driver

🚔 Device Manager Plug in the USB DUT 1. File Action View Help 🧇 🧼 📅 🔄 🔽 📅 😣 😭 😽 🛵 2 Go to the "Device Manager" A HP-PC 3 Select "BT" device to install BT driver. D - Batteries Bluetooth Radios D - Computer Disk drives Solar Barbar States > 🚛 Human Interface Devices De IDE ATA/ATAPI controllers Imaging devices ESC antu Compute >-- Keyboards Open Mice and other pointing devices Manage Monitors Network adapters Control Panel Map network drive... ▲ - 1 Other devices Disconnect network drive... Networ Control Panel Home MT7662 E1 Create shortcut Update Driver Software... Bevice Manager Delete Ports (COM 8 Disable Rename Remote settings Processors Uninstall Sound, video System protection Properties System devic Scan for hardware changes Recycle B. Advanced system settings 🕛 Universal Seri Places Properties 責任・創新・卓越・開創 *Coretronic*

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Update USB driver (Cont.)





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Update USB driver_Method_A





Update USB driver_Method_A





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Update USB driver_Method_B





Update USB driver_Method_B (Cont.)

Selec	t the device driver you want to install for th	nis hardware.
*	Select the manufacturer and model of your hardware disk that contains the driver you want to install, click	e device and then click Next. If you have a Have Disk.
Show	w compatible hardware	
M	ediatek Bluetooth 4.0 Adapter	
		$\overline{\mathcal{O}}$
	the definition to make distantly, since add	Have Disk



Update USB driver_Method_B (Cont.)

Install From	m Disk	0 22	
4	Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	OK Cancel	
8	Choose the folder acc	ording to	your OS type
	Copy manufacturer's files from: C:\Users\HP\Desktop\7662_USB_TestTool\MtkL -	Browse	n click Next. If you have
	→ → 7662_USB_TestTool → MtkUsb_1	.10.25.07 • objchk	_win7_x86 ▶ i386
	objchk_win7_amd64 objchk_win7_x86 objchk_wxp_x86		



Update USB driver_Method_B (Cont)

G Update Driver Software - MT7662_E1	
Select the device driver you want to install for Select the manufacturer and model of your hardword disk that contains the driver you want to install, cli	t <mark>his hardware.</mark> are device and then click Next. If you have a ck Have Disk.
Show compatible hardware Model MediaTek Bluetooth USB Dongle (7662) Select this driver	7.jpg 類型: JPG 檔案 大小: 175 KB 尺寸: 1366 x 768 像素
This driver is not digitally signed! <u>Tell me why driver signing is important</u>	Have Disk 11 Next Cancel



Update USB driver_Method_B





WCN Combo Tool

• Install BT tool: WCN_Combo_Tool_Setup.exe











SOP - How to use BT Tool



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Installation"WCN_Combo_Tool_Setup_customer", Click "BT_Tool.exe"





BT Tool in WCN Combo Tool

• BT Tool:

- 1. Setting page for Bluetooth Test-Mode
- 2. **RF Test** page for BR & EDR TX-Mode
- 3. BLE Test mode page for LE TX/RX-Mode
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- 5. TX tone Test page for BR/EDR/LE continuous TX-Mode





How to use BT Tool

• BT Tool:

- 1. Setting page for Bluetooth Test-Mode
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Open / Close COM

Read BD Address

Enter Test Mode

Read BD Address

- 1. Ensure BT COM port is opened and "RESET Device" button is clicked.
- 2. Click "Read" button.
- 3. BD Address is updated

M MediaTek BT Tool	_ D ×	X
Setting HCI Commander RF Test Scripter BLE Test Mode BLE Normal Mode Non-Signating Rx Test Tx Tone Test Device 1 Image: Commander RF Test Scripter Baud Rate: 115200 Patch File: Dr.patch1225 bin Patch BD Addters: Dv (000000000000000000000000000000000000	Setting HCI Commander RF Test Sc Device 1 HCI type: UART COM Dem Cose Baud F Patch File: [D-\patch1225.bin BD Address: 0x [00:00:46:76:62:01 RESET Device Enter DUT	ripter BLE Test Mode BLE Normal Mode Non-Signaling Rix Test Tx Tone Test Port: COMIT Rate: 115200 Patch Write
[4]	•	



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Enter Test Mode

- 1. Ensure BT COM port is opened and "RESET Device" button is clicked.
- 2. Click "Enter DUT" button to allow DUT to enter test mode.
- 3. The connection between DUT and test set (ex: CBT) could be established under test mode.





Agenda

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Reset Device

- 1. Ensure BT COM port is opened and "RESET Device" button is clicked.
- 2. Click "**Reset Device**" button to Reset DUT.
- 3. HCI RX event is responded (RX: 0E 04 01 03 0C 00)





BR & EDR TX Mode

- 1. Ensure BT COM port is opened and "RESET Device" button is clicked.
- 2. Set pattern type, packet type, and signal Frequency. And then Click "Start" button.
- 3. Check Tx power of DUT by test set (ex: CBT).
- 4. Click "**Stop**" button to end test.





Tx Power Control

- 1. Ensure BT COM port is opened and "RESET Device" button is clicked.
- 2. Set pattern type, packet type, and signal Frequency. And then Click "Start" button.
- 3. Check Tx power of DUT by BT test set (ex: CBT).
- 4. Select "**Tx Power Level**" to 6~0, and then see if TX power is correspondly changed.

Setting HCI Commander RF Text Scripter BLE Text Mode BLE Normal Mo RF Text Pattern Tx 1010 pattern Whiten Reset Device Packet Type DH1 Packet Type DH1 Packet Type DH1 C Data Length Z7 (* Single Frequency 0 C Frequency Hopping Tx Power Level 7 Set Set Set Set	de Non-Signaling Rx Text Tx Tone Text [T+0:11:00 TX: 15,PC;1,0 [T+0:11:00 TX: 15,PC;1,0] [T+0:11:00 TX: 15,PC;1,0] [T+0:11:00 TX: 15,PC;1,0] [T+0:11:00 TX: 15,PC;1,0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;1,0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;1,0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0] [T+0:11:00 TX: 15,PC;0]	Setting HCI Commander RF Test Scripter BLE Test Mode BLE Normal Mode RF Test Pattern Tx 1010 pattern Whiten Packet Type DH1 _ Data Length 27 C Single Frequency 0 C Frequency 0 C Frequency Hopping Tx Power Level 6 Set	de Non-Signaling Rx Text Tx Tone Text Image: Text Signaling Rx Text Image: Signaling Rx Si
BT RF TX progressing		Set Tx Power Level finish	



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Hopping

• Select "Frequency Hopping", and then see if TX signal is present on spectrum analyzer correctly.





Single Frequency

Select "**Single Frequency**", and then change the channel number (00~78) ,TX signal is present on spectrum analyzer correspondingly.





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- **5. TX tone Test** page for BR/EDR/LE continuous TX-Mode





BLE Test Mode - TX

- 1. Ensure BT COM port is opened and "RESET Device" button is clicked.
- 2. Set RF channel and Pattern type on CBT to analyze DUT TX performance.
- 3. Select TX frequency (00~39) and Tx pattern. Then click "Start" button.
- 4. TX signal is present on CBT correspondingly.
- 5. Click "Stop" button to end LE TX test.

☞ Tx Test	⊂ Rx Test	Read BLE Access Address	Bead
Channel	0		
Pattern Tx Level	PRBS9	 下午 05:22:54) TX: 3,C,0, 「下午 05:22:53) FX: E,4,1,3,C,0 「下午 05:22:55] TX: E,4,1,1E,30,0 「下午 05:22:55] FX: E,4,1,1E,30,0 	
Packet Count			
	3 Stop		Clear Log



BLE Test Mode - RX

- 1. Ensure BT COM port is opened and "RESET Device" button is clicked.
- 2. Set Rx Level, RF channel, and Pattern Type on CBT. Then Turn on generator.
- 3. Select RX frequency (00~39) and Rx pattern. Then click "Start" button.
- 4. Click "Stop" button. PER result are shown in below.

ig HCLCommander HFLest Scribter DCLLest mode BCF Normal Mode No	-olgnaling Hx Test 1x Tone Test	Setting HLI Col	imander HF lest Scripter DLL le	St Mode BLE Normal Mode Non-Signaling H	x Test Tx Tone Test	
Tx Test C Rx Test	Read	C Tx1	est (Rx Test	Read BLE Access Address	Read	
Channel 0		Channel	0			
Pattern PRBS9		Pattern	PRBS9 _	[上午 09:57:46] TX: 3,C,0, [上午 09:57:46] RX: E,4,1,3,C,0		
Tx Level Tx Level	,0 0	TxLevel	<u>v</u>	(上午 09:57:46) TX: 1D,20,1,0 (上午 09:57:46) RX: E,4,1,1D,20,0 (上午 09:57:57) TX: 1F,20,0, (上午 09:57:57) TX: 1F,20,0,		
Packet Count		Packet C	ount Canto	teer i soon in die eerste gebeure		
				· .		
Stop	Clear Log		Start	2	Clear Log	
LE TX successfully		Stop BT BLE RX	successfully			



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Agenda

- BT Tool:
 - 1. Setting page for Bluetooth Test-Mode
 - 2.RF Test page for BR & EDR TX-Mode
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 - 4. Non-signaling RX Test page for BR & EDR





Non-Signaling RX Test

- 1. Ensure BT COM port is opened and "RESET Device" button is clicked.
- 2. Set Rx Level, RF channel, Packet Type, Pattern Type, and BD address (ex: 000000A5F0C3) on CBT. **Then Turn on generator.**
- 3. Select Rx pattern, RX frequency (00~78), Packet Type, and Tester Address (ex: 000000A5F0C3, please fill "00A5F0C3"). Then click "**Enter Test**" button.
- 4. Click "End Test" button. PER/BER result are shown in right side.

🗱 MediaTek BT Tool	_ <u> </u>	M MediaTek BT Tool	_ 🗆 🗙
Setting HCI Commander RF Test Scripter BLE Test Mode BLE Normal N	Mode Non-Signaling Rx Test Tx Tone Test	Setting HCI Commander RF Test Scripter BLE Test Mode BLE Normal Mode Non-Signaling Rx Test Tx Tone Test	
Non-Signaling Rx Test	Non-Signaling Rx Test Result	Non-Signaling Rx Test	
Rx Pattern Pseudo Random Bit Sequer	Rx Packet Count	Rx Pattern Pseudo Random Bit Sequer 💌 Rx Packet Count 1238	
Rx Frequency 0	Rx Error Rate:	Rx Frequency 0 Rx Error Rate: 0.161550%	
Rx Packet Type DH1	Rx Byte Count	Rx Packet Type [0H1] Turbus Addees 000ASF0C3 Rx Byte Count 33426	()
3 Enter Test Exit Test HCI Reset	Bit Error Rate:	Enter Test Exit Test HCI Reset	
		[F+ 6:13-43] Tr: DPC,170,4B,00,00,1,40,0,20,10,00,0,45,P0,C3,00 [F+ 6:13-43] Tr: DPC,170,4FR,00,00,1,40,0,20,1,00,0,0,45,P0,C3,00 [F+ 6:13-53] Tr: DPC,170,4FR,00,00,1,40,0,20,10,00,0,45,P0,C3,00	
BT Non-Signaling Test successfully	ClearLog	BT Non-Signaling Test successfully	ar Log
۹	x	4	



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Agenda

- BT Tool:
 - 1. Setting page for Bluetooth Te
 - 2.RF Test page for BR & EDR T
 - 3.BLE Test mode page for LE TX/RX-Mod
 - 4. Non-signaling RX Test page for BR & EDR





Single Tone – CW tone TX (No modulated signal)

- 1. Ensure BT COM port is opened and "RESET Device" button is clicked.
- 2. Select Tone Type (ex: Single_Tone_DC), and then change the channel number (00~78)
- 3. Click "Enter Test" button. TX signal is present on spectrum analyzer correspondingly.
- 4. Click "HCI Reset" button to end test.

AediaTek BT Tool	_ <u> </u>					*RBW 10 kHz	Marker 1 [T1]
tting HCICommander RFTest Scripter BLETest Mode BLENormal Mode Non-Signaling RxTest TxTone Test	1	Re	f 20 dBm	* Att	30 dB	SWT 20 ms	2.401992000 GHz
		2	0				
		-1	0			1	
Ix Frequency 0		1 PK MAXH					
Mode: BT w		2					
Modulation IM 💌		CLRWR	10				
Pattern PRBS9							
Town Tree I I I I I I I I I I I I I I I I I I			20				
			30		m	M	
下午 04:41:02] TX: D5,FC,5,00,0,0,0 下午 04:41:02] RX: E,4,1,D5,FC,0	-		40		اد ما مر		
				هر ا	M MALIN	1 Minen	
		~	mmunulit		M		Manufacture and a second
	Clear Log	M					
Tx Tone Test successfully				┉╷╷╷╷╷			
	1.1	Ce	enter 2.402	GHz	200	kHz/	Span 2 MHz



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Modulation Tone – Continuous mode TX

- 1. Ensure BT COM port is opened and "RESET Device" button is clicked.
- 2. Select "Modulation_Tone", and then change the channel number (00~78). Choose mode (BT-GFSK/EDR or LE) and Modulation rate (1M/2M/3M)
- 3. Click "Enter Test" button. TX signal is present on spectrum analyzer correspondingly.
- 4. Click "HCI Reset" button to end test.

MediaTek BT Tool	<u>_ x</u>	R						* RBW 1	0 kHz	Marker	1 [T1]	
Setting HCI Commander RF Test Scripter BLE Test Mode BLE Normal Mode Non-Signaling Rx Test Tx Tone Test		×y P	af 20	dBm	* 7	N++ 30	dB	VBW 3	0 kHz	2	8.	81 dBm
Tx Tone Test		2	0	GDitt		400 30	, ub	541 2	0 1113	2	.4019920	JOO GIIZ
Tone Type Modulation_Tone							1					
Tx Frequency 0		1 PK	.0									
Mode RT V		MAXH -0										
		2 AP										
Modulation 111 _		CLRWR	10									
Pattern PRBS9												
Enter Test HCI Reset			20									
			30				~	M				
(下午 04-866) TX: D5,FC,5,0,4,0,0 (下午 04-866) TX: E,4,1D5,FC,0							<i>A</i>					
		-	40			M			h.			
			50			المسطير			Mu			
		L	mm	margan		1.1				1. A	malyn	mand
		-1	60		WWW					Hinn		
	Clear Log		N. MALALA	A ININ WITT	17 1 W J	117			WART III	U MMI L	11111	14 YM
IT Tx Tone Test successfully		F-	₽₽₽		┼╢╵╢		1		╞╋╹╼╉	┞╢╢┤	┦┦╢╎	╆╫╢
		-	80		r							r
	1.1	C	enter 2	2.402 GHz			200	kHz/			Spa	n 2 MHz



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Real COM Relay



Harrek Inc.

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Real COM Relay (1/3)

• Test setup:



Real COM Relay (2/3)

- 1. Ensure BT COM port is opened and "RESET Device" button is clicked.
- 2. Click "Enter DUT" button to allow DUT to enter test mode.
- 3. Close BT COM port. Click "Stop Relay".
- 4. Click "Config → Use virtual COM"



5. Select COM port of "USB to RS232 cable" for example: COM 1 for "USB to RS232 cable", please choose "COM1"





Real COM Relay (3/3)

1. Click "Start Relay" button for Real COM relay.





NCC電信管制射頻器材警語

低功率電波輻射性電機管理辦法

- 第十二條 經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率或變更 原設計之特性及功能。
- 第十四條低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立即停用,並改善至無 干擾時方得繼續使用。
 前項合法通信,指依電信法規定作業之無線電通信。
 低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。
- 使用此產品時應避免影響附近雷達系統之操作。
- 高增益指向性天線只得應用於固定式點對點系統。

模組認證:

- 1. 本模組於取得認證後將依規定於模組本體標示審驗合格標籤。
- 2. 系統廠商應於平台上標示「本產品內含射頻模組: XXXyyyLPDzzzz-x」字樣。



Federal Communication Commission Interference Statement

- 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.
- 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 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.
- FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.



Federal Communication Commission Interference Statement

- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- Operations in the 5.15-5.25GHz band are restricted to indoor usage only.
- FOR MOBILE DEVICE USAGE (>20cm/low power)
- Radiation Exposure Statement : This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.
- This device is intended only for OEM integrators under the following conditions:
 - 1) The antenna must be installed such that 20 cm is maintained between the antenna and users, and (if EUT is portable device, please delete this item)
 - 2) The transmitter module may not be co-located with any other transmitter or antenna.
- As long as 2 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed



Federal Communication Commission Interference Statement

- IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.
 - End Product Labeling FOR MOBILE DEVICE USAGE (>20cm/low power) This transmitter module is authorized only for use in device y

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains FCC ID:SUZ-WB01". The grantee's FCC ID can be used only when all FCC compliance requirements are met.

Manual Information To the End User
 The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.
 The end user manual shall include all required regulatory information/warning as show in this manual.



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