RS485 TO WIFI ETH MQTT

From Waveshare Wiki Jump to: navigation, search

Software Preparation

 EMQX MQTT (broker.emqx.io) (http://www.emqx.io/online-mqtt-client#/recent_connecti ons)

Hardware Preparation

- RS485 TO WIFI/ETH (https://www.waveshare.com/rs485-to-wifi-eth.htm)
- PC
- RS232 RS485 TO ETH/RS485 TO ETH/USB TO RS485 (Devices with onboard RS485) (http s://www.waveshare.com/rs232-485-to-eth.htm)



(/wiki/File:Eth-485-485-wifi.png)

Log In To The Configuration Page

Open the wireless network connection and search for the network. The "Waveshare- AP" (xxxx is the last four digits of the MAC address) as shown in the figure below is the default network name of Service Set Identifier (SSID).



(/wiki/File:RS485_TO_WIFI_ETH_MQTT02.png)

Enter the address in the computer browser: "10. 10.100 254"; the management page of RS485 TO WIFI/ETH will appear on the webpage -> Enter the user name and password with "admin".



(/wiki/File:RS485_TO_WIFI_ETH_MQTT03.png)

If your browser fails to connect after entering "10. 10.100.254", you can use the following

IP address:"10.10.100.222".

Tenda			Tenda	a WiFi
	在线设备(3)			
₩ 路由状态	设备名称	下载限制	允许上网	^
⊕ 上网设置	PESKTOP-O.	🖉 无限制	▼ 本机	
令 无线设置	192.108.0.199			
② 网速控制	Waveshare 192.168.0.198	无限制	•	
▲ 家长控制	? Hui		•	l
🔗 智能省电	192.168.0.200			*
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□	禁止上网设备(黑名单)		
↔ 系统管理	设备名称	MAC地址	解除限制	^
	没有设备			*

(/wiki/File:RS485_TO_WIFI_ETH_MQTT04.png)

Connect To The Internet WAN

Please enable AP+STA mode, as shown below:

Duick Configure	Working Mode Configuration	Duick Configure	STA Interface Settin	ng
Mode Selection	You may configure the Uart-WIFI module will mode and data transfer mode.	 Mode Selection AP Interface Setting 	You could configure STA interface p	parameters and turn on/off AP+STA here.
STA Interface Setting	STA Mode:	STA Interface Setting	AP's SSID	Waveshare_6EC8 Search
Application Setting	Station Mode Data Transfer Mode Transparent Mode	Application Setting	MAC Address (Optional) Security Mode	OPEN V
Ethernet Setting	Apply Cancel	Ethernet Setting	Encryption Type	NONE V
HTTPD Client Mode		HTTPD Client Mode		Apply Cancel
MOTT Setting		MQTT Setting	AP+SIA settings AP+STA	an v
Device Management		Device Management		Apply Cancel
			WAN Connection Typ DHCP Mode	DHCP(Auto config) v
			Hostname(Optional)	Waveshare_6EC8
				Apply Cancel

(/wiki/File:STA%2BAP.png)

Connect to the WiFi hotspot for Internet access (you can also open the network port and connect the network cable to the Internet)

中文 English

不安全 10.10.100.254/EN/s	ite survey.html				-		
					L0 (#	E A" Q	
SSID	BSSID	RSSI	Channel	Encryption	Authentication	Network 4	
406	50:fa:84:4c:ad:ea	94%	1	AES	WPA2PSK	Infrastructure	
Nano	b4:0f:3b:19:78:31	100%	10	AES	WPA2PSK	Infrastructure	
Xiac 🗾 I	ec:41:18:e7:00:99	91%	11	AES	WPA2PSK	Infrastructure	
DxE79498E99CB2E5AFBA	24:69:68:89:65 da	83%	4	AES	WPA2PSK	Infrastructure	Quick Configure Quick Configure
Redmi_3F2C	5c:02:14:f3:8f.ea	81%	6	AES	WPA2PSK	Infrastructure	Mak Charles
0xE5A4A7E76897E48A8CE76897	90:76:9t9a:18:04	78%	1	AES	WPA2P5K	Infrastructure	- Mode Selection
333	24:cf:24:ea:38:74	76%	2	AES	WPA2PSK	Infrastructure	AP Interface Setting 1F WI-FI Setting [Medity]
	6e:b1:58:21:9d:ba	78%	6	AES	WPA2PSK	Infrastructure	- CL MINING HIMIN
0xE99A94E5A381E5AEB6E88081E78F	64:64:4a:e3:cb:4b	68%	2	AES	WPA2PSK	Infrastructure	STA Interface Setting Wifi Mode
dundundun	Scia6:dfic4:ca:04	63%	6	AES	WPA2PSK	Infrastructure	Mode STA Mode v
Xiaomi406	64:64:4a:e3:65:01	63%	6	AES	WPA2PSK	Infrastructure	Application Setting STA Interface Parameters
VNLYXYOHY	2c:b2:1a:6a:1b:92	60%	4	AES	WPA2PSK	Infrastructure	AP's SSID Waveshare_D928
0xE4B89CE58C97E9A5BAE5AD90E9A	6 34:96:72:1c:04:95	55%	11	AES	WPA2P5K	Infrastructure	Ethernet Setting MAC Address (Optional)
martinking	d0:76:e7:05:5f:60	42%	1	AES	WPA2PSK	Infrastructure	UTTOD (Fast Made Section 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.
Lyle	1c:60:de:bc:60:8c	42%	1	AES	WPA2PSK	Infrastructure	Security Mode OPEN V
martinking111	e2:76:e7:05:5f:60	44%	1	AES	WPA2PSK	Infrastructure	MOTT Setting NONE V
mFi_07E472	4c.bc.98:07:e4:72	50%	5	AES	WPA2PSK	Infrastructure	Apply Cancel
BREEZE	68.77.24:09.37 a2	47%	6	AES	WPA2PSK	Infrastructure	Device Management
0x2AE5A49CE78CABE48893E794A82	A 6e:77:24:09:37:a2	50%	6	NONE	OPEN	Infrastructure	2FEthernet Ports Setting (Modify)
	72:77:24:09:37:a2	47%	6	AES	WPA2P5K	Infrastructure	
B404	48:0e:ec:0f:f1:a2	42%	6	AES	WPA2PSK	Infrastructure	2FUart Setting [Modify]
0xE5AE89E6BE9CE6B2A7E6B5B7	90:76:9f2e.b3:4d	42%	11	AES	WPA2PSK	Infrastructure	0
Xiaomi_839C	24:cf:24:aa:83:9d	34%	1	AES	WPA2PSK	Infrastructure	4 Extended and a state of the state
٥	8c 53 c3 59 7c c1	39%	1	AES	WPA2PSK	Infrastructure	4 P Network Setting [Mode/]
CMCC-Ryxe	08:60 83:89:34 a8	39%	3	AES	WPA2PSK	Infrastructure	_
0xE8AFB4E4BDA0E5BE88E985B7E59	5 9c:9d:7e:84:05:0a	34%	3	AES	WPA2PSK	Infrastructure	5F MQTT Setting [Modify]
ChinaNet-XvNZ	30:1b:b8:26:e5:84	34%	6	AES	WPA2PSK	Infrastructure	
504-1CASC3	a2:66:aa:06:c7:47	31%	6	AES	WPA2PSK	Infrastructure	6F Device Management
102	44:19:71:4b:68:29	31%	11	AES	WPA2PSK	Infrastructure	
xiaocheng	28:d1:27:8f2c:00	26%	6	AES	WPA2PSK	Infrastructure	Restart Module
TPGuest_8844	56:75:95:7d:88:44	26%	11	AES	WPA2PSK	Intrastructure	Restart Module Restart
SKHY306	a4:39:b3:14:71:1d	26%	11	AES	WPA2PSK	Infrastructure	
B204	34:fc:a1:88:0e:3f	26%	11	AES	WPA2PSK	Infrastructure	
0xE78CAAE78CAA	54:75:95:6d:88:44	24%	11	AES	WPA2PSK	Infrastructure	
	3c cd 57:67.b3.9a	13%	1	AES	WPA2PSK	Infrastructure	
SSID	BSSID	Siganl(%)%	0	AES	WPA2PSK	Ad Hoc	

(/wiki/File:RS485_TO_WIFI_ETH_MQTT005.png)

STA mode has the same function as an external network cable. Please turn on WiFi and turn off the hotspot.

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				中文 English
-				
	Quick	Configure	MQTT Setting	
	Mode !	Selection		
	AP Int	erface Setting	Set MQTT Function	
			MQTT Setting	
	> <u>STA In</u>	terface Setting	Open the MQTT	ON V
	Applic	ation Setting	Version(3.1.1)	V3.1.1 ▼
	Tal	at Catting	Server Address	
	Ettiern	let Setting	Server Port	undefined
	HTTPI	D Client Mode	Heart Beat(0-65535/0 means	s off)
	MQTT	Setting	Client ID(Can be empty)	
			Username(Can be empty)	
	Device	Management	Password(Can be empty)	
_			Pub Mode	mode1(Pure transparent transmission mode) 🗸
			Sub Mode	mode1(Pure transparent transmission mode) V
			Open the Will	ON V
			Will Topic	
			Will QOS	QOS0 ~
			Will Retained	ON V
			Will Message(Can be empty)	undefined
				Apply Cancle
			MQTT Pub Topic	

(/wiki/File:Wifi_MQTT.png)

Easy-to-use Online MQTT Client|Try Now (emqx.io) (http://www.emqx.io/online-mqtt-clien t/#/recent_connections/0350e24b-cb34-442c-95a2-6c037ce66fcf)

Enter the MQTT Setting to configure:

C	Ŵ	▲ 不安全	10.1	0.100.254/ho	me.html]	A»	20	ø	¢	£≡	œ	⊥ ₀	8
												_		
											中江	Ż	En	nglish
	Quick	<u>c Configure</u>		MQ	TT Setting									
1	Mode	Selection		Set MQT	T Function									
	⇒ <u>AP In</u>	terface Setting		MQTT Se	etting									
	STA I	interface Setting		Open th	e MQTT		ON V							
	Appli	cation Setting		Version	(3.1.1)		V 3.1.1 ▼							
	Ethor	mat Catting		Server A	Address									
	- <u>Ether</u>	net Setting		Server Port			undefined							
1	♦ <u>HTTF</u>	PD Client Mode		Heart B	eat(o-65535/o mea	ans off)								
F	<u> → MQT</u>	T Setting		Client II	D(Can be empty)									
	Denie	Management		Usernar	ne(Can be empty)									
	Devic	<u>æ Management</u>		Passwor	rd(Can be empty)									
				Pub Moo	de		mode1(Pu	ure trar	sparent	transm	ission m	ode) 🗸		
				Sub Mod	de		mode1(Pu	ure trar	sparent	transm	ission m	ode) 🗸		
				Open th	e Will		ON ¥							
				Will Top	pic									
				Will QO	S		QOS0 V							
				Will Ret	ained		ON ¥							
				Will Me	ssage(Can be emp	y)	undefined							
							Apply	Cancle]					

(/wiki/File:RS485_TO_WIFI_ETH_MQTT007.png)

Communicate via MQTT and EMQX MQTT platform:

MQTT Pub Topic

nnections	K Back	Edit	Connect	Î		
@broker.emqx.io:8063	General					中交
					Onen the MOTT	(ON ¥)
	- Name E	TH		Quick Configure	Version(3.4.4)	Valle
	* Client ID	ngth:_39058966	c	Mode Selection	Server Address	braker emax la
	* Host		_	AP Interface Setting	Server Part	1883
		and an	_	STA Interface Setting	Heart Beat(o-65535/o means off)	60
	* Port a	083		A local and an America	Client ID(Can be empty)	12345678
	* Path A	rat		Application Setting	Username(Can be empty)	
				Ethernet Setting	Password(Can be empty)	
	Usemame			HTTPD Client Mode	Pub Mode	mode1(Pure transparent transmission mode
	Password				Sub Mode	mode1(Pure transparent transmission mode
				MQTT Setting	Open the Will	OFF -
	ssi/rus	true 🧿 false		Device Management		Apply Cande
					MQTT Pub Topic	
	Advanced A				Delete Topic	
					Special Symbol(Can be empty)	1
	Connect Tin	neout (s) 10			Topic Name	matt
	Keen	Alive (c) on			QOS	Q082 ¥
	Kitep	And the first			Retained	OFF V
	Clean	Session 🧿 true 🕓 false			Add Topic Clear Topic	
	Auto Re	connect 🗆 true 🧿 false				Apply Cande
					MQTT Sub Topic	
	MQT	Version 5.0	~		Delete Topic	
	Session Expin	Interval			Topic Name	matt
					QOS	Q050 ¥
	Receive M	laximum	(Byte)		Add Topic Clear Topic	
						Apply Cande

(/wiki/File:RS485_TO_WIFI_ETH_MQTT008.png)

			SSCOM V5.13.1 Serial/Net data debugger,Author:Tintin,2618058@qc
ETH 😽		ሀ 🖉	PORT COM_Settings Display Send_Data Multi_Strings Tools He
(十 添加订阅)	GE ● Plainte ∨ 全部 发送	已接收	[22:50:25.965]0UT→◇abodefghijklanopqrstuvwxyz abodefghijklanopqrstuvwxyz abodefghijklanopqrstuvwxyz abodefghijklanopqrstuvwxyz abodefghijklanopqrstuvwxyz
mqtt QoS 0	qrstuvwxyz		abode fgni jklanop grstuwwyr abode fghi jklanop grstuwwyr abode fghi jklanop grstuwwyr
	2022-09-08 22:51:05:863		□ [22:50:42.902]0UT→◆abcdefghijklanopqrstuwwyz abcdefghiiklanopqrstuwwyz
	Topic: mqtt QoS: 0 hello		abodefghi jklanogqrstuvnyy abodefghi jklanoqqrstuvnyy abodefghi jklanoqqrstuvnyy abodefghi jklanoqqrstuvnyy abodefghi jklanoqqrstuvnyy abodefghi jklanoqqrstuvnyy
	2022-09-08 22:51:08:197	,	[22:51:03.662]00T→◇abcdefghijklnnopqrstuwxxyz abcdefghijklnnopqrstuwxxyz
	Topic: mqtt QoS: 0		abodafghi jklanopgr stuvwzyz abodafghi jklanopgr stuvwzyz abodafghi jklanopgr stuvwzyz abodafghi jklanopgr stuvwzyz abodafghi jklanopgr stuvwzyz
	abcdefghijklmmop qrstuvwxyz		abodefghijklanopqrstuwxyz □ [22:51:04_584]007→Cabadafabiiklanoparstuwenyz
	abcdefghijklmmop		abodefghijklanopgrstuwwyz abodefghijklanopgrstuwwyz
	qrstuvwxyz abcdefghijklmmop		abodefghi jklmnopgrstuwwxyz abodefghi jklmnopgrstuwwxyz abodefghi jklmnopgrstuwwxyz
	qrstuvwxyz		abodafghi jklanopqrstuvwzyz abodafghi jklanopqrstuvwzyz —
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	abcdefghijklmmop		abodefghi jklmnopgrstuwwyz abodefghi jklmnopgrstuwwyz abodefghi jklmnopgrstuwwyz
	abcdefghijklmmop		abodefghi jklnnopgrstuvwxyz abodefghi jklnnopgrstuvwxyz abodefi jklnnopgrstuvwxyz
	qrstuvwxyz	_	[22:51:11.251]0UT→◇abcdefghijklnnopqrstuvwxyz
	qrstuvwxyz		abodafghi jklannopgrstuwwyz abodafghi jklannopgrstuwwyz abodafghi jklannopgrstuwwyz
	abcdefghijklmmop		abodefghijklannopgrstuwwzyz abodefghijklannopgrstuwwzyz
	2022.00.08.22-51-11-572		abodefghijklmnopqrstuvwzyz
	2022-09-06 22:51:11:572		ClearBata OpenFile SendF
	Payload: JSON 🗸	QoS: 2 🗸	ConNum TCPClient THEXShow SaveData Receive
	O Retain Meta		Local 192.168.0.199 V 8899 Discourd Abdefshi klaneogarstuwwyz
	mqtt1	← -	为了更好地发展SSCOW软件 遺伝生出真な目的支援Lanopqrstuwayz abcdefchijkLanopqrstuwayz
	123456789		【升级到15.13.1】★合宙高性价比40模块值得一试、★RT-Thread中国人的开源5

(/wiki/File:RS485_TO_WIFI_ETH_MQTT009.png)

Tips: STA and ETH cannot be opened at the same time.

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