USR-DR154:How to configure MQTT

Step1 : Connect the PC to the DR154 via serial port (COM1 115200 8n1) Step 2 :Enter serial AT mode

😽 USR-CAT1 V1.1.4		- 0 ×
File Language		
[PC Serial Parameters] : Serial Port COM1 🗸 BaudRate 115200 🗸 Parity/Data/Stop NONI 🗸	8 v 1 v Close	
Choose Work Mode	Operation and Hints	
Transparent Mode O HTTPD Client Mode O SMS Mode O NQTT Mode	Query al parameters	
	Enter Serial AT command mode Exit Serial AT command mode	
PC NetWork M2M device Serial device	Build Time Query IMEI Query phone number Query version	
Transparent Mode Parameters	Query RSSI Save parameters Reset to factory setting Restart	
Pable Socket     PBaPort     socket.usr.cn     2217     Unk Type     TCP     Perss     Trme of Transtory Lnk(s)     10     Backup     Socket A     Backup     Socket B     Enable Socket     C     Backup     Socket C     Enable Socket     D	Tmestamp       RX:16         Serial Open Success       >[Rx<-1[11:10:31][asc]	Reset Count
TLS Encrypted parameters		
□ ssi		
Modem Parameters		
Serial Port         Serial BaudRate         11520( \neg )         Flow Control         NONE \neg )           Parity/Data/Stop         NONE \neg )         8 \neg )         1 \neg )	1	
More Packaging Interval(ms) 50 sckaging Length(Bytes) 1024	Send via Serial Port + TX:0	🕘 Send 👻

Step 3: Query all the parameters

😽 USR-CAT1 V1.1.4			- 0 ×
File Language			
[PC Serial Parameters] : Serial Port COM1 V BaudRate 115200 V Parity/Data/Stop NONI	✓ 8 ✓ 1 ✓ ■ Close		
Choose Work Mode	Operation and Hints	-	
Transparent Mode	Query all parameters	🛱 Set and save all parameters	
	Enter Serial AT command mode	Exit Serial AT command mode	
PC NetWork M2M device Serial device	Build Time Query IMEI	Query phone number Query version	
Transparent Mode Parameters	Query RSSI Save parameters	Reset to factory setting Restart	
Enable Socket     Ps&Port     Socket.usr.cn     2317     Link Type     TCP     Persis     Time of Transtory Link(s)     10	Timestamp RX:3355		Reset Count
Backup         IP&Port           Socket A         IP           Enable Socket         B	>[Tx->][11:11:35][asc] AT+SSLEN?		
Backup Socket B Enable Socket C	>[Rx<-][11:11:35][asc] AT+55LEN? +S5LEN:OFF		
Backup Socket C  Dable Socket	OK >[Tx->][11:11:35][asc] AT+SSLAUTH? >[Rx<-][11:11:35][asc] AT+SSLAUTH?		
TI 6 Encremented exemptions			
C SSL	+SSLAUTH:ALL OK		
	Operation complete		
Modern Parameters			
Serial Port         Serial BaudRate         11520( v)         Flow Control         NONE v)           Parity/Data/Stop         NONE v)         8 v)         1 v)           Parity/Data/Stop         NONE v)         8 v)         1 v)	Sand via Sarial Port - TY'0		D sond -

Step 4 : change the working mode to the MQTT and set the parameters up

😽 USR-CAT1 V1.	.1.4							- 0 ×
File Language								
[PC Serial Parame	eters] : Serial Port COM1	✓ BaudRate 115200	Parity/Data/Stop NONI ~	8 v 1 v 🗰 Clos	e .			
Choose Work Mo	de			Operation and Hints				
O Transparent	Mode O HTTPD Client M	Node 🔾 SMS Mode	MQTT Mode	Query a	I parameters	E Set and save	all parameters	
				Enter Serial AT	command mode	Exit Serial AT cor	nmand mode	
PC	NetWork	M2M device	Serial device	Build Time	Query IMEI	Query phone number	Query version	
MQTT Mode Para	meters			Query RSSI	Save parameters	Reset to factory setting	Restart	
Connect	Generic MQTT	🔿 ALI Cloud		I Timestamp	RX:3355		•	Reset Count
Vvil messages enable	MQTT Server IP&Port Username Password Client ID MQTT Version MQTT version MQTT serial trans mode MQTT heartbeat time(s)	47.107.90.59 admin admin BRI54_MQTT_TEST 3.1.1 10 Transparent mode 60 Guean session	1983     1983       1983 	OK           >[Tx->][11:11:35][a: AT+SSLEN?           >[Rx<-][11:11:35][a: AT+SSLEN:OFF           OK           >[Tx->][11:11:35][a: AT+SSLAUTH?           >[Rx<-][11:11:35][a: AT+SSLAUTH?	sc] sc]			
TLS Encrypted pa	rameters			+SSLAUTH:ALL				
				ОК				
				Operation complete				
Modem Paramete	ers				×			
Serial Port	Serial BaudRate Parity/Data/Stop Packaging Interval(ms)	I15200 v         Flow C           NONE v         8 v           50         sckaging Length(	ontrol NONE ~ 1 ~ Bytes) 1024	 Send via Serial Port +	TX:0			🕘 Send 🝷

Step 5 : set the publish/Subscribe topic up

😽 USR-CAT1 V1.	14					- 0 X
File Language						
[PC Serial Parame	eters] : Serial Port COM1 🔍 BaudRate 115200 🗸 Parity/Data/Stop NONI 🗸	8 v 1 v 🖬 Clo	se			
Choose Work Mod	de	Operation and Hints				
O Transparent	Mode OHTTPD Client Mode OSMS Mode OMQTT Mode	Query	all parameters	🔚 Set and save	all parameters	
		Enter Serial A1	r command mode	Exit Serial AT co	mmand mode	
PC	NetWork M2M device Serial device	Build Time	Query IMEI	Query phone number	Query version	
MQTT Mode Parar	meters	Query RSSI	Save parameters	Reset to factory setting	Restart	
	MQTT heartbeat time(s) 60 Clean session	🕑 Timestamp	RX:3355			Reset Count
Will messages enable		OK >[Tx->][11:11:35][a AT+SSLEN?	sc]			
Subscribe Topics	Topici [DR154_MQTT_TEST/SubTog]  Topic2 [/SubTopic2  0 ~	>[Rx<-][11:11:35][a AT+SSLEN? +SSLEN:OFF	sc]			
Dublish Tanina	Topic3 [/SubTopic3 0 ~      Topic4 [/SubTopic4 0 ~	OK	scl			
Publish Topics	100/L [04154_10[1] [151 [Public] 1 ]	AT+SSLAUTH? >[Rx<-][11:11:35][a AT+SSLAUTH?	sc]			
TLS Encrypted pa	rameters	+SSLAUTH:ALL				
SSL SSL		ОК				
		Operation complete				
Modem Paramete	ers	ī				
Serial Port	Serial BaudRate         11520C v         Flow Control         INNE v           Parky/Data/Stop         NONE v         8 v         1 v           Packaging Interval(ms)         50 vkaging Length(Bytes)         1024	 Send via Serial Port 👻	TX:0			Ø, Send 🗸

Step 6 : Set and save all the parameters, then it will save the settings and reboot the DR154

H USR-CAT1 V1.1.4					– 🗆 🗙
File Language					
[PC Serial Parameters] : Serial Port COM1 v BaudRate 115200 v Parity/Data/Stop NONI v	8 ~ 1 ~ Clo	se			
Choose Work Mode	Operation and Hints				-
O Transparent Mode     O HTTPD Client Mode     O MQTT Mode     MQTT     MQTT     MQTT     MQTT     Serial	. Query	all parameters	Set and save	all parameters	
	Enter Serial AT	F command mode	Exit Serial AT cor	mmand mode	
PC NetWork M2M device Serial device	Build Time	Query IMEI	Query phone number	Query version	
MQTT Mode Parameters	Query RSSI	Save parameters	Reset to factory setting	Restart	
MQTT heartbeat time(s) 60	🕑 Timestamp	RX:3355			Reset Count
	ОК				
UWI messages enable	>[Tx->][11:11:35][a AT+SSLEN?	isc]			
	>[Rx<-][11:11:35][a	sc]			
Subscribe Topics Topic1 DR154_MQTT_TEST/SubTog 0 ~	AT+SSLEN?				
Topic2 /SubTopic2     0 ~	+SSLEN:OFF				
□ Topic4 [/SubTopic4 0 ~	ок				
Publish Topics         Topic1         DR154_MQTT_TEST/PubTog         1          Retain	>[Tx->][11:11:35][a AT+SSLAUTH?	sc]			
C Topic3 /PubTopic3 0 V C Retain	>[Rx<-][11:11:35][a	sc]			
🗋 Topic4 //PubTopic4 🛛 0 🗸 🖓 Retain	AT+SSLAUTH?				
TLS Encrypted parameters	+SSLAUTH:ALL				
🗆 SSL	ок				
	Operation complete				1
Modem Parameters	= 	· • anananan		mmmm v	
Serial Port Serial BaudRate 11520( V Flow Control NONE V Party/Data/Stop NONE V 8 V 1 V	I				
More Packaging Interval(ms) 50 3ckaging Length(Bytes) 1024	Send via Serial Port 👻	TX:0			🕲 Send 👻

Data test:

1. login to the server and enable the MQTT Broker

EMO										C	) Githu	0 0	Free Tital ->
Dashboard	Clients								emq	x@127.0.0.1			
MONITORING ~	Client ID	Username	IP Address	Keepalive(s)	Expiry Interval(s)	Subscriptions Count	Connect Status	Created At	Operation				
Overview	DR154_MQTT_TEST	admin					<ul> <li>CONNECTED</li> </ul>						
Clients													
Topics													
Subscriptions													
RULE ENGINE 🗸													
MANAGEMENT ~													
由 TOOLS 🗸													
BS ADMIN 🗸													
admin 🕒													

 $2 \, {\ensuremath{\scriptstyle \sim}} \,$  Sub the topic in the MQTT Broker

	p//47.107.90.59 10063/#/websocket		<b>0 4 1 1 1</b> 4 4 5	又于「「九伯田得意防	ሐ 🛄 🎮 🕻	
★ 收藏 · □手机收藏夹 🕃 网址大:	全 💽 360機業 📵 遊动中心					
CEMO		<ul> <li>Subscribe success</li> </ul>				Free Trial →
Dashboard						
Overview	Clean Session SSL wa://47.107.90.59.8083/mqtt					
Clients						
Topics	Connect Deconnect Current State: CONNECTED					
O Subscriptions	Subscribe					
🞮 📄 RULE ENGINE 👻						
MANAGEMENT -						
db 1001 8			Topic	QoS	Time	Operation
Websocket						×
HTTP API						
88 ADMIN ~	Sutscribe					
	Messages					
🐵 admin 🕒	testtopic {"msg"	"Hello, Worldt" }			Retained	send
# २ म 📄 烯	🕘 📀 👧 🍇 🐔 🖬 🗄 🚑 🖻	\$				^ 11:20 ↓ 11:20 ↓ 11:20

3. Post the test datas in the software for DR154 check if the MQTT Broker get the message

₩ USR-CAT1 V1.1.4		×
File Language		
[PC Serial Parameters] : Serial Port COM1 v BaudRate 115200 v Parity/Data/Stop NONI 8	✓ 1 ✓ ■ Close	
Choose Work Mode	Operation and Hints	
Transparent Mode     HTTPD Clent Mode     SMS Mode     MQTT Mode	Query all parameters	Set and save all parameters
	Enter Serial AT command mode	Exit Serial AT command mode
PC NetWork M2M device Serial device	Build Time Query IMEI	Query phone number Query version
MQTT Mode Parameters	Query RSSI Save parameters	Restart Restart
MQTT heartbeat time(s) 60 Clean session Will messages enable TLS Encrypted parameters SSL	Timestamp Hex RX:4361 OK Operation complete >[Rx<-][11:16:19][asc] WH-GM5 >[Tx->][11:21:41][asc] DR154_MQTT_TEST_MESSAGE1 DR154_MQTT_TEST_MESSAGE1	Reset Count
Modem Parameters           Serial Port         Serial BaudRate         11520( v)         Flow Control         NONE v)         Plow Contro	Send via Serial Port → □ Hex TX:24	اsend -

## 4、 The MQTT Broker received the test message from DR154

	7.107.90.59.18083/#/websocket		0H # 11 0 0	人 自卫女任日言亲原衣	do 🛄	N L 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
🗙 改憲 · 🗌 手机改藏夾 📀 网址大全 🔾	2 360提家 🛞 游戏中心					
CEMO)					① GitHub	O Free Trial →
+			Topic	QoS	Time	Operation
Dashboard						
Overview						
Clients	Subscribe					
Topics						
C. does infinite	Messages					
🞮 🗏 RULE ENGINE 🗸	testiopic	("msa", "Hello, World")			V Retained	send
MANAGEMENT ~						_
🖽 TOOLS 🗠						
Websocket	Messages already sent		Messages received			
Contraction of the second s	Messages Topic QoS	Time	Messages	Topic	QoS	Time
ES ADMIN ~			DR154_MQTT_TEST_MESSA GE1	DR154_MQTT_TEST/ PubTopic1		
🐵 admin 🗗						
a २ म 🖿 👂	😑 🧭 🗿 🔯 🔍 🕅 🖽 🗸	. = 🖻 🗘				ヘ 11:21

5. Post the test datas in the MQTT Broker and check if the DR154 get the message

WSR-CAT1 V1.14				- 0 X
[PC Serial Parameters] · Serial Port COM1 V BaudRate 115200 V Parity/Data/Stop NONI 8				
Choose Work Mode	Operation and Hints			
	·			
C mansparent mode C H T PD Clent mode C SMS mode C MQ T mode	🗟 Query all	parameters	Set and save	all parameters
MOTT MOTT Seriel Seriel	Enter Serial AT o	command mode	Exit Serial AT cor	nmand mode
PC NetWork M2M device Serial device	Build Time	Query IMEI	Query phone number	Query version
MQTT Mode Parameters	Query RSSI	Save parameters	Reset to factory setting	Restart
MQ11 senai trans mode Transparent mode V		-	*	
MQTT heartbeat time(s) 60	🕑 Timestamp 🗌 Hex	RX:4402		Reset Count
Clean session	Operation complete			
	>[Rx<-][11:16:19][aso	]		
	WH-GM5			
n messages enable	>[Tx->][11:21:41][aso	:]		
	DR154_MQTT_TEST_M	1ESSAGE1		
	>[Rx<-][11:24:10][asc	:]		
TIC Encounted permeters	DR154_MQTT_TEST_M	1ESSAGE2_From M	QTT Broker	1
Les Encrypted parameters				1
SSL	DP154 MOTT TEST	MESSAGE1	*	
	DKIJT_NQTT_TLJT	MESSAGEI		
Modem Parameters				
Serial Port Serial BaudRate 115200 Serial Port				
Party/Data/Stop NONE X 8 X 1 X				
Backaging Interval(mr) 50 v/saging Longth(Butor) 1024	Conduct Contribut	711-11		(D) Const
More Ackaging Interval(ins) 100 BCKaging Length(Bytes) 1024	Send via Serial Port +	JHex 1X:24		Send -
				alj