# YNH-MN316-AT指令示例

## 1. 文档说明

☑ 该文档展示了核心板通过TCP/UDP/MQTT协议连接服务器(野牛服务器、OneNET、阿里 云)并实现数据传输,作为串口发送AT指令调试阶段的参考。不同平台账户配置信息不同, 需更改指令中云平台(OneNET、阿里云)的配置信息,实现与云平台的数据通信。

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## 2. 连接信息



### ✓ OneNET

设备名称: EC800816

产品id: WtF1aQE659

token (需要用工具计算): version=2018-10-

31&res=products%2FWtF1aQE659%2Fdevices%2FEC800816&et=2537256630&method=

md5&sign=VJfBWuWM43wPgj%2BH7B0G8w%3D%3D

#### 阿里云

clientId:

k0jupm3hCdL.ML307842|securemode=2,signmethod=hmacsha256,timestamp=1710133 664162

username: ML307842&k0jupm3hCdL

passwd: 2d865a7a861e70f32c45c6bedc0f14ad1e20a706b952d67f7077bad390520170

mqttHostUrl: iot-06z00f8bo0pxsix.mqtt.iothub.aliyuncs.com

port: 1883

## 3. 基础通用命令



✓ //获取信号质量

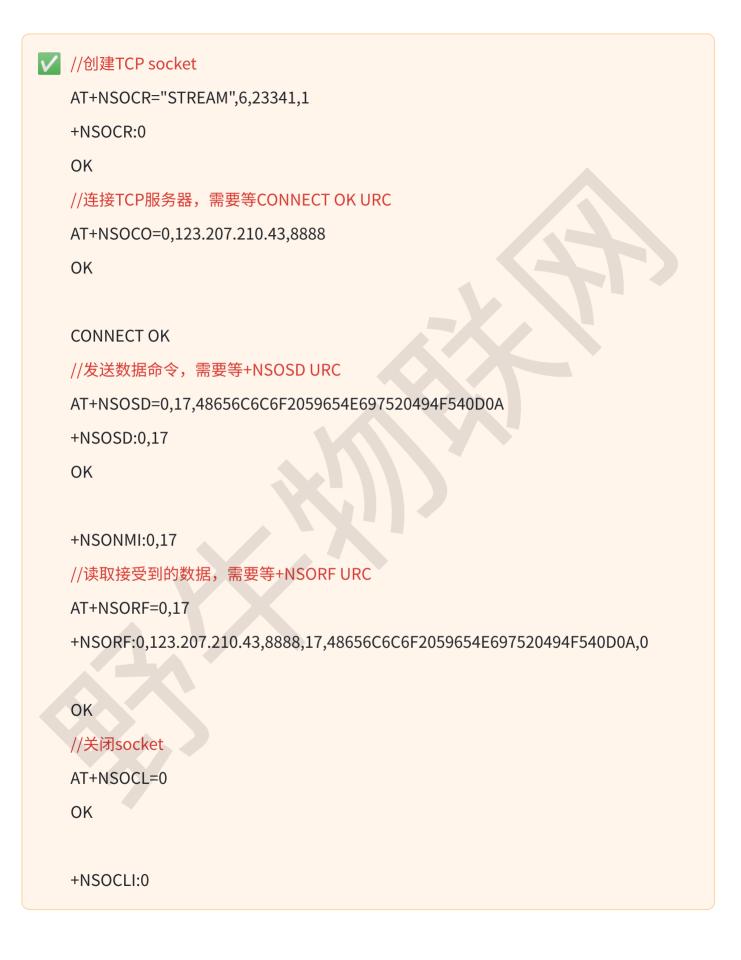
AT+CSQ

```
//获取注网状态,0,1表示注网成功
AT+CEREG?
//获取卡号
AT+CIMI
//复位指令
AT+NRB
```

## 4. UDP

```
✓ //创建UDP socket
   AT+NSOCR="DGRAM",17,2334,1
   +NSOCR:0
   OK
   //发送UDP数据,需要等+NSOST URC
   AT+NSOST=0,123.207.210.43,9999,10,30313233343536373839
   +NSOST:0,10
   OK
   +NSONMI:0,10
   //读取接收的数据,需要等+NSORF URC
   AT+NSORF=0,30
   +NSORF:0,123.207.210.43,9999,10,30313233343536373839,0
   OK
   //关闭socket
   AT+NSOCL=0
   OK
   +NSOCLI:0
```

## 5. TCP



## 6. MQTT-野牛服务器

```
✓ //配置连接参数
   AT+MQTTCFG="123.207.210.43",1883,"clientExample",60,"","1,0
   OK
   //连接 MQTT 服务器,需要等+MQTTOPEN:OK URC
   AT+MQTTOPEN=0,0,0,0,0,"",""
   OK
   +MQTTOPEN:OK
   //订阅主题,需要等+MQTTSUBACK URC
   AT+MQTTSUB="topic/example_8808",0
   OK
   +MQTTSUBACK:1,0,topic/example_8808
   +MQTTPUBLISH:0,0,1,0,topic/example_8808,6,001bye
   //发布消息,需要等+MQTTPUBLISH URC
   AT+MQTTPUB="topic/example_8808",0,0,0,0,"hello yeniu!I am MN316"
   OK
   +MQTTPUBLISH:0,0,0,0,topic/example_8808,22,hello yeniu!I am MN316
   //断开连接
   AT+MQTTDISC
   OK
   +MQTTDISC:OK
   //删除 MQTT 客户端,并释放资源
   AT+MQTTDEL
   OK
```

ATK XCOM V2.6	_						
ok	串口选择						
	COM7:USB	-SERIAL CH34C V					
+CME_ERROR:8002	波特率	9600 🗸					
ok							
+MQTTOPEN:OK	停止位	1 ~					
OK	数据位	8 ~					
+MQTTSUBACK:1,0,topic/example_8808 +MQTTPUBLISH:0,0,1,0,topic/example_8808,6,001bye	校验位	None ~					
יינון אינייטנגנאר.ט, ט, ז, ט, topic/example_oouo, b, uulbye							
OK TOWNSTRANGE OF STATE OF STA	串口操作	● 关闭串口					
+MQTTPUBLISH:0,0,0,0,topic/example_8808,22,hello yeniu!I am MON316	保存窗口	清除接收					
OK OK		显示□ DTR					
+MQTTDISC:OK	RTS	自动保存					
OK	□时间戳						
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
单条发送 多条发送 协议传输 帮助							
MDN316-MQTT-yeniu   80   308",0,0,0,0, "hello yeniu!I am MDN316"	85	2 发送新行					
81	86	]16进制发送					
13", 1883, "clientExample", 60, "", "", 1, 0 82 AT+MQTTDISC	87	」关联数字键盘					
AT +MQTTOPEN=0, 0, 0, 0, 0, "", "" 83 AT +MQTTDEL	88	] 自动循环发送					
AT+MQTTSUB="topic/example_8808",0 84	89 J	割期 500 ms					
页码 9/16     移除此页     添加页码     首页     上一页     下一页     尾页     页码     1     跳转     导入导出条目							
☆ ▼ www.openedv.com S:281 R:236 CTS=0 DSR=0 DCD=0 当前时间 18:51:17							

### 7. OneNET

✓ //配置连接参数(只能配置一次,多次配置会报错,需要复位或者断开连接才能再次配置。 只校验数据格式,不校验参数正确性)

AT+MQTTCFG="183.230.40.96",1883,"EC800816",60,"WtF1aQE659","version=2018-10-31&res=products%2FWtF1aQE659%2Fdevices%2FEC800816&et=2537256630&method=md5&sign=VJfBWuWM43wPgj%2BH7B0G8w%3D%3D",1,0

OK

//连接 MQTT 服务器,需要等+MQTTOPEN:OK URC

AT+MQTTOPEN=1,1,0,0,0,"",""

OK

+MQTTOPEN:OK

//订阅主题,需要等+MQTTSUBACK URC

AT+MQTTSUB="\$sys/WtF1aQE659/EC800816/thing/property/post/reply",0

OK

+MQTTSUBACK:1,0,\$sys/WtF1aQE659/EC800816/thing/property/post/reply

AT+MQTTSUB="\$sys/WtF1aQE659/EC800816/thing/property/set",0

OK

+MQTTSUBACK:2,0,\$sys/WtF1aQE659/EC800816/thing/property/post/reply

//发布消息,需要等+MQTTPUBLISH URC

//发送json格式有点问题,修改为十六进制发送,将json转为16进制,去掉最外层双引号。 133是字符长度(16进制字符串长度除以2)

原始数据: {"id":"123","version":"1.0","params":{"CurrentTemperature": {"value":11.3},"LightLux":{"value":1000.3},"SoilMoisture":{"value":51.4}}}

### 转为16进制:

7b226964223a22313233222c2276657273696f6e223a22312e30222c22706172616d73223 a7b2243757272656e7454656d7065726174757265223a7b2276616c7565223a31312e337d 2c224c696768744c7578223a7b2276616c7565223a313030302e337d2c22536f696c4d6f69 7374757265223a7b2276616c7565223a35312e347d7d7d

AT+MQTTPUB="\$sys/WtF1aQE659/EC800816/thing/property/post",0,0,0,133,7b2269642 23a22313233222c2276657273696f6e223a22312e30222c22706172616d73223a7b224375 7272656e7454656d7065726174757265223a7b2276616c7565223a31312e337d2c224c696 768744c7578223a7b2276616c7565223a313030302e337d2c22536f696c4d6f69737475726 5223a7b2276616c7565223a35312e347d7d7d

OK

+MQTTPUBLISH:0,0,0,0,\$sys/WtF1aQE659/EC800816/thing/property/post/reply,39, {"id":"123","code":200,"msg":"success"}

### //断开连接

AT+MOTTDISC

OK

+MOTTDISC:OK

//删除 MQTT 客户端,并释放资源

AT+MQTTDEL

OK



## 8. 阿里云

✓ //配置连接参数(只能配置一次,多次配置会报错,需要复位或者断开连接才能再次配置。 只校验数据格式,不校验参数正确性)
AT+MQTTCFG="iot-06z00f8bo0pxsix.mqtt.iothub.aliyuncs.com",1883,"k0jupm3hCdL.ML307842|securemod

06z00f8bo0pxsix.mqtt.iothub.aliyuncs.com",1883,"k0jupm3hCdL.ML307842|securemod e=2,signmethod=hmacsha256,timestamp=1710133664162|",60,"ML307842&k0jupm3hCdL","2d865a7a861e70f32c45c6bedc0f14ad1e20a706b952d67f7077bad390520170",1,0

OK

//连接 MQTT 服务器,需要等+MQTTOPEN:OK URC

AT+MQTTOPEN=1,1,0,0,0

OK

+MQTTOPEN:OK

### //订阅主题,需要等+MQTTSUBACK URC

AT+MQTTSUB="/sys/k0jupm3hCdL/ML307842/thing/event/property/post\_reply",1

OK

+MQTTSUBACK:1,1,/sys/k0jupm3hCdL/ML307842/thing/event/property/post\_reply

### //发布消息,需要等+MQTTPUBLISH URC

AT+MQTTPUB="/sys/k0jupm3hCdL/ML307842/thing/event/property/post",0,0,0,0," {params:{CurrentTemperature:51.8,RelativeHumidity:37,LightLuxValue:56.3}}"

OK

+MQTTPUBLISH:0,0,0,0,/sys/k0jupm3hCdL/ML307842/thing/event/property/post\_reply ,107,{"code":200,"data":

{},"id":"null","message":"success","method":"thing.event.property.post","version":"1.0"}

### //断开连接

AT+MQTTDISC

OK

+MQTTDISC:OK

//删除 MQTT 客户端,并释放资源

AT+MQTTDEL

OK

ATK XCOM V2.6			_		X		
ок			串口选择				
			COM7: USB-	SERIAL CH34	C ~		
OK +MQTTOPEN:OK			波特率	9600	~		
ok			停止位	1	~		
+MQTTSUBACK:1,1,/sys/k0jupm3hCdL/ML307842/thing/event/property/post_reply			数据位	8	~		
OK +MQTTPVBLISH:0,0,0,0,/sys/k0jupm3hCdL/ML307842/thing/event/property/post_reply,107,				None	~		
{"code":200, "data": {}, "id": "null", "message": "success", "method": "thing. event. property. post", "version": "1.			串口操作	● 关闭	十二		
0"}			保存窗口	清除接	ub		
OK NAMED TO COLOR			□ 16进制显示□ DTR				
+MQTTDISC:OK			□ RTS □ 自动保存		保存		
OK			□时间戳		ms		
单条发送 多条发送 协议传输 帮助							
D ment o menu 11	00	AT+MQTTPUB="/sys/k0jupm3hCdL/ML30784	105	7 发送新行			
	01		106	] 16进制发送	1		
20a706b952d67f7077bad390520170",1,0	<u>√</u> □	AT+MQTTDISC	107	- ]关联数字键	盘		
AT +MQTTOPEN=1, 1, 0, 0, 0	03	AT+MQTTDEL	108	_ _ 自动循环发			
AT +MQTTSUB="/sys/k0jupm3hCdL/ML30784 1	04	AT+NRB	109 周	期 500	ms		
页码 11/16 移除此页 添加页码 首页	E	一页 下一页 尾页 页码 1	跳转	导入导出条目	1		
☆ www.openedv.com S:516 R:331 CTS=0 DSR=0 DCD=0 当前时间 11:31:35 .::							