

灯联网网关推送规格书

MQTT TOPIC 设计

设备注册：/lighting/<mac-id>/reg，用于向友商服务器或网关进行注册
数据上传：/lighting/<mac-id>/data，用于向友商服务器推送数据，全部大写
数据确认：/lighting/<mac-id>/rep，用户向友商服务器回复数据

- 1. 设备ID<id>直接使用MAC地址进行替代，或者衍生计算。
- 2. TOPIC设计，已经确定，参数约定为大写。

智慧照明 JSON 报文

	南农报文类型	可用性
总能耗	AI	Yes
总运行时间	AI	Yes
实时功率	AI	No
使用次数	AI	Yes
灯开关	DI	Yes
亮度变化	SOE	Yes
变量变暗时间	SOE	Yes
色温	SOE	No
RGB	SOE	No
报损	SOE	No

总能耗(数据)

```
{
  "key": "total_power",
  "value": float,
  "type": "AI",
  "unit": 2,
  "name": "总能耗",
  "label": "W.h",
```

```
"timestamp": int(10)
}
```

总运行时间(数据)

```
{
  "key": "total_runtime",
  "value": float,
  "type": "AI",
  "unit": 0,
  "name": "总运行时间",
  "label": "h",
  "timestamp": int(10)
}
```

使用次数(数据)

```
{
  "key": "use_times",
  "value": int,
  "type": "AI",
  "unit": 0,
  "name": "使用次数",
  "label": "次",
  "timestamp": int(10)
}
```

使用触发次数来填充使用次数。

灯开关(遥信)

```
{
  "key": "light_switch",
  "value": bool,
  "type": "DI",
  "unit": 1, //1: 开, 0: 关
  "name": "开关",
  "timestamp": int(10)
}
```

亮度变化(事件)

```
{
  "key": "light_brightness",
  "value": int,
  "type": "SOE",
  "unit": 50,
  "name": "亮度", //范围: 0 ~ 100
  "label": "亮度设置为50",
  "timestamp": int(10)
}
```

变亮变暗时间(事件)

```
{
  "key": "light_change_time",
  "value": int,
  "type": "SOE",
  "unit": 30, //范围: 1 ~ 200
  "name": "变亮变暗时间",
  "label": "变暗时间设置为30",
  "timestamp": int(10)
}
```

报损

```
{
  "key": "light_status",
  "value": int,
  "type": "SOE",
  "unit": 3, //0: 正常, 1: 不灭, 2: 不亮, 3: 异常波动
  "name": "是否损坏",
  "label": "异常波动",
  "timestamp": int(10)
}
```

报文实例

```
connect to: xxx.xxx.xxx.xxx MQTT端口
topic: /lighting/C06E897D82F0/reg/
payload:
{
  "key": "register",
  "snr": "C06E897D82F0",
  "MAC": "C06E897D82F0",
```

```
"IP": "10.15.32.75",  
"DNS": "10.15.32.1",  
"created": 1713937225390,  
"connected": 1713937225390,  
"uptime": 12837128937,  
"supplier": "beacool",  
"model": "gw00002"  
}
```

connect to: xxx.xxx.xxx.xxx MQTT端口

topic: /lighting/C06E897D82F0/data

payload:

```
{  
  "key": "total_power",  
  "value": float,  
  "type": "AI",  
  "unit": 2,  
  "name": "总能耗",  
  "label": "W.h",  
  "timestamp": int(10)  
}
```