S01 LPG Detector

MQTT Protocol Description

When the S01 liquefied gas detector host (hereinafter referred to as the host) is connected to the Internet, it communicates with the APP through the MQTT protocol remotely. When MQTT publishes topic data, the message quality Qos=1, Retain=TRUE.

1. Subject of host measurement data

1.1. Subject name:
gasLevel/dev_id
The dev_id is the ID number of the host module and consists of 9 characters. Used to distinguish multiple host modules. This topic is a message that the host module actively pushes to the APP.

1.2. The content format of the data area:
LEVEL/BATTERY_LEVEL/IP/TIMESTAMP/WIFI_STATUS/DEVICE_INFO
Each data segment is explained as follows:
LEVEL: liquid level, unit: mm
BATTERY_LEVEL: Battery level (%)
IP: LAN IP
TIMESTAMP: UTC timestamp of measurement data
WIFI_STATUS: WIFI signal, negative when connected to the router normally, the larger the value, the better the signal; if it is not negative, it means the router is connected abnormally
DEVICE_INFO: device status value, reserved
For example, the module pushes data to the APP:
345/34/192.168.1.46/1528424526/-58/S
Means: LPG level is 345mm, battery power is 34%, LAN IP is 192.168.1.46, measured data UTC timestamp is 1528424526, router WIFI signal quality is -58, and device status is S.

2. Host parameter theme

2.1. Subject name:
gasLevel/params/dev_id
The dev_id is the ID number of the host module and consists of 9 characters. Used to distinguish multiple host modules. In this topic, the APP side actively pushes the setting parameters to the module side, and can also query the parameters.

2.2. Data area content format:

strictMonitor/timeFrame/threshold/regularHour

Each data segment is explained as follows:

strictMonitor: Test mode, 0 means off, 1 means on; after opening, it will continue to measure the liquid level, keep the WIFI network connected, and report data;
timeFrame: liquid level measurement interval, unit: minute
threshold: Threshold for reporting level changes, unit: mm
regularHour: daily report time point, range: 0~23 o'clock

For example, the APP end sets the parameters on the module end:

0/20/10/21

Means: the test mode is closed, the measurement interval is 20 minutes, the threshold for reporting level changes is 10mm, and the reporting time is 21:00 every day.

2.3. When APP querying parameters, the format of data area content:

?

It is a single question mark, the module will reply to the APP with the content format of the local parameters as shown above.