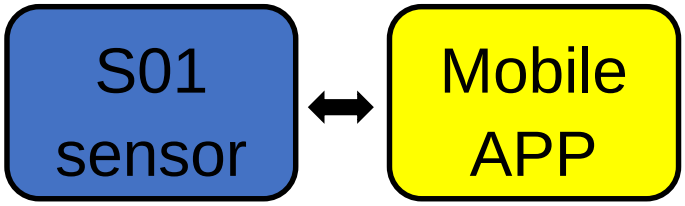
S01 LPG Detector

APP development docking method

According to the following scenarios, this article describes the docking method between the DYP product S01 liquid gas level sensor module (hereinafter referred to as the module) and the customer APP.

Scenario 1: How to configure the wireless router when the end user first installs



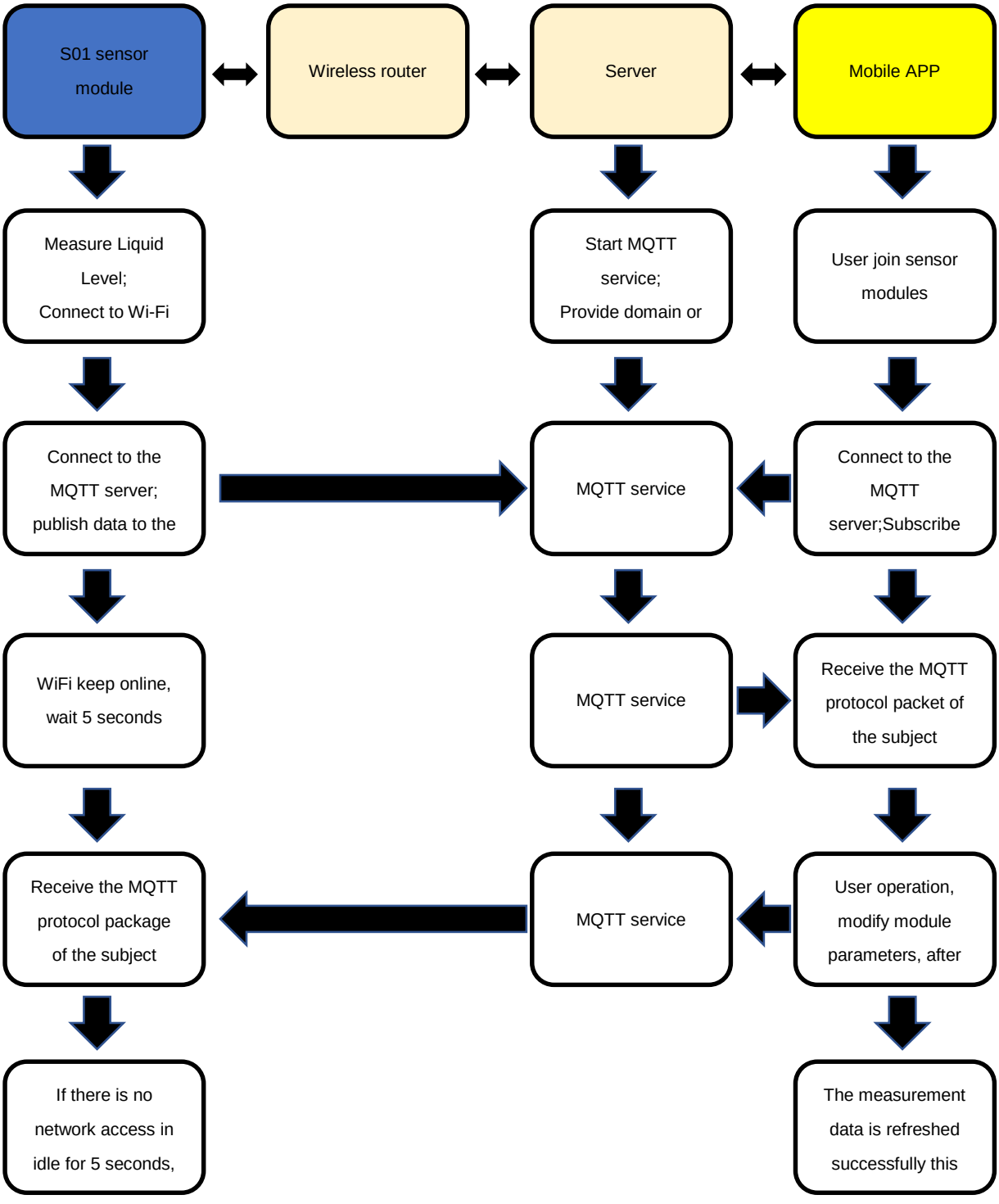
The module does not know the user's router information when it is first installed or when the router is replaced, so it needs to be configured.
Short press the main button, the module will turn on the AP hotspot.
Turn on the WIFI on the mobile phone, find the module hotspot in the WIFI list, and click to directly connect to the module WIFI hotspot.

1. Mobile web page settings
Open the web browser, enter "192.168.4.1" to enter the homepage, enter the router SSID and password and other information, click confirm to submit, and you will be prompted that the setting is successful.

2. Mobile APP settings
Open the APP interface, click the set router function button, enter the router's SSID and password and other information, click configure, the APP establishes a TCP connection 192.168.4.1:2001, sends the WIFI information setting command "SetWifi", wait for the module to respond, indicating that the setting is successful. For the format, please refer to the S01 liquefied gas level LAN communication protocol document.

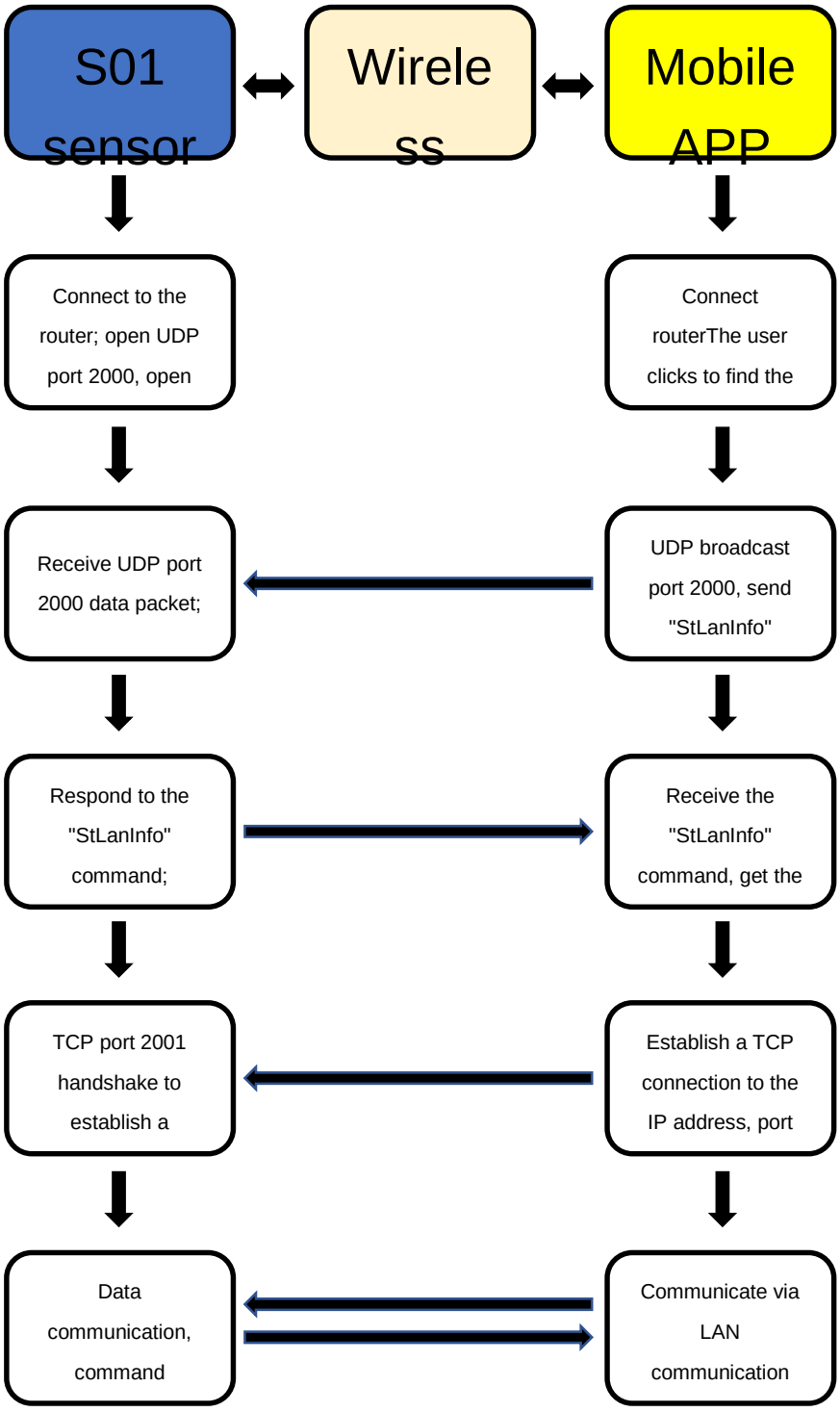
Scenario 2: How to connect the module and APP when connected

The sensor and the APP communicate through the MQTT protocol. Among them, dev_id is the ID number of the sensor module, which consists of 9 characters. Please refer to the MQTT protocol description document of S01 liquefied gas level.

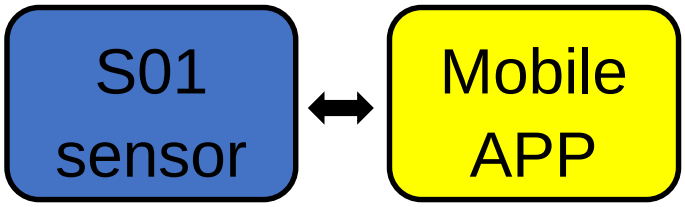


Scenario 3: The connection between the APP and the module when the router is connected but the WAN is disconnected

The sensor and APP communicate through the local area network communication protocol, and the format is detailed in the S01 liquefied gas liquid level local area network communication protocol document.



Scenario 4: There is no router, the way the APP directly connects to the module



Similar to scene one. Short press the main button, the module will turn on the AP hotspot. Turn on the WIFI on the mobile phone, find the module hotspot in the WIFI list, and click to directly connect to the module WIFI hotspot.
The APP establishes a TCP connection 192.168.4.1:2001 and communicates through the LAN communication protocol, such as sending the "GetMeas" command to request module measurement data; see the S01 LPG Liquid Level LAN Communication Protocol document for details.