

# WiFi HaLow Applications

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# Applications

1. Serial port data transmission via RS-232 or RS-422/485
2. Internet link: WiFi HaLow to Ethernet Bridge
3. Sub-meter level positioning system: AOA Locator/Gateway
4. RTLS Gateway



# 1. WiFi HaLow serial adapter

- IEEE 802.11 bgn
- Network: AP or STA
- Applications: TCP, UDP, Unicast, Broadcast, Multicast, Http, Https
- IEEE 802.11 ah (HaLow)
- Frequency: 865 MHz or 915 MHz
- Band width: 1, 2, 4 MB
- Network: AP or STA
- Applications: TCP, UDP, Unicast, Broadcast, Multicast

# Profile

## RS-232

920 or 865 MHz  
antenna: 2 dB

Male DB9



## RS-422/485

2.4GHz  
antenna: 5 dB

Male DB9 + 6P Terminal Block



# 3 Power input

**5-40 VDC**



# Web page configuration

The screenshot shows the 'Serial WiFi Converter' web interface. The top navigation bar includes 'Serial', '2.4G', 'Sub-1G', 'Wizard', 'Status', and 'System'. The 'Sub-1G' tab is active. The page is divided into two main sections: 'Sub-1G AP Settings' and 'Sub-1G STA Settings'. In the 'Sub-1G AP Settings' section, 'Sub-1G AP mode' is set to 'Disable'. In the 'Sub-1G STA Settings' section, 'Sub-1G STA Mode' is set to 'Enable' and 'Sub-1G STA Power' is set to '+20dbm'. A dropdown menu for 'Sub-1G country code' is open, showing options from '+1dbm' to '+16dbm', with '+2dbm' selected. Below this, there are fields for 'Connect AP SSID', 'Connect AP Password', 'Security Mode', 'DHCP Client', 'Sub-1G Socket Settings', 'Protocol', 'Server/Client Mode', 'Client Destination Host Name/IP', and 'Client Destination Host Port'. An 'Apply' button is located at the bottom right of the settings area.

The screenshot shows the 'Serial WiFi Converter' web interface with the 'Wizard' tab active. The page displays a 'Welcome to the WiFi Setup Wizard' message and a table of detected WiFi networks. The table has columns for ID, BSSID, SSID, TYPE, CH, SIGNAL, and SECURITY. Below the table, the status is 'Scanning...OK'. At the bottom, there are buttons for 'Sub-1G', 'Scan', and 'Next'.

ID	BSSID	SSID	TYPE	CH	SIGNAL	SECURITY
0	7e:e9:31:1:6f:7		Infra	3	-43	WPA2_PSK
1	5c:e9:31:1:6f:7	Uconnect-AP	Infra	3	-46	WPA2_PSK
2	e0:5a:1b:e0:25:bd	S2DW485-25bd	Infra	8	-57	OPEN
3	5c:92:5e:d:ee:bc	uconnect-2g	Infra	1	-61	WPA_WPA2_PSK
4	64:9:ac:44:28:82	4G-2.4G	Infra	1	-71	WPA_WPA2_PSK
5	ac:b6:87:9e:af:59	yua094-1f	Infra	6	-72	WPA2_PSK
6	ae:b6:87:ae:af:59		Infra	6	-72	WPA2_PSK
7	58:13:d3:36:65:c6	yua094	Infra	11	-72	WPA_WPA2_PSK
8	94:b5:55:c3:38:c5	CG06-38c5	Infra	8	-75	OPEN
9	48:ed:e6:39:dc:a2	tjm3954-200-4-3F-1	Infra	1	-79	WPA2_PSK

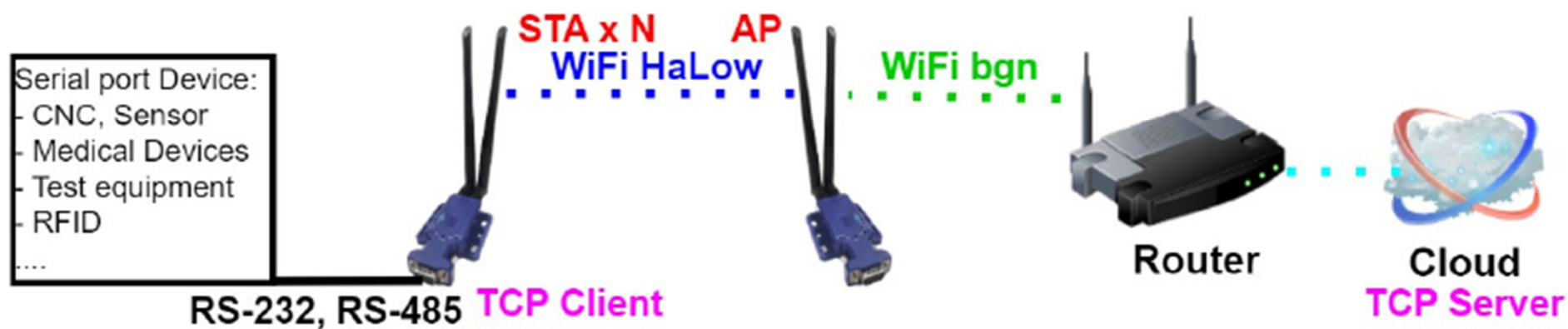
# 1 Link with smartphone



## 2 Link with PC or NB

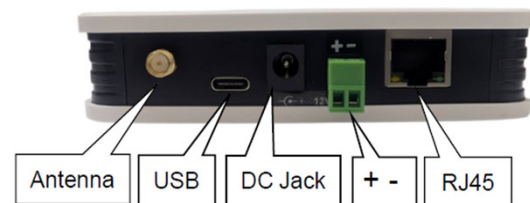


### 3 Link with Cloud via WiFi bgn

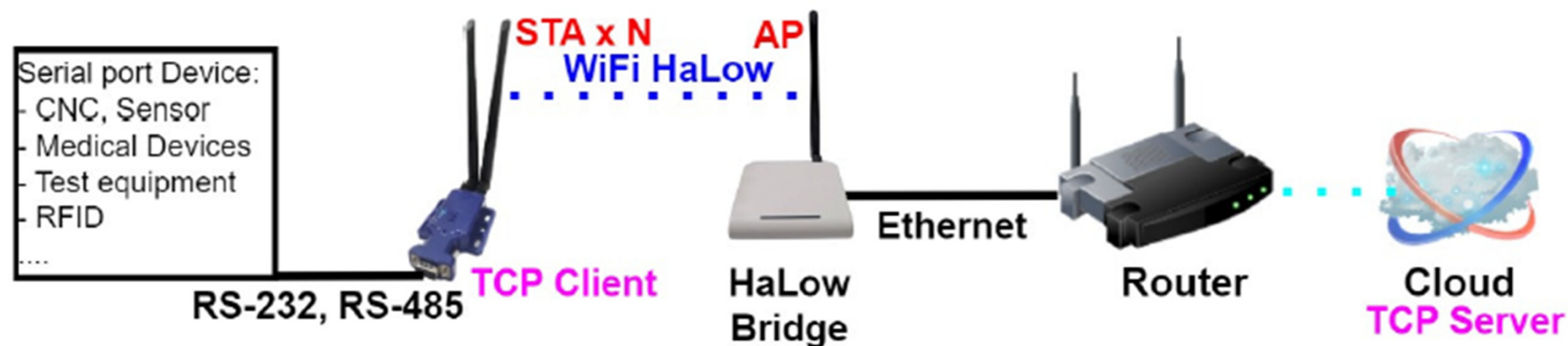


## 2. Internet Bridge & WiFi HaLow repeater

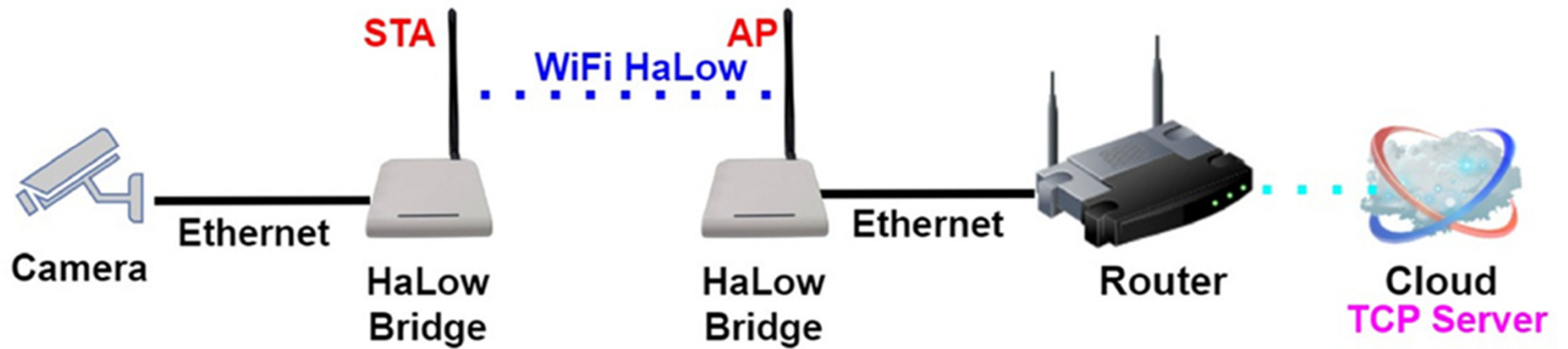
- WiFi HaLow to Ethernet Bridge (CE,FCC,TELEC,RoHS)



## Link with Cloud via Ethernet



Connect the IP CAM with the Ethernet to AH bridge



## One to up to 12 TCP client connections via AP

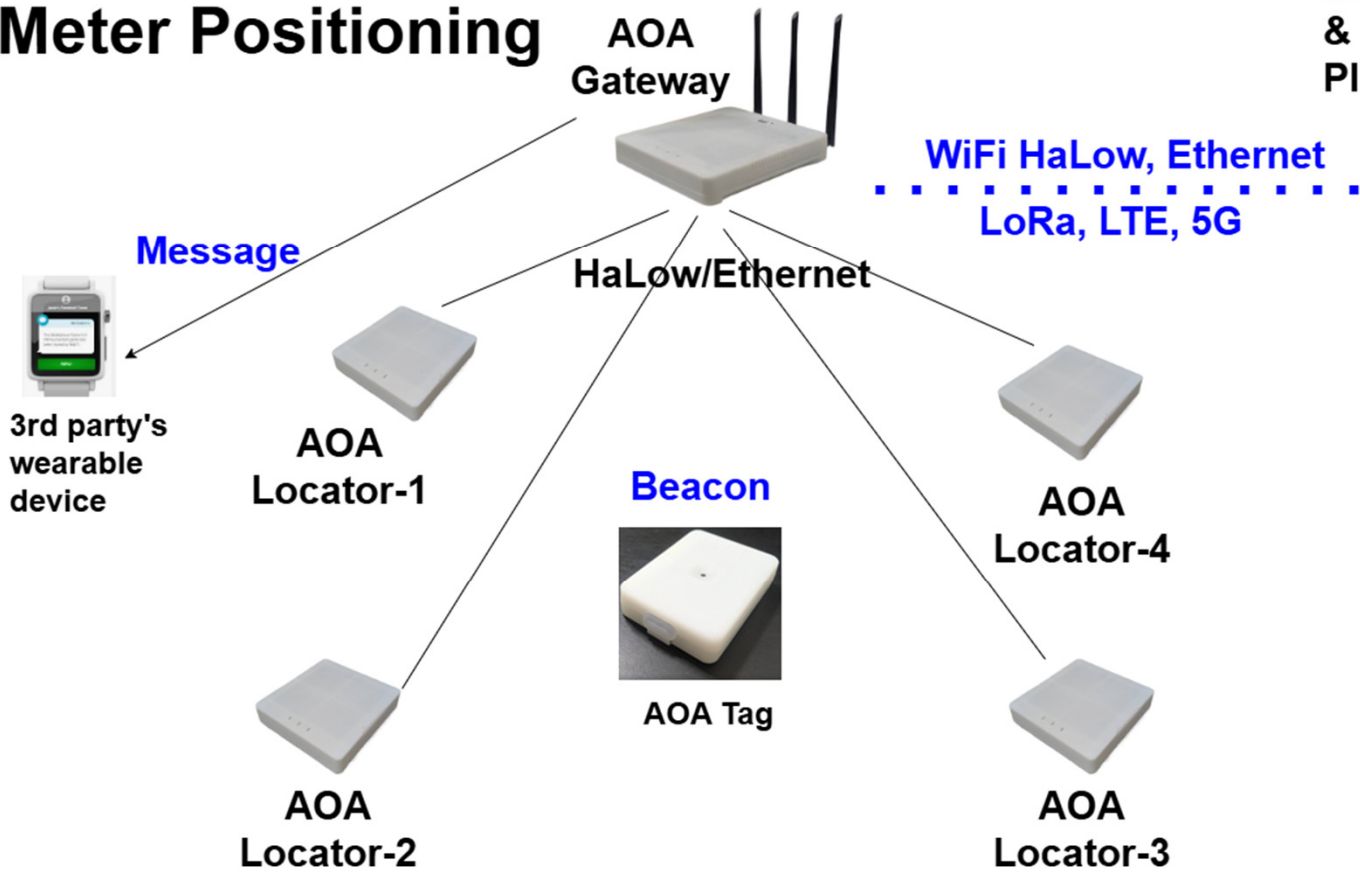


### 3. Sub-meter level positioning system: AOA Locator/Gateway

- WiFi HaLow
- Ethernet
- BLE x 2
- Option: 5G, LTE, LoRa, WiFi AH (HaLow)



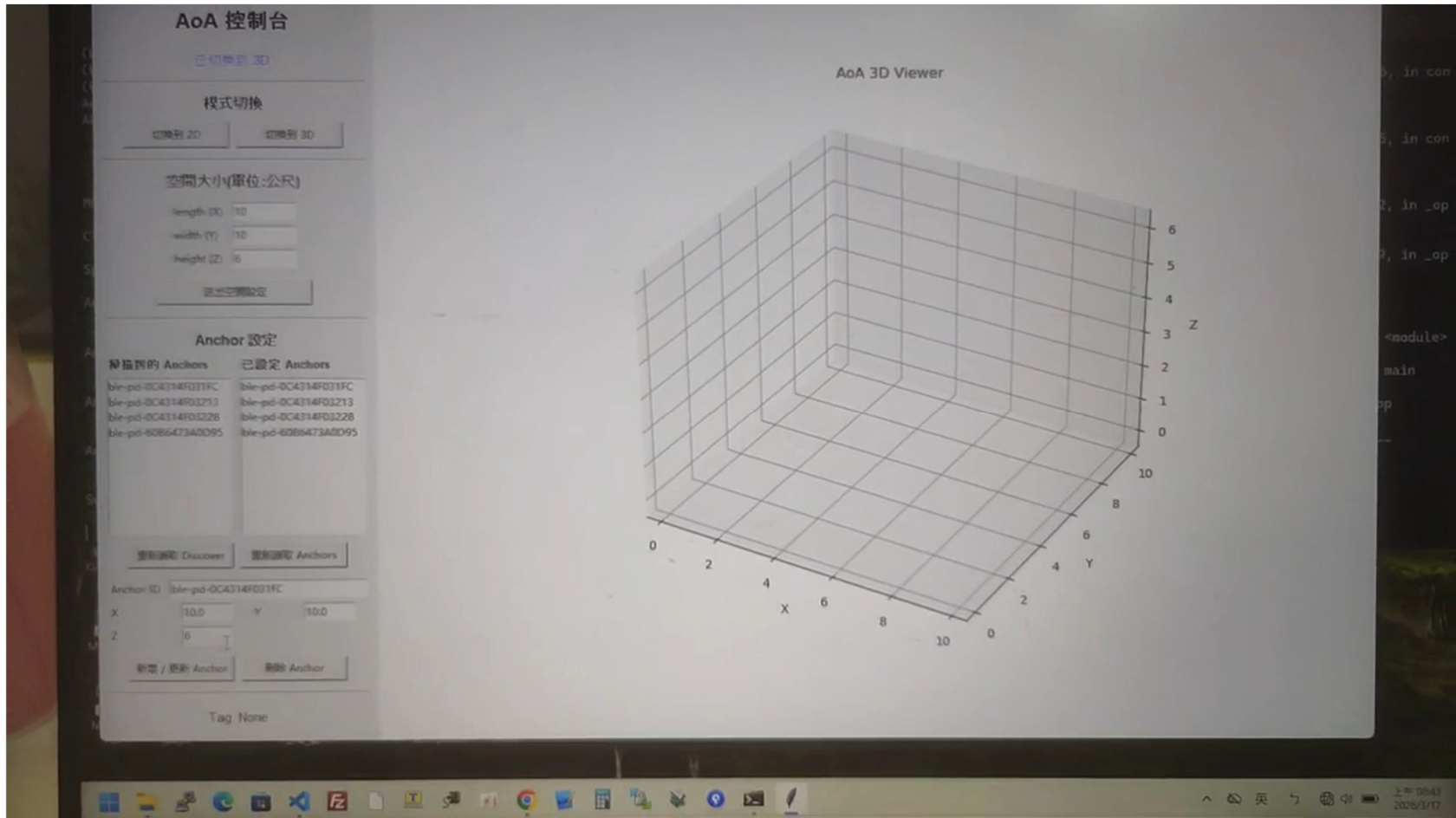
# RTLS - AOA Sub-Meter Positioning



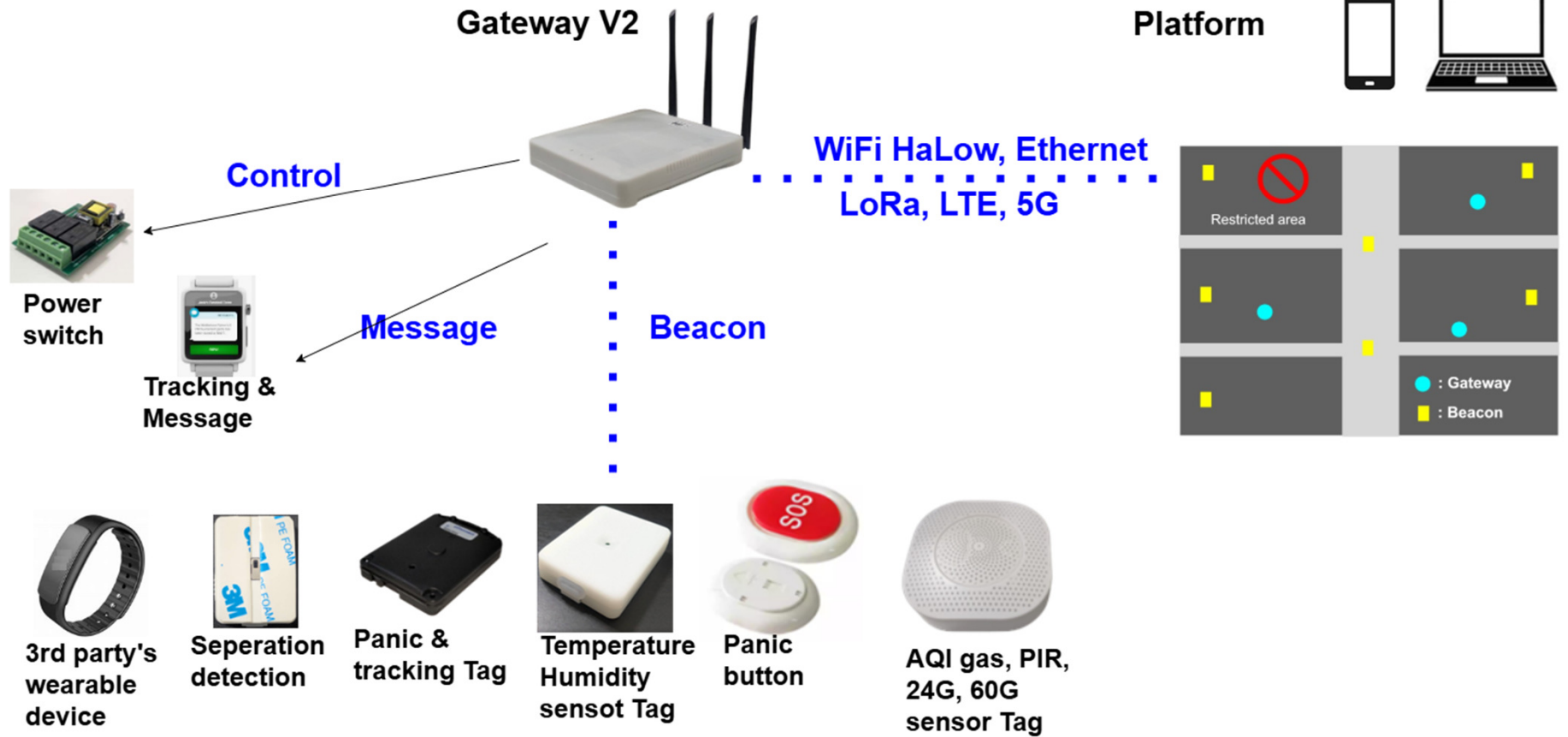
Monitoring & Control Platform



# AoA Test video:



# RTLS Gateway



# Our service:

- OEM
- ODM

# Thank you!

Contact us:

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