

# Tongyu MacroWiFi

## T-AOAX362Q



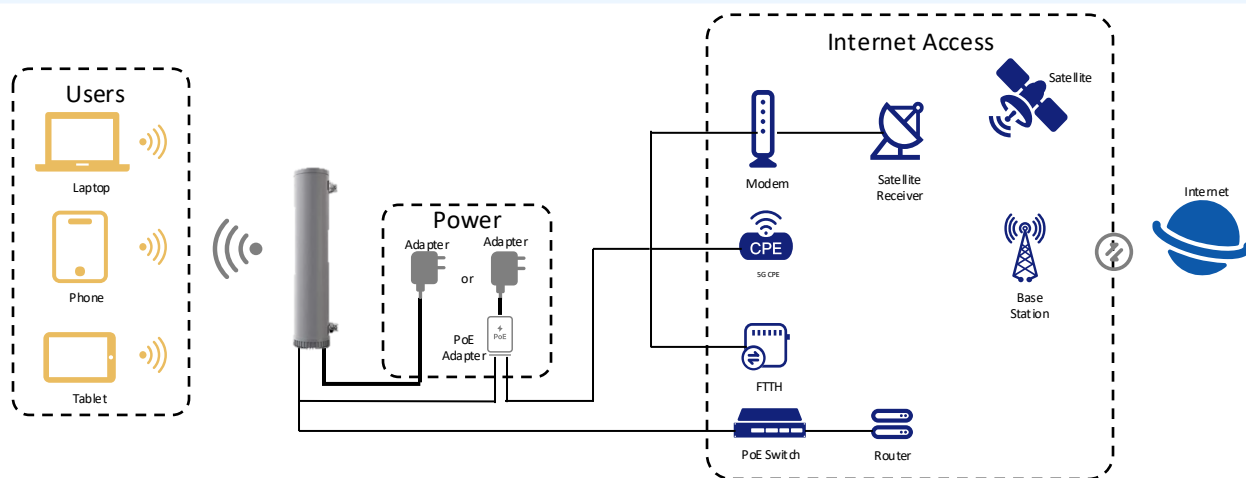
### Features

- Cloud management and billing platform
- Support 2.4/5GHz dual band
- Support AX3600
- Support 200+ users
- 4\*4 MIMO antenna with 13dBi high gain
- 180° Sector coverage
- 1.5~2km Maximum coverage distance
- 2.5 GE PoE+ Port

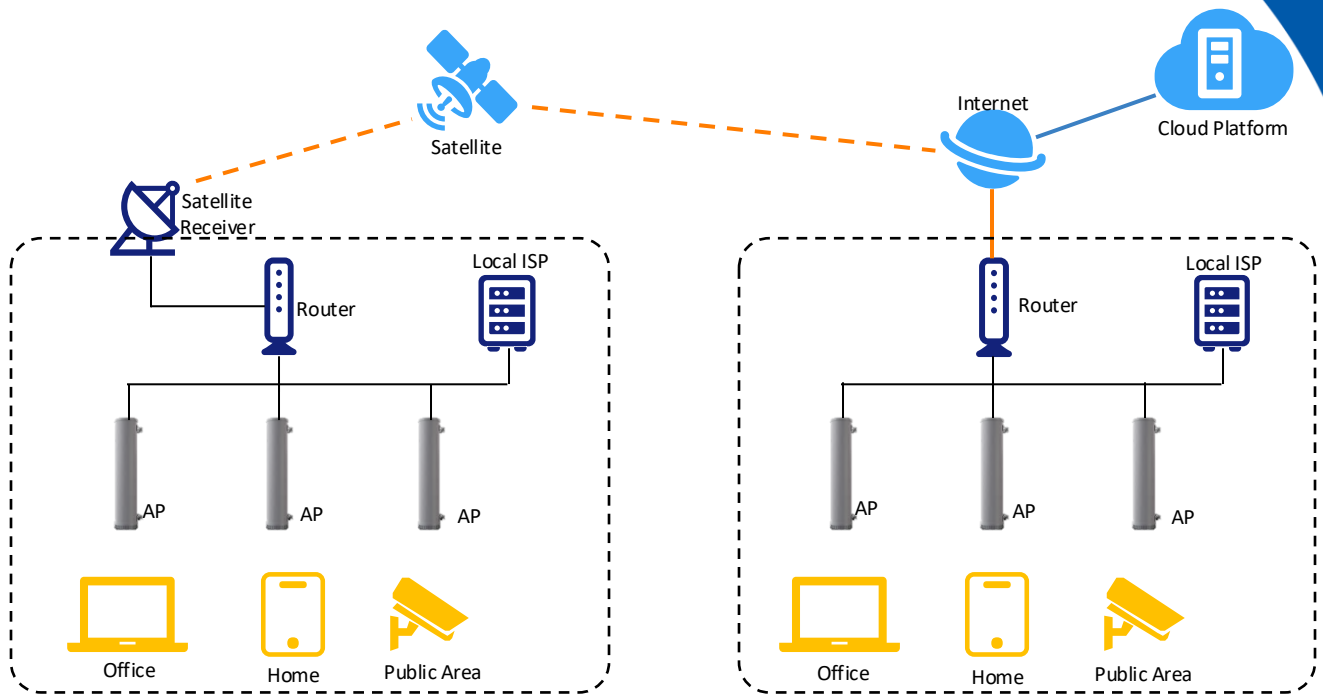
The MacroWiFi Solution designed for expansive, long-range coverage in rural areas, farms, and remote locations where traditional WiFi solutions often struggle with limited coverage, interference, and user capacity. It features an innovative high-gain, wide-beam antenna array, delivering kilometer-level coverage for reliable connectivity and supporting a massive number of users across vast open spaces.

With an advanced protocol, optimized antenna design, and built-in out-of-band filtering, it ensures exceptional signal clarity and a dependable, high-performance WiFi experience while meeting strict emission standards.

### Network Topological Graph



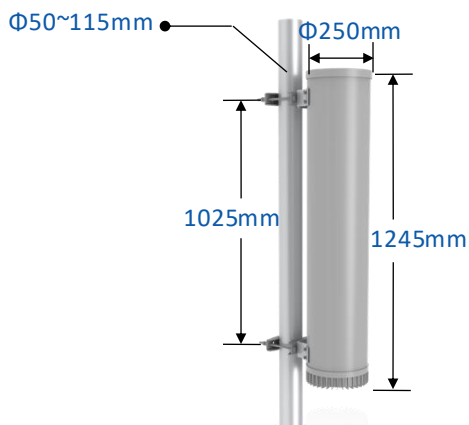
## Networking Platform



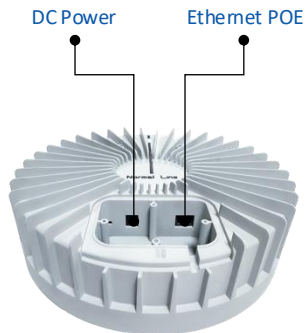
## Platformized Software Features

- **Converged Platform**
  - ✓ AC Function
  - ✓ CRM Function
  - ✓ Billing Function
  - ✓ Selfcare Function
- **Flexible Deployment**
  - ✓ On Premise
  - ✓ On Cloud
  - ✓ Multi Tenancy
- **Flexible Bundles**
  - ✓ Monthly
  - ✓ Temporary for days
  - ✓ Unlimited
  - ✓ Limited
  - ✓ Speed Control
- **Rich Services**
  - ✓ KYC
  - ✓ Selfcare
    - Portal
    - Apps
  - ✓ Flexible payment
  - ✓ Invoice
- **Management**
  - ✓ AP Discover
  - ✓ Auto Configuration
  - ✓ Organization
  - ✓ Dashboard
  - ✓ Report

# Specifications



Dimensions



Bottom Interface

## Main Design

LAN Interfaces	1x 2.5Gbps Ethernet Port
Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax
Maximum Data Rate	1148 Mbps (2.4 GHz) 2402 Mbps (5 GHz)
Wireless Client Capacity	1000+
Optimal Wireless Client Threshold (LAWiFi Protocol)	200
Maximum EIRP	36dBm for 2.4GHz and 5GHz (EIRP on different channels may be limited by country regulations)
Maximum Coverage Range	1.5-2km (An unobstructed coverage environment)
Reception Sensitivity	2.4GHz: 11AX 20MHz MCS0: -95 11AX 20MHz MCS11: -66 11AX 40MHz MCS0: -94 11AX 40MHz MCS11: -63  5GHz: 11AX 20MHz MCS0: -94 11AX 20MHz MCS11: -64.5 11AX 40MHz MCS0: -90.5 11AX 40MHz MCS11: -63 11AX 80MHz MCS0: -88.5 11AX 80MHz MCS11: -60.5

## Wireless Function

Multiple SSIDs	16 (8 on each band)
Channel	US: 2.4GHz: 1 - 11; 5GHz: 36,40,44,48,149,153,157,161,165; EU: 2.4GHz: 1 - 13; 5GHz: 36,40,44,48,52,56,60,64,100,104,108,112,116,120,124,128,132,136,140
Automatic Channel Selection	√
Transmit Power Control	Adjust transmit Power on dBm
QoS (WMM)	√
Seamless Roaming	√
MESH	√
Beamforming	√
MU-MIMO	2G: 4x4 DL MU-MIMO 5G: 4x4 DL MU-MIMO
OFDMA	UL/DL OFDMA
Rate Limit	Based on SSID/Client
LAWiFi Protocol	√

## Support Data Rates

802.11ax	8 Mbps to 2402 Mbps (MCS0-MCS11, NSS = 1 to 4 HE20/40/80)
802.11ac	6.5 Mbps to 2166.7 Mbps (MCS0-MCS11, NSS = 1 to 4 VHT20/40/80)
802.11n	6.5 Mbps to 600 Mbps (MCS0-MCS31, HT20/40)
802.11g	6, 9, 12, 18, 24, 36, 48, 54 Mbps
802.11b	1, 2, 5.5, 11 Mbps
802.11a	6, 9, 12, 18, 24, 36, 48, 54 Mbps

# Specifications

## Security

Access Control	√
Maximum MAC Filter	4000
VLAN	√
Wireless Encryption	WPA-Personal/Enterprise WPA2-Personal/Enterprise WPA3-Personal/Enterprise
802.1X Support	√

## Antenna

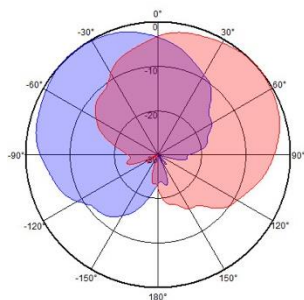
Radiation Pattern	Directional antenna
Polarization	±45°
Beam Pointing	±45°
Gain (dBi)	2.4GHz: 4 x 13±0.5 5GHz: 4 x 13±0.5
Horizontal 3dB Beamwidth (°)	2.4GHz: 90±5 5GHz: 85±5
Electrical Downtilt (°)	1.5 (Customizable)
Out-of-band Spurious Emission	<-36 dBm

## Physical Design

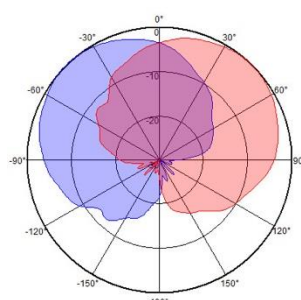
Power Supply	802.3at PoE or 12V/2A DC
Maximum Power Consumption	25.5W (for PoE); 22.5W (for DC)
Reset	√
Mounting	Pole Installation
Dimensions	Φ250 mm x 1245 mm
Net Weight	13.2 kg
Enclosure Material / Rack Material	UPVC
Packing Size (mm)	1415 x 355 x 380
Installation Kit Weight (kg)	2.5
Packing Weight (kg)	18
Wind Load (N, at 150km/h)	168/168/168 (Frontal/Lateral/Rearside)
Environment	Operating Temperature: -25 °C~60 °C / -40 °C~70 °C Storage Temperature: -40 °C~70 °C Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~90% non-condensing

# Antenna Patterns

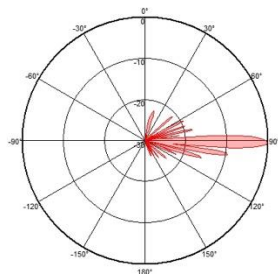
2.4 GHz Horizontal Beam



5 GHz Horizontal Beam



2.4 GHz Vertical Beam



5 GHz Vertical Beam

