Altai IX600 Wi-Fi Access Point

The Altai IX600, with the latest Wi-Fi 6 (802.11ax) technology, is specifically designed to provide highly reliable and consistent connectivity to mobile users and IoT devices at the market's most affordable price point.

With maximum data rates of 1.774 Gbps, Altai patented technologies, and Wi-Fi 6 features such as OFDMA and bi-directional multi-user MIMO, the IX600 delivers the capacity, coverage, and reliability to meet the challenges for medium-density indoor deployments.

Wi-Fi 6 Technology

The 802.11ax technology greatly enhances multi-user efficiency as well as speed, taking the Wi-Fi experience to an entirely new level.

Seamless Mobility

The IX600 supports the Altai Smart Roaming Technology that enables low-latency roaming and resolves sticky client issues.

Super Coverage and Capacity

Max. LOS Access	350 m (2.4 GHz) 250 m (5 GHz)
Max. Data Rate	574 + 1200 Mbps
Max. Concurrent Users	512 (256 per Radio)

Enhanced Security Services

With WPA3 security and Enhanced Open, as well as the Altai WIPS Suite, the IX600 delivers the highest level of security services.

Integrated IOT Capabilities

The IX600 integrates a Bluetooth 5 radio, allowing organizations to leverage it as an IoT platform, thus eliminating the need for an overlay infrastructure and additional IT resources.

Flexible Management

Altai APs offer flexible management options which include standalone mode, WLAN controller with AltaiGate, virtual appliance with AltaiCare On-Premise, and cloud service with AltaiCare Cloud.

Key Features and Benefits

- **Best value in price/performance** Dual-band Wi-Fi 6 with extended coverage at the market's most affordable price point

- **Wi-FI 6 Technology** OFDMA and MU-MIMO for enhanced multi-user efficiency and speed. Other features such as 1024 QAM of modulation, BSS coloring and Target Wake Time also help optimize IX600's performance

- **Dual-Band Dual-Concurrent** The IX600 delivers maximum data rates of up to 1.2 Gbps in 5GHz and 574 Mbps in 2.4GHz, providing connectivity for up to 256 associated clients per radio

- **IOT Ready** Integrated BLE5.0 radio to help simplify deploying and managing IoT-based services.

- **Seamless Mobility** Built-in Altai Smart Roaming Technology enables low-latency roaming and resolves sticky client issues.

- **AirFi™ Technology** Altai AirFi™ enhances the IX600's capacity by optimizing the clients' throughput based on their speed and data volumes

- **Enhanced Security** The IX600 supports WPA3, Enhanced Open, and the Altai WIPS Suite to help protect user authentication and wireless traffc.

- **Low profile housing design** Sleek, low profile design allows the IX600 to blend into any surrounding environment

- **Flexible Management Options** Standalone mode, WLAN controller with AltaiGate, virtual appliance with AltaiCare On-Premises, and cloud service with AltaiCare Cloud

Wireless Interface

802.11b/g/n/ax (2x2:2) Radio

Operating Mode	AP/ CPE/ Bridge/ Repeater
Standard	IEEE 802.11b/g/n/ax
Maximum Data Rate	574 Mbps
Operating Frequency	2.400 – 2.484 GHz
Transmit Power	22 dBm (Max.)

- Receiver Sensitivity

1 Mbps	-98 dBm;	11 Mbps	-87 dBm
6 Mbps	-94 dBm;	54 Mbps	-77 dBm
HT20 MSC0	-94 dBm;	HT20 MSC7	-76 dBm
HT40 MSC0	-91 dBm;	HT40 MSC7	-73 dBm
HE20 MSC0	-94 dBm;	HE20 MSC11	-65 dBm
HE40 MSC0	-92 dBm;	HE40 MSC11	-59 dBm

802.11a/n/ac/ax (2x2:2) Radio

Operating Mode	AP/ CPE/ Bridge/ Repeater
Standard	IEEE 802.11a/n/ac/ax
Maximum Data Rate	1.2 Gbps
Operating Frequency	5.150 – 5.350 GHz
	5.470 – 5.725 GHz
	5.725 – 5.850 GHz
Transmit Power	22 dBm (Max.)

- Receiver Sensitivity

6 Mbps	-92 dBm;	54 Mbps	-75 dBm
HT20 MSC0	-92 dBm;	HT20 MSC7	-75 dBm
HT40 MSC0	-90 dBm;	HT40 MSC7	-72 dBm
VHT20 MSC0	-92 dBm;	VHT20 MSC8	-69 dBm
VHT40 MSC0	-90 dBm;	VHT40 MSC9	-67 dBm
VHT80 MSC0	-87 dBm;	VHT80 MSC9	-63 dBm
HE20 MSC0	-92 dBm;	HE20 MSC11	-62 dBm
HE40 MSC0	-90 dBm;	HE40 MSC11	-61 dBm
HE80 MSC0	-86 dBm;	HE80 MSC11	-58 dBm

Supported Radio Technologies
- 802.11b: Direct-Sequence Spread-Spectrum (DSSS)
- 802.11a/g/n/ac: Orthogonal Frequency-Division Multiplexing (OFDM)
- 802.11ax: Orthogonal Frequency-Division Multiple Access (OFDMA)

Other Wi-Fi Features
- 32 SSID (16 SSID per Radio)
- 802.11h, 802.11k, 802.11r, 802.11v, 802.11w
- Passpoint (Release 2)
- Fast Roaming
- Multi-AP Steering
- Smart Load Balancing
- Smart Mesh Networking*
- Dual Radio Redundancy*
- 1+ N Redundancy*
- Altai *AirFi*™ Throughput Optimization
- WMM (802.11e)

Antenna

2.4 GHz Antenna
- Built-in Antenna   3 dBi Omni

5 GHz Antenna
- Built-in Antenna   5 dBi Omni

IoT Radio

- Bluetooth Low Energy (BLE5.0)

Networking

- Switch (Bridge) and Gateway Mode
- IPv4/ IPv6 Dual-Stack
- NAT
- DHCP Client/ Server
- PPPoE Client
- Soft-GRE
- VLAN
- Bandwidth Control Per VAP/ Client
- Multicast Rate Filter/ IGMP Snooping

Security

- Authentication – Open, Shared key, WPA/ WPA-PSK, WPA2/ WPA2-PSK, , WPA3*, 802.1x (EAP-PEAP/ TLS/ TTLS/ SIM/ AKA)
- Encryption – WEP, TKIP, AES
- Client Isolation
- MAC-based Access Control (White/ Black List)
- RADIUS
- Active directory
- Firewall
- WIPS* – Denial of Service, Rogue AP Detection, Alerting and Reporting

Management

- Management Platforms: Standalone, AltaiGate, AltaiCare Cloud Service, AltaiCare On-Premises Virtual Appliance
- Web User Interface
- Command Line Interface (SSH)
- SNMP v1/ v2c / v3
- MIB2/ IF-MIB/ Altai Enterprise MIB
- Syslog
- Remote Factory Reset
- Auto Channel Selection and TX Power Control
- Spectral Analysis*
- KPI Monitoring*
- Client OS Detection

Physical Specification

Dimension	160 mm x 160 mm x 33 mm
Weight	0.43 kg
Mounting	Ceiling/ Wall-mounting
Network Interface	1 x 1GbE Ports

Power Supply

Power Supply	802.3af/at PoE
	DC Input 12 VDC
Power Consumption	12 W (Typical)

Environmental Specification

Operating Temperature	0 °C to 40 °C
Storage Temperature	-30 °C to 70 °C
Humidity	Up to 90% (Non-condensing)

Certification

- FCC/CE/Others*
- RoHS2

Product Ordering Information

IX600 (Part No.: SD.IX600-2241-000)

- IX600 Indoor 2x2 Dual-Band 802.11ax AP with Integrated Antennas and BLE
- Ceiling-Mount Accessories
- Wall-Mount Accessories
- Quick Start Guide

Optional Accessories
- 54 VDC PoE Injector
- 12 VDC AC/DC Adapter

Contact Us
- Email: sales@altaitechnologies.com

IX600-PB-20211222

*Will be available in the future.
The coverage or range may vary depending on environmental conditions.
The transmit power may vary according to country regulations.
Although Altai has attempted to provide accurate information in these materials,
Altai assumes no legal liability for the accuracy and completeness of the information.
All specifications are subject to change without notice.