Altai VX200 Dual-Band CPE/AP

The Altai VX200 is an industrial CPE/AP specifically designed to deliver unparalleled Wi-Fi experience and highly reliable connectivity at the market's most affordable price point.

The VX200 offers several powerful features to meet the challenges of today's industrial Wi-Fi networks:

- Together with the A8n (ac) or the A3-Ei, VX200 delivers over ten times the coverage of any conventional Wi-Fi solution
- Altai's Fast Roaming technology allows VX200 to roam seamlessly between APs, with millisecond-level handover time
- Support industrial communications standards such as PROFINET
- Advanced Interference Mitigation Suite offers significant reduction in interference in harsh and noisy industrial environments
- Due to the wide operating temperature range and a robust design with enhanced surge, ESD, and vibration protection, VX200 can be used in harshest conditions with the highest reliability



Applications

- The VX200, with fast roaming technology, enhanced vibration protection and compact design, is ideally suited for installation on AGV or AS/RS platform in factories, logistics centers, and warehouses
- Due to its superior coverage and flexible deployment options, the VX200 is the most affordable high-performance CPE in the market for real-time device monitoring, remote management, and data collection in a wide range of industrial environments
- With support for industrial standards such as PROFINET, the A8n (ac) Super WiFi Base Station/ A3-Ei AP and VX200 offers the most cost-effective solution for factory automation, enabling automate production across all levels

Super Dual-band Coverage

Max. LOS AP Access with 5dBi Omni	350 m (2.4 GHz) 250 m (5 GHz)
Max. LOS CPE with 5dBi Omni	2 km to A8-Ein (ac) 1.5 km to A3-Ei
Max. Data Rate	400 + 867 Mbps

Key Features and Benefits

- **Dual-Band Concurrent** Operating in both 2.4 GHz and 5 GHz bands, the VX200 is backward-compatible with existing 802.11a/b/g/n/ac deployments
- **Wave 2 MU-MIMO** MU-MIMO significantly improves multi-client capacity, and dual radios deliver data rates up to 867 Mbps at 5 GHz and 400 Mbps at 2.4 GHz
- **Fast Roaming Technology** Allows the VX200 to roam seamlessly between APs, with handover time of < 120 ms under WPA2
- **Redundant Link** VX200's dual radios can connect to two APs simultaneously, with one as an active link and the other as backup, ensuring a highly reliable wireless connection
- **Compact Size** The VX200's size is 120x85x32mm; making it one of the smallest Industrial CPEs in the market
- **Anti-Vibration** Enhanced vibration and shock protection (IEC60068-2-6 and IEC60068-2-27 standards) makes the VX200 ideally suited for installation on AGV/AS/RS platforms
- **Industrial Ruggedness** Integrated power isolation and enhanced surge and ESD protection against environmental interference
- **Graphene Coating** Industrial-grade housing with Advanced Graphene Coating helps VX200 dissipate heat even in confined space.
- **Flexible Deployment Options** Supported by multiple management platforms: standalone, controller, or cloud-based / on-premises by AltaiCare

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Seamless Roaming with Compact Size

Wireless Interfaces

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

• Operating Mode		AP/ CPE/ Bridge/ Repeater
• Standard		IEEE 802.11b/g/n
• Operating Frequency		2.400 – 2.484 GHz (Ch 1-13)
• Transmit Power		25 dBm (Max.)
• Receiver Sensitivity (Typical)		
802.11b	1 Mbps	-90 dBm
	11 Mbps	-90 dBm
802.11g	6 Mbps	-86 dBm
	54 Mbps	-73 dBm
802.11n	HT20	-86 dBm
	HT40	-83 dBm

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

• Operating Mode		AP/ CPE/ Bridge/ Repeater
• Standard		IEEE 802.11a/n/ac
• MU-MIMO		Up to 2 Streams
• Operating Frequency		5.150 – 5.350 GHz
		5.470 – 5.725 GHz
		5.725 – 5.850 GHz
• Transmit Power		25 dBm (Max.)
• Receiver Sensitivity (Typical)		
802.11a	6 Mbps	-88 dBm
	54 Mbps	-73 dBm
802.11n	HT20	-88 dBm
	HT40	-85 dBm
	VHT20	-88 dBm
	VHT40	-85 dBm
	VHT80	-83 dBm

For both 2.4 and 5 GHz

- 32 SSID (16 SSID per Radio)
- 802.11h, 802.11k, 802.11r, 802.11v, 802.11w
- Hotspot 2.0
- Fast Roaming
- Altai *AirFi*™ Throughput Optimization
- WMM (802.11e)

Antenna

• Antenna Connector	2 x RSMA Female
• External Antenna	Optional

Networking

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

Security

- Authentication – Open system, Shared key, WPA/ WPA-PSK, WPA2/ WPA2-PSK, 802.1x (EAP-PEAP/ TLS/ TTLS/ SIM/ AKA)
- Encryption – WEP, TKIP, AES
- Inter/ Intra-client Isolation
- MAC-based Access Control (White/ Black List)
- RADIUS
- Active directory
- Firewall*
- WIDS /WIPS

Management

- Cloud or Server-based Management by AltaiCare
- Controller-based Management by Access Controller
- Web User Interface
- Command Line Interface (SSH)
- SNMP v1/ v2c / v3
- MIB2/ IF-MIB/ Altai Enterprise MIB
- Syslog
- Auto Channel Selection and TX Power Control
- Spectral Analysis*
- KPI Monitoring*
- Client OS Detection*

Physical Specifications

• Dimension	120 mm x 85 mm x 32 mm
• Weight	0.2 kg
• Mounting	DIN-rail Mount, Wall Mount
• Network Interface	1 x 10/100 /1000 Mbps Ethernet Port
• Serial Interface	DB9 Male
• Serial Standard	RS-232
• LED Display	Power Status
	Ethernet Status

Power Supply

• Power Supply	DC Input (12 to 48 VDC)
	802.3af/at PoE PD
• Power Consumption	8 W (Typical) / 12 W (Max.)

Environmental Specifications

• Operating Temperature	-20 °C to +60 °C
• Storage Temperature	-40 °C to +75 °C
• Humidity	5 to 95% (Non-condensing)
• Corrosion/ Thermal Protection	Advanced Graphene Coating
• Surge Protection	EN 61000-4-5: ±4kV CM / ±2kV DM (10/700us)
• Vibration Protection	IEC60028-2-6 / IEC60068-2-27

Certifications

- FCC / CE / SRRC* / Others*
- RoHS2 Compliance

Product Ordering Information

VX200 (Part No.: SD.VX200-2231-000)

- VX200 Dual-Band 2x2 802.11ac Wave 2 CPE/AP
- Wall Mounting Kit
- DIN Mounting Kit

Contact Us

- Email: sales@altaitechnologies.com

VX200-PB-191028

**Will be available in the future*
Note: Coverage or range may vary depending on environmental conditions. Max. transmit power varies according to country regulations
Note: Specifications are subject to change without notice

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