

Pioneer in 5G&WiFi6 CPE



Indoor& Outdoor Industrial Gateway

IA4560

Product Introduction

MegaTower 

Wuhan Da Ta Technologies Co. Ltd

The IA4560, introduced by Wuhan Data, is a high-value industrial gateway tailored for industrial, vehicular, and outdoor applications. Equipped with a 4-core high-performance communication processor and an embedded real-time operating system, it supports a wide range of network protocols, security features, and industrial communication protocols. The device offers multiple physical interfaces for versatile business data transmission. With a compact design, the IA4560 boasts an IP40/IP67 rating for dust and water protection, along with a wide temperature tolerance, ensuring high flexibility and strong adaptability across various environments.

Product Overview

The IA4560 is a robust 5G industrial gateway with support for 5G NR and LTE uplink. It offers high-speed data transfer, low latency, and high reliability, converting cellular data to gigabit Ethernet and WIFI. Capable of interfacing with industrial serial, Ethernet, and WIFI devices, it ensures seamless data transmission and routing for various 5G applications. Designed for both indoor and outdoor use, the IA4560 features an IP67 rating for protection against water and dust, making it a versatile choice for a wide range of environments.





Product Highlights

High-speed Internet experience

- ✧ **Domestic High-Performance 5G Chip:** Supports global mainstream frequency bands and seamless ultra-fast 5G internet on SA/NSA networks.
- ✧ **Cost-Effective Solution:** A combination of a dedicated CPU, independent Wi-Fi 6 chip, and standalone 5G chip offers high performance and reliability while minimizing unnecessary costs.
- ✧ **Mature Quad-Core Processor at 1.8GHz:** Enhances multi-device connectivity and processing capabilities, effortlessly handling a variety of applications.

Industrial quality, strong environmental adaptability

- ✧ **IP67 Protection:** Suitable for both indoor and outdoor use, offering direct deployment in various environments.
- ✧ **Temperature Range of -30°C to 65°C:** Designed to operate effectively in a wide range of conditions.

Next-Generation Wi-Fi 6 with multiple-user Access (Wi-Fi Optional)

- ✧ **AX1800 Wi-Fi 6 Support:** Delivers cutting-edge Wi-Fi 6 performance.
- ✧ **1024QAM Modulation:** Boosts data efficiency by 25% over 802.11ac (256QAM).
- ✧ **BSS Coloring Mechanism:** Minimizes frequency interference, optimizing network speed.
- ✧ **Target Wake Time (TWT) Technology:** Enhances speed by 30% and cuts power use by 30%, supporting simultaneous multi-user access.

Supports Layer 2 and Layer 3 VPNS for easy local networking

- ✧ Establishes local networks with L2TP, IPSEC, Vxlan, and more, for seamless VPN connections to internal, external, and cloud resources.

Dual Redundancy, Always Online

- ✧ Supports dual connections of 5G NR and wired networks, with automatic detection of network failures and automatic line switching to ensure uninterrupted connectivity.

Product Specification

Hardware Specification	
System Parameters	
Main CPU Architecture	Independent Qualcomm Quad-Core CPU
Main CPU Frequency	1.8GHZ/core, quad-core
Memory	1GB
5G Chip	UNISOC V516
Interface Parameters	
5G NR	Support SA&NSA network
5G Antenna	2x External + 2x Internal Antennas (Wi-Fi Version) 4x External 5G Antennas (No Wi-Fi Version)
SIM Card	1* external Nano SIM slot 1*eSIM (optional)
WAN Port	1*GE port, 100M/1000M adaptive, type: RJ45
LAN Port	1*GE ports, 100M/1000M adaptive, type: RJ45
WiFi Protocol (Optional Wi-Fi configuration)	2.4GHz IEEE 802.11 b/g/n/ax 2T2R 5GHz IEEE 802.11 a/n/ac/ax 2T2R
WiFi Theoretic Throughput (Optional Wi-Fi configuration)	Overall WiFi throughput:1800Mbps 2.4GHz: 574Mbps (2ss 40MHz) 5GHz: 1200Mbps (2ss 80MHz)
WiFi Antenna (Optional Wi-Fi configuration)	2 omnidirectional antennas for both 2.4GHz and 5GHz dual bands.
Industrial Serial Port	1*RS232/485 port
USB port	1*USB Debug port
Physical Parameters	
Dimension	185mm * 185mm * 40mm
Material	Metal+Plastic
Colour	White

Installation	<p>Outdoor Install: Table, wall, or rail mount.</p> <p>Mounting Options: Outdoor pole and wall mounts available (require separate outdoor kit for IP67 rating).</p> <p>Note*: Related installation accessories must be purchased separately,not included.</p>
Button	RESET
Indicator	<p>Non-Wi-Fi Version Indicators: Power, Internet, 5G, and LTE lights.</p> <p>Wi-Fi Version Indicators: Power, Internet, 5G/4G, and Wi-Fi lights.</p>
Power Supply	
Power Supply	DC 12V (2PIN lock), DC 9-72V wide-voltage(optional) , PoE (POE IN)(optional) .
External Power Supply	support for supplying external DC power at the same voltage as the input device. (Optional)
Environment Parameters	
Working Temperature	-30°C~ +65°C
Storage Temperature	-40°C ~ +70°C
Working Humidity	5%—95% HR(Non condensing)
Storage Humidity	5%—95% HR(Non condensing)

Software Specifications	
5G Access	SA&NSA network, 5G/LTE, automatic network searching, manual network setting, APN, traffic statistics, SMS management, Band locking, cell locking*, PIN management
WAN Access	Routing mode, Bridge mode, Link backup*
LAN Access	VLAN Management, MAC Management, IGMP Snooping*, IGMP Proxy*
WiFi Access	Support 802.11 a/b/g/n/ac/ax standard, Channel Adaptive, Multi-SSID, WPS: PBC/PIN mode, WPA/WPA2/WPA3 security encryption, Mesh networking, WMM, WiFi Terminal Blacklist, Dual band convergence, Guest WiFi
IP Application	IPv4, IPv6, IPv4/IPv6 dual stack, ARP, PPPOE, DHCP Client/Server, DNS, NAT, ALG, Virtual Server
Routing	Static routing V4/V6

VPN Protocol	PPTP, L2TP, IPSEC*, Vxlan*
Security	Basic firewall, anti-attack(ARP,DDOS etc.), anti-scan, port filtering, MAC filtering, DMZ, DNS filtering, URL filtering
Device Management	TR069, SNMP*, MQTT*, Local WEB, User Management, Restart, Factory Reset, Local Upgrade, Support For Remote Upgrade, Log Management, Ntp, Ping Testing, Tracert Testing, Nslookup Testing

Note: The * symbol indicates a non-generic feature, support varies from version to version

Networking

