Pioneer in 5G&WiFi6 CPE

Industrial/Power Gateway

IA4525

Product Introduction



Wuhan Da Ta Technologies Co. Ltd

IA4525 is a cost-effective industrial gateway launched by Wuhan Da Ta Technologies, positioning industrial, vehicle and power timing applications. The product uses a 4-core high-performance communication processor, takes embedded real-time operating system as the software support platform, and supports various network protocols, security features and industrial protocols. It also provides multiple types of physical interfaces and supports the transmission of various services. With compact design, IP40 protection, and wide temperature adaptability, the device can meet the user in a variety of environmental conditions to use, providing high flexibility and strong adaptability.

Product Overview

IA4525 is a high-performance 5G industrial gateway that supports 5G NR and LTE uplink access, has 5G large bandwidth, low latency, high reliability and other features, and can convert cellular network data into Gigabit Ethernet and WIFI data. At the same time, it supports the connection of industrial serial port devices, Ethernet devices and WIFI devices to achieve transparent data transmission and routing functions, effectively meeting various 5G communication needs. The product software is based on OpenWRT, supports TR069, a variety of VPNS, modbus, MQTT and other protocols, and has the ability to provide secondary development for industrial, vehicle and Internet of Things applications. IA4525 supports 5G high-precision timing, and can also be applied to distribution network differential protection, distribution network PMU, distribution network automation Sanyao(Remote Communication/Telemetry/Remote control), intelligent inspection and other business scenarios in the power industry.



Product Highlights

High-speed Internet experience

- High-performance 5G chip; Support global mainstream frequency band; Support both SA/NSA network.
- Selecting cost-effective solutions, Using independent CPU+ independent wifi6 chip + independent 5G chip and Reducing unnecessary costs as much as possible while keeping high performance and strong reliability.
- ☆ The mature quad-core @1.8GHZ main processor improves multi-device connectivity and processing capabilities to easily cope with various applications.

Industrial quality, strong environmental adaptability

- ♦ IP40 dust proof, improve equipment stability.

Supports Layer 2 and Layer 3 VPNS for easy local networking

Supports L2TP, IPSEC, Vxlan and other layer 2, layer 3 VPN technology, and can establish VPN virtual connection with internal network resources, external network resources, cloud resources and other destination networks, and easily realize virtual networking with the factory local network.

Double backup, always online

♦ Support 5G NR and wired dual connection, air and ground backup, automatic



detection of network faults, automatic line switching, to ensure that the network never drops.

5G high-precision timing

- ♦ 1us high-precision timing service without wiring.
- Integrated 5G communication and timing module,able to integrate various services and improve the cost performance of equipment.

Product Specification

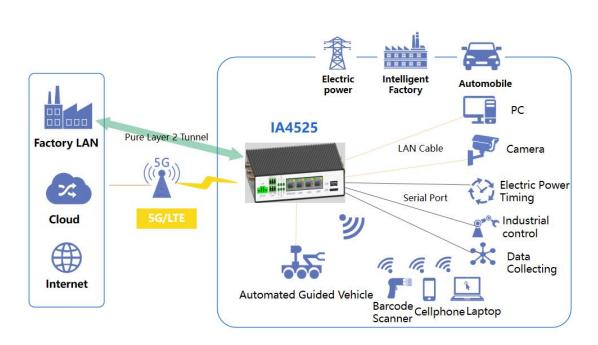
Hardware Specification		
System Parameters		
Main CPU Architecture	Independent Qualcomm Quad-Core CPU	
Main CPU Frequency	1.8GHZ/core, quad-core	
Memory	1GB	
5G Chip	UNISOC V516	
Interface Parameters		
5G NR	Support SA&NSA network	
5G Antenna	4 external antennas	
SIM Card	1*SIM slot	
	1*sSIM/patch card (optional)	
WAN Port	1*GE port, 100M/1000M adaptive, type: RJ45	
LAN Port	3*GE ports, 100M/1000M adaptive, type: RJ45	
WiFi Protocol	2.4GHz IEEE 802.11 b/g/n/ax 2T2R	
	5GHz IEEE 802.11 a/n/ac/ax 2T2R	
WiFi Theoretic Throughput	Overall WiFi throughput:1800Mbps	
	2.4GHz: 574Mbps (2ss 40MHz)	
	5GHz: 1200Mbps (2ss 80MHz)	
WiFi Antenna	2 external omnidirectional antennas	
USB port	1*USB	
Physical Parameters		
Dimension	158mm * 120mm * 30mm	

Material	Metal	
Colour	Black	
Installation	Tabletop/Wall-mounting/Clamp rail	
Button	RESET	
Indicator	Power, LAN, 2.4G WiFi, 5G WiFi, 4G LTE, 5G NR	
Power Supply		
Power Supply	DC 12V(2 industrial lock pin terminal), standard 220V DC adapter	
Output Voltage	12V	
Output Current	2A	
Environment Parameters		
Working Temperature	-20°C~ +60°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*
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
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
Device Management	TR069, SNMP*, Local WEB



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



Networking