

Product Model LGS2000-F-CPE501-WAPI

Product Image



Product Overview

LGS2000-F-CPE501-WAPI is a WAPI CPE product developed based on IEEE 802.11ac and Chinese national standard GB 15629.11 series of wireless LANs, with the advantages of high reliability, high security, feature-rich and high performance to meet the WAPI wireless security application requirements of industrial application scenarios. CPE501 is suitable for intelligent inspection, CPE501 is suitable for smart inspection, digital twin, mobile access, smart storage, smart security, AGV and other related scenarios. It supports 2.4GHz and 5GHz dual-band, IEEE802.11a, IEEE802.11b, IEEE802.11g and 802.11ac modes, WAPI security mode, and the highest access rate 1167Mbps. It supports wireless dual-link redundancy to ensure fast and seamless switching in mobile video transmission service, and no frame loss of video images.

Technical Specification

<p>Full support for 802.11ac technology The CPE501 complies with the latest 802.11ac Wave2 protocol standard, providing spatial 2-stream (2-stream) wireless transmission rate of 867Mbps and an overall access capacity of 1167Mbps, which can effectively provide higher performance in terms of coverage, access density, and operational stability. It can effectively provide higher performance in terms of coverage, access density, operation stability, etc.</p> <p>Millisecond Seamless Roaming CPE501 works in WAPI Client mode, which can support to establish two links with wireless network at the same time, 2.4GHz and 5GHz, one works in main link mode (data forwarding) and one works in backup link mode, thus realizing wireless dual-link redundancy backup. Through the fine adjustment of wireless scanning and wireless connection control, the transmission quality of the two links is monitored in real time, and once the quality of the backup link is found to be better than the main link, the device will make link switching in real time to always ensure that data is transmitted in the best link state and achieve a lower packet loss rate in the switching process, thus guaranteeing a continuous, high-quality wireless link connection with the outside world.</p> <p>Multi-service bearing CPE501 supports QoS features, which can provide good bearing for data, voice, video and other business applications.</p>	<p>Dual-port design CPE501 supports dual network port design with dual uplink Gigabit Ethernet ports, which not only solves the interface data backup problem, but also provides flexible networking for networks that require internal and external network isolation.</p> <p>High security level hardware cryptographic algorithm protection CPE501 fully complies with the requirements of GB 15629.11 series of China's wireless LAN national standards, supports WAPI-PSK and WAPI-Cert security modes, and fully adopts the cryptographic algorithms approved by the State Cryptography Administration. All the generation and signature operations related to WAPI private key are done in the security chip, and the private key never leaves the security chip, thus ensuring the security of WAPI device local cryptographic algorithm and private key usage. The subsequent service data is also encrypted and decrypted by the WLAN chip hardware, which not only meets the need of network security but also guarantees the network performance.</p> <p>Rugged design for harsh environments Industrial-grade wide temperature devices can be selected for long-term stable operation in -40°C to 70°C environment Phoenix head power input interface</p>
Size	114mm*98mm*33mm (L*W*H)
Interface	Ethernet2 x 1000M electrical ports
Antenna port	Antenna port 2*MMCX connector, 2.4GHz and 5GHz combined
Operating Frequency Band	2.4G 5G
Band	802.11b/g/n : 2.4GHz-2.483GHz (China) 802.11ac/a/n/a-5: 150GHz-5.350GHz/5.725GHz-5.850GHz (China)
Modulation Technology	OFDM_BPSK@69Mbps, QPSK@12/18Mbps, 16-QAM@24Mbps, 64-QAM@48/54Mbps
Modulation method	DSSS : DBPSK@1Mbps, DQPSK@2Mbps, CCK@5.5/11Mbps/MIMO-OFDM (11n): MCS 0-15/MIMO-OFDM (11ac): MCS 0-9 11n-DSS-CCK@5.5/11Mbps, DQPSK@2Mbps, DBPSK@1Mbps 11n-g/OFDM_64QAM@48/54Mbps, 16QAM@24Mbps, QPSK@12/18Mbps, BPSK@6/6Mbps 11n-MIMO-OFDM_BPSK, QPSK, 16QAM, 64QAM 11ac-MIMO-OFDM_BPSK, QPSK, 16QAM, 64QAM, 256QAM
Maximum transmitting power	23dBm
Emission frequency adjustable granularity	16Bm
Operating temperature/storage temperature	-40 ~ 70°C / -40 ~ 70°C
Operating Humidity / Storage Humidity	5%-95%(Non-condensing)
Power supply mode	12~36V DC, Phoenix terminal power input interface
Overall power consumption	≤14W
MTBF	>250000H
Operating Frequency Band	2.4GHz 5GHz
Channel bundling	Support 40MHz, not recommended 80MHz bundle
MU-MIMO	NA Support
867Mbps(PHY)	NA Support
300Mbps(PHY)	Support NA
A-MPDU	Support Support
WLAN	Support Support
Maximum Similarity Demodulation (MLD)	Support Support
Maximum Combined Ratio Reception (MRC)	Support Support
Space-time grouping code (STBC)	Support Support
Low Density Parity Check Coding (LDPC)	Support Support
Maximum connection rate	2.4GHz: 300Mbps/5GHz: 867Mbps
Terminal aging, heartbeat detection	Support
Client mode	Support Client mode
Automatic channel selection	Support
Automatic power regulation	Support
RF Management	Support
Intelligent rate selection algorithm	Support
Time fair scheduling	Support
Roaming	Supports wireless dual-link redundancy backup with uplink devices at the same time to achieve fast data channel switching
Security Mode	WAPI-PSK, WAPI-Cert
Compliance	Fully compliant with the relevant requirements of China's national standard GB 15629.11 series of wireless LAN using symmetric/asymmetric cryptographic algorithms approved by the State Cryptography Administration
Private Key and Algorithm Security	Embedded with a high security level WAPI special security chip, the private key-related operations are carried out inside the security chip hardware to ensure the security of WAPI device's private key and cryptographic algorithm operations.
Operations and Maintenance	Network Management Telnet, WEB

Mechanical Drawing

