CES7114G-8GF-6GT

14-Port Layer 2 Gigabit Managed Embedded Industrial Ethernet Switch

- Support 8 Gigabit SFP ports and 6 Gigabit copper ports
- Support redundant ring protocols such as CS-Ringv1/v2, ERPS, STP/RSTP, enhancing network reliability
- Fast ring redundancy (CS-Ringv1/v2) with less than 20ms, improving communication reliability
- Support DDM digital diagnostic monitoring, allowing monitoring of current DDM SFP module's operating temperature, voltage, current, transmit optical power, and receive optical power
- Support DC9~24V power input, complying with intrinsic safety circuit design standards
- Operating temperature range from -40℃ to +75℃

Product Description

CES7114G-8GF-6GT is a 14-port layer 2 full Gigabit managed embedded industrial Ethernet switch designed and developed for industrial communication network applications, meeting the requirements of intrinsic safety design. This product supports 8 Gigabit fiber optical ports, 6 Gigabit copper ports, and 1 DC9~24V power input. It adopts a fanless, intrinsic safety, and wide voltage design, featuring selected industrial-grade components, supporting an operating temperature range from -40℃ to +75℃, complying with the requirements of intrinsic safety circuit design standards. It is installed in an embedded manner, meeting the requirements of various industrial network scenes.

CES7114G-8GF-6GT supports WEB management functions and various network protocols, such as CS-Ringv1/v2, ERPS, STP/RSTP, VLAN, LACP, IGMP-Snooping, LLDP, SNMPv1/v2c/v3, RMON, QoS, ACL, 802.1X authentication, WEB/TELNET/SSH access control, port aggregation, port mirroring, static MAC address binding, network diagnosis, loopback detection, Email logging, alarms, and firmware online upgrades, enhancing network performance, reliability, and security to meet the needs of various complex networks. The product has undergone rigorous testing for functions, high and low temperatures, safety regulations, EMC, etc., meeting the requirements of complex networks and harsh industrial environment applications, and can be widely used in comprehensive energy, smart cities, rail transit, intelligent transportation, smart factories, industrial automation, and other fields.

Product Features

- Support rate limiting for broadcast, unknown multicast, and unknown unicast packets, as well as detection of broadcast and multicast packet storms to prevent network storms
- Support static and dynamic link aggregation, increasing transmission bandwidth and improving link reliability
- Support port mirroring to capture data at port ingress and egress for network detection and fault management
- Support 802.1Q VLAN to provide Access, Trunk, and Hybrid interfaces for dividing multiple broadcast domains, enhancing network security
- Support IGMP snooping and static multicast tables to reduce multicast data broadcast in the network, saving network resources
- Support LLDP link layer discovery protocol to obtain information about LLDP neighbor devices, facilitating link status monitoring for topology management and fault localization
- Support ERPS Ethernet ring protection switching technology, providing multi-ring networking, link backup, fast convergence, and improved network stability
- Support RSTP rapid spanning tree protocol, compatible with STP protocol, to eliminate network loops and improve network reliability
- Support SNMPv1/v2c/v3 centralized management and SNMPv1/v2c/v3 TRAP information, supporting both national grid standard TRAP and private TRAP
- Support RMON remote network monitoring for statistics and alarms on various types of data frames, usable for remote monitoring and management by network management systems
- Support QoS quality of service to prioritize transmission of voice, video, and important data in network devices, resolving network congestion
- Support ACL access control lists for filtering TCP/UDP/ICMP/IGMP packets based on source/destination IP and MAC addresses
- Support 802.1X port authentication for authenticating access users, providing local authentication databases and remote RADIUS login authentication
- Support loopback detection to prevent network loops and network storm triggers
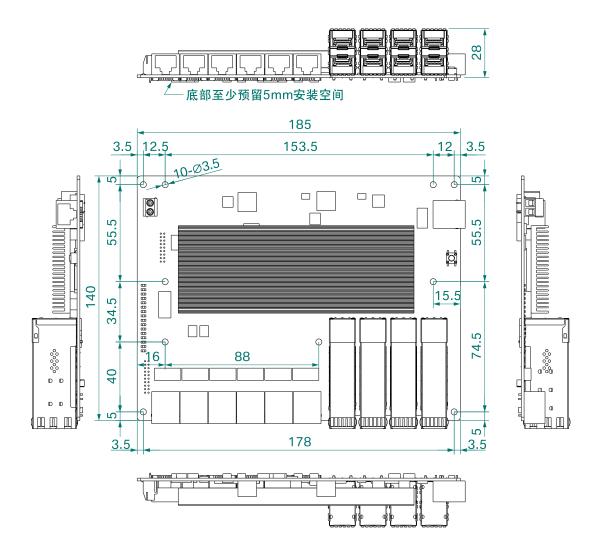
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Technical Specifications

Software	
Switching	Support port configuration, port rate limiting, storm suppression, storm detection, port aggregation, LACP (Link Aggregation Control Protocol), and port statistics Support 802.1Q VLAN and port isolation Support static unicast MAC address binding
Redundancy	Support proprietary CS-Ringv1/v2 ring network technology. Support ERPS. Support RSTP and is compatible with STP.
Multicast	Support IGMP Snooping Support static multicast MAC address binding
Security Management	Support access control for WEB, TELNET, and SSH Support ACL (Access Control List) for controlling access Support 802.1X port authentication Support Email logging, loopback detection, and network storm/port link-down alarms
Management and Maintenance	Support QoS, SNMP v1/v2c/v3, SNMP v1/v2c/v3 TRAP, RMON, and LLDP Support port mirroring, Ping, and DDM for optical modules Support user management with different permissions, system logging, and local/network time synchronization Support online reboot, factory reset, system upgrade, and configuration file upload/download
Switch Capability	
Processing Type	Store-and-Forward
Backplane Bandwidth	56Gbps
Buffer Size	4.1Mbit
MAC Table Size	8K
Interface	
Gigabit Fiber port	8*1000Base-X Gigabit SFP ports
Gigabit Copper port	6*10/100/1000Base-T(X) auto-sensing RJ45 copper ports, full/half duplex, auto MDI/MDI-X

CONSOLE	1 CONSOLE port, RS232 signal RJ45 port, used for device debugging
Button	Restart and factory reset
Status LED	Power LED, operation LED, alarm LED, port LED, with the ability to externally connect indicator
Power Supply	
Input Voltage	DC9~24V
Power Consumption	＜13W@DC12V(full load)
Connection	5.08mm pitch 2-pin terminal block
Protection	overcurrent protection
Physical Characteristics	
Dimensions	185×140×28 mm
Installations	Embedded
Weight	About 0.4kg
Working Environment	
Operating Temp	-40℃~+75℃
Storage Temp	-40℃~+85℃
Relative Humidity	5%~95% (non-condensing)

Dimensions

Unit: mm

底部至少预留5mm安装空间

Ordering Information

Standard Model	Gigabit SFP port	Gigabit Copper port	Input Voltage
CES7114G-8GF-6GT	8	6	DC9~24V

Contact Us

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