

# CS-2404G-8C-HS

## 16+8+4 Port Industrial Managed Gigabit L3 Switch



- 16x Gigabit Ethernet ports
- 8x Gigabit combo Ethernet
- 4x 1000F(x) SFP Slot
- RSTP, MSTP, ERPS, LACP for Network Redundancy
- QoS CoS/DSCP to increase determinism
- Supports IGMP Snooping v1/v2/v3, up to 512 groups
- DHCP Relay Option 82 for policies IP address assignment
- SNMP v1/v2c/v3 for network management
- Supports Storm Protection
- USB storage for configuration-free replacement
- Supports industrial automation protocols Ethernet/IP and Modbus TCP



## Specifications

### Technology

IEEE 802.3 10BaseT  
IEEE 802.3u 100BaseTX  
IEEE 802.3ab 1000BaseT  
IEEE 802.3z 1000BaseX  
IEEE 802.3x Flow Control  
IEEE 802.3az Energy-Efficient Ethernet  
IEEE 802.3ad/802.1AX LACP  
IEEE 802.1D Spanning Tree Protocol  
IEEE 802.1w Rapid STP  
IEEE 802.1s Multiple STP  
ITU-T G.8032 / Y.1344 ERPS  
IEEE 802.1Q VLAN Tagging  
IEEE 802.1ad Stacked VLANs  
IEEE 802.1p Class of Service  
IEEE 802.1X Network Authentication  
IEEE 802.1AB LLDP  
IEEE 1588 PTP

### Standards

**Processing Type** Store and Forward

### Switch Properties

**Switch Fabric** 56Gbps

**Priority Queues** 8 Queues

**Jumbo Frame** 9216bytes

**MAC Table Size** 16K

**Packet Buffer** 12Mbits

**VLAN Table Size** 4094

**IGMP Group** 512

**ACL Group** 512

**VLAN IP Entries** 64

**Routing Entries (IPv4/IPv6)** 512/256 host, 64/64 LPM

### Software Feature

**Network Redundancy** RSTP, MSTP, G.8032 ERPSv2, Port Trunking with LACP

**Security** 802.1X, RADIUS, TACACS+, SSL, SSH

**Management** IPv4, IPv6, Web, Telnet, Serial Console, CLI, SNMP v1/v2c/v3, uPnP

**Diagnostics** RMON, SNMP Inform/Trap, Syslog, SMTP, Port Mirroring, LLDP

**Configuration** DHCP Server/Client, Relay Option 82, TFTP, USB

**Filter** 802.1Q VLAN, Q-in-Q, IGMP Snooping v1/v2/v3, IGMP Querier, Independent Vlan Learning

**Time Sync.** NTP, IEEE1588v2 OC (Software Timestamp), BC (Software Timestamp), TC (Hardware Timestamp)

**QoS** CoS, DSCP, WRR/SPQ Queuing, Storm Protection

**Industrial Profiles** Ethernet/IP, Modbus TCP, Profinet

**L3 Switching** Static Routing, RIP v1/v2, RIPng, OSPF v2, OSPF v3, VRRP v2

## Interface

|                       |  |
|-----------------------|--|
| <b>RJ45 Port</b>      | 16x 10/100/1000T(x), auto negotiation speed duplex mode, auto MDI/MDI-X  |
| <b>Combo Port</b>     | 8x 10/100/1000T(x) with dual speed SFP combo port, auto media detect   |
| <b>Fiber Port</b>     | 4x 1000F(x) SFP Slot   |
| <b>LED Indicators</b> | <b>Per unit:</b> PWR1, PWR2(AC2/DC2), Fault, Ring Master, Ring State<br><b>Ports:</b> Link/Active with Green LED on the left, Speed on the right with highest speed(Amber), low speed(OFF) |
| <b>Alarm Contact</b>  | 1x relay output with current carrying capacity of 1A @ 24 VDC  |
| <b>Digital Inputs</b> | 1x isolated input from the electronics.<br>+13 to +30V for state "1"<br>-30 to +3V for state "0"<br>Max. input current: 8mA  |
| <b>Button</b>         | Multiple functions reset button  |
| <b>Serial Console</b> | 1x RS232 in RJ45 connector with console cable, 115.2Kbps, 8N1  |
| <b>Storage</b>        | 1x USB 2.0 storage for firmware update, configuration backup, restore, boot up and syslog  |

## Power Requirements

|                          |  |
|--------------------------|--|
| <b>Operation Voltage</b> | 90~264VAC, 48VDC, redundant dual inputs                |
| <b>Connection</b>        | AC socket, DC 4-pin terminal block                     |
| <b>Power Consumption</b> | 0.46A@110VAC, 0.86@24VDC                               |
| <b>Protection</b>        | Overload Current Protected, Reverse Polarity Protected |

Features with star(\*) implies those are under development.

In a continuing effort of improvement and updated technology, product specifications are subject to change without notice.

## Mechanical Construction

|                         |                        |
|-------------------------|------------------------|
| <b>Enclosure</b>        | Aluminum / Steel metal |
| <b>Protection Class</b> | IP30                   |
| <b>Dimensions</b>       | 440x44x437 mm (WxHxD)  |
| <b>Weight</b>           | 4.80 kg                |
| <b>Mounting</b>         | Rack Mounting          |

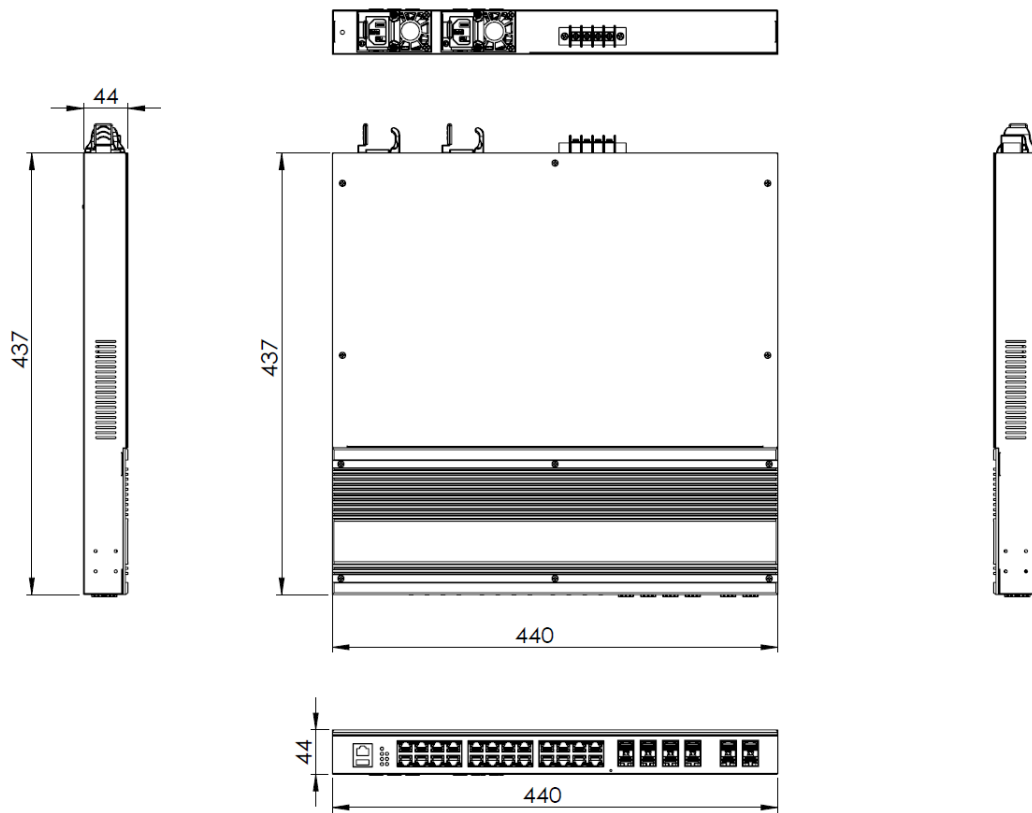
## Environmental Limits

|                                  |                                       |
|----------------------------------|---------------------------------------|
| <b>Operating Temperature</b>     | Standard: -20°C ~ 60°C (-4°F ~ 140°F) |
| <b>Storage Temperature</b>       | -40°C ~ 85°C (-40°F ~ 185°F)          |
| <b>Ambient Relative Humidity</b> | 5 to 95%, (Non-Condensing)            |

## Regulatory Approvals

|                  |   |
|------------------|---|
| <b>EMI</b>       | FCC Part 15 Subpart B Class A<br>CE EN 55032 Class A  |
| <b>EMS</b>       | IEC61000-4-2 (ESD)<br>IEC61000-4-3 (RS)<br>IEC61000-4-4 (EFT)<br>IEC61000-4-5 (Surge)<br>IEC61000-4-6 (CS)<br>IEC61000-4-8 (Magnetic Field) |
| <b>Free Fall</b> | IEC60068-2-32   |
| <b>Shock</b>     | IEC60068-2-27   |
| <b>Vibration</b> | IEC60068-2-6  |
| <b>Green</b>     | RoHS Compliant  |
| <b>MTBF</b>      | >100,000 hours  |
| <b>Warranty</b>  | 5 Years   |

## Dimensions (unit = mm)



## Ordering Information

|                          |   |
|--------------------------|---|
| <b>CS-2404G-8C-HS-AC</b> | 16+8+4 Port Industrial Managed Gigabit L3 Switch<br>- 16x 10/100/1000T(x) + 4x 1000F(x) SFP Slot + 8x Combo Ports<br>- Operating Temperature:<br>- 2x 90~264VAC Power Input                       |
| <b>CS-2404G-8C-HS-AD</b> | 16+8+4 Port Industrial Managed Gigabit L3 Switch<br>- 16x 10/100/1000T(x) + 4x 1000F(x) SFP Slot + 8x Combo Ports<br>- Operating Temperature:<br>- 1x 90~264VAC Power and 1x 12~48VDC Power Input |
| <b>CS-2404G-8C-HS-DC</b> | 16+8+4 Port Industrial Managed Gigabit L3 Switch<br>- 16x 10/100/1000T(x) + 4x 1000F(x) SFP Slot + 8x Combo Ports<br>- Operating Temperature:<br>- 2x 12~48VDC Robust Isolation Power Input       |

## Optional Accessories

|                  |  |
|------------------|--|
| <b>NDR-75-24</b> | 75W Industrial DIN-Rail Power Supply, 24VDC (metal case) |
| <b>NDR-75-48</b> | 75W Industrial DIN-Rail Power Supply, 48VDC (metal case) |