Carat55-D2GF8GP-DP

DIN-Rail L2 Industrial Ethernet switch

Features



- 2 Gigabit port slots for fiber，8 100/1000 port adaptive TX
- TX supports IEEE 802.3at standard (PoE+)
- Recovery time of ring network < 20ms
- High strength aluminum alloy sealed shell structure
- Industrial grade fan free design，Suitable for long working hours
- Support AutoSniffer device management software

Product Overview

Carat55-D2GF8GP-DP managed DIN-Rail Layer 2 industrial Ethernet switch is a high-performance switch designed for rail transportation, industrial automation and other network communications in line with rail transit , industry standards such as EN50155, EN50121 and other industry standards, and has obtained a number of certificates, such as CE, FCC, etc. It is suitable for use in harsh environments, and offers highly reliable industrial network connectivity solutions for different industrial applications.

Carat55-D2GF8GP-DP adopts store-and-forward switching method, providing 8 10/100/1000

Base-TX RJ45 ports, all TX ports support maximum 30W (802.3at standard) POE+ power supply, 2 Gigabit SFP optical slots, providing full line speed non-blocking 1000M forwarding, providing full duplex under the IEEE802.3x flow control in full duplex and backpressure flow control in half-duplex mode.

Carat55-D2GF8GP-DP supports network management functions based on command line, Telenet, SNMP, SSH, Web page, etc. It also supports Virtual LAN (VLAN), Multicast Snooping (IGMP Snooping), Port Trunk, Port Security, Port Mirror, and Quality of Service (QoS). It supports Layer 2 switching functions such as virtual LAN (VLAN), IGMP Snooping, link aggregation (Port Trunk), port security, port mirroring, and quality of service (QoS).

Specifications

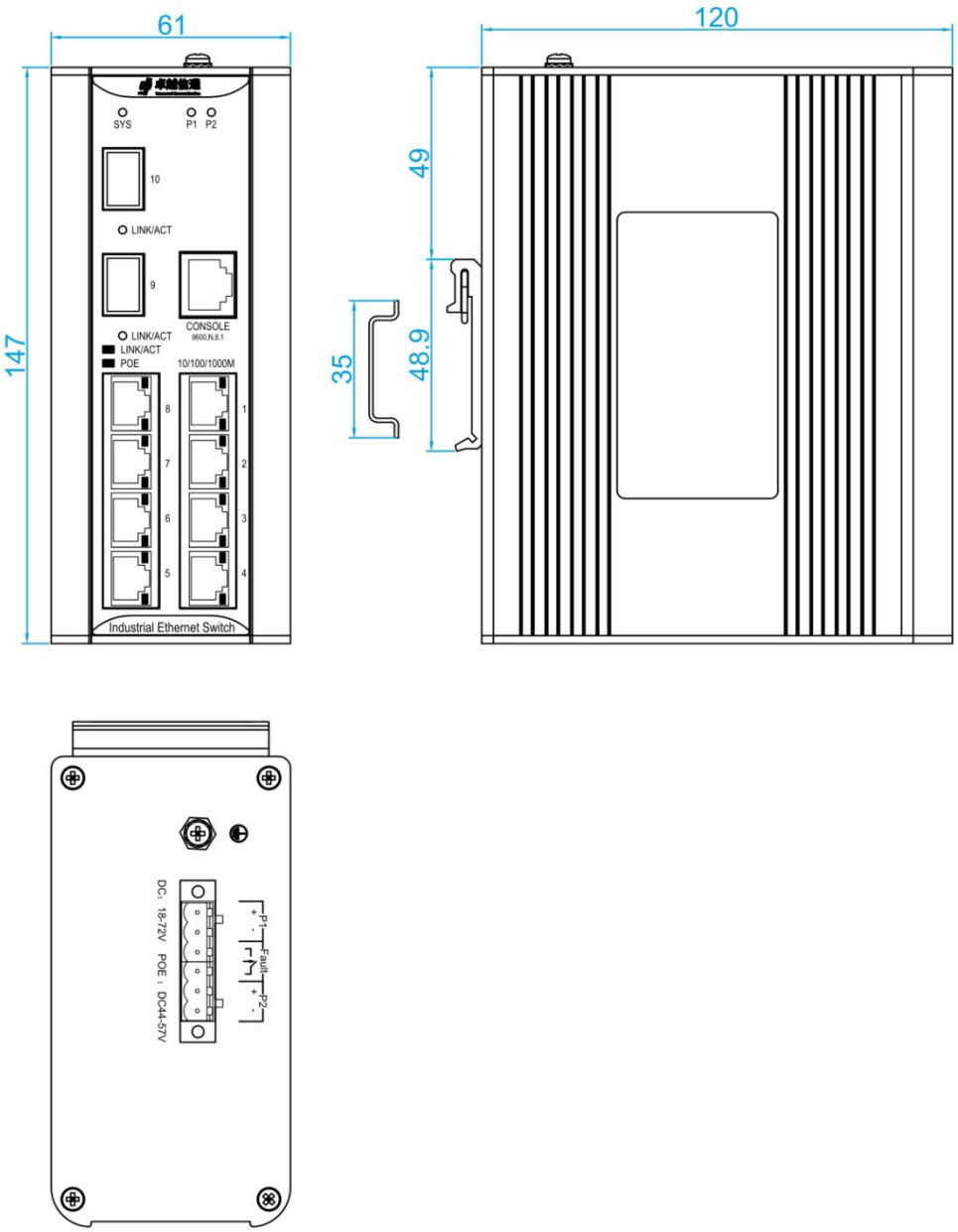
Compliances	
Standards	IEEE 802.3i(10Base-T) IEEE 802.3u(100Base-TX) IEEE 802.3ab(1000Base-T) IEEE 802.3ad (port aggregation) IEEE 802.3z(1000Base-SX/LX) IEEE 802.3x(Flow Control) IEEE 802.1p (Priority) IEEE 802.1Q (VLAN) IEEE 802.1d(STP) IEEE 802.1w(RSTP) IEEE 802.1s(MSTP) IEEE 802.3af (POE) IEEE 802.3at (POE+)
Switch Properties	
Mode	Store and forward
Switching Capacity	20Gbps
Forwarding Rate	14.88Mpps
Date buffer	4.1Mbit
MAC Address	8K
Switching delay	<10μs
Physical port	
Electrical port	8 10/100/1000Base-TX ports, RJ45, automatic flow control, full/half-duplex mode, MDI/MDI-X auto-detect, all TX support up to 30W (802.3at standard) POE+ power supply
Optical port	2 Gigabit SFP optical port slots, LC

Network Management Port	1 Console Management Port (RS-232), RJ45
LED Indicator	System indicator (SYS), Power indicator (P1,P2), Interface indicator (Link/ACT), POE indicator (POE)
Main Features	
VLAN	Support Port-based VLAN Support IEEE802.1Q VLAN Support private VLAN Support Protocol VLAN Support Voice VLAN Support MAC VLAN Support common QinQ Support selectivity QinQ Support flexibility QinQ Support VLAN Translation Support N:1 VLAN Translation
DHCP	Support IPv4/IPv6 DHCP Client Support Option 82、Option 37/38 Support IPv4/IPv6 DHCP Snooping、IPv4/IPv6 DHCP Server
Reliability	Support STP，RSTP，MSTP Support multi process MSTP* Support LACP Support EMVTE（ULPP+ULSM） Support G.8032（ERPS） Support Loopback detection、VCT、DDM Support ULDP
Security	Supports port speed limiting Supports broadcast storm control based on message and byte counts Support port/MAC binding and MAC filtering Supports port-based and VLAN-based MAC count limitation Supports anti-ARP spoofing, anti-ARP scanning, ARP binding. Supports DHCP Snooping, ND Snooping. Supports DAI Supports standard IEEE 802.1x, extended IEEE 802.1x, Web Portal Supports TACACS+
Multicast	Support IGMP v1/v2/v3 snooping、IGMP Fast leave Support MLD v1/v2 snooping Support multicast VLAN、 IPv4/IPv6 DCSCM
QoS	Support based on ACL flow, VLAN ID, COS, TOS, DSCP Supports aggregated PolicyMap Supports port-based and VLAN-based PolicyMap binding Supports single speed, single bucket, two colors Supports DSCP, COS/802.1p priority, TOS and other field rewriting Supports 8 queues per port

	Support SP, WRR queue scheduling algorithm Supports matching IP sliced messages
ACL	Support based on ACL flow, VLAN ID, COS, TOS, DSCP Supports aggregated PolicyMap Supports port-based and VLAN-based PolicyMap binding Supports single speed, single bucket, two colors Supports DSCP, COS/802.1p priority, TOS and other field rewriting Supports 8 queues per port Support SP, WRR queue scheduling algorithm Supports matching IP sliced messages
Security Network Management	Support CLI IPv4/IPv6 HTTP support IPv4/IPv6 FTP/TFTP support IPv4/IPv6 SNTP/NTP support Support IPv4/IPv6 telnet username and password for radius authentication Support SSH for IPv4/IPv6 Support Security IP security network management function IPv4/IPv6 syslog support SNMPv1/v2c/v3 support Support MIB interface, support Trap Support RMON 1, 2, 3, 9 four groups Supports dual-IMG and multi-profile Supports LLDP Support port mirroring, RSPAN Support sFlow flow monitoring Supports OAM Supports mirror sampling
Mechanical	
Dimensions	61mm×120mm×147mm(W×D×H)
Weight	900g
Installation	DIN-rail mounting, Wall mounting (with optional kit)
Protection	IP40，Pleated high strength aluminum shell
Electrical	
Input Voltage	48VDC (44-57V) redundant power input, supports overload, reverse connection protection, 6-pin 5.08mm pitch terminal block (relay occupies 2 positions)
Alarm port	Support 1-way relay alarm output, terminal
Power	Non-POE<6.5W POE: Each TX supports up to 30W (802.3at standard) POE+ power supply.
Working Environment	
Operating Temperature	-40℃~75℃

Storage Temperature	-40℃~85℃		
Relative Humidity	5%~95%（Non condensing）		
Certifications			
System certification	ISO9001，ISO14001，ISO22163（IRIS）		
Standard certification	CE，FCC，network access license		
Safety	EN60950，UL508		
EMC	EMI	FCC CFR47 Part 15B Class A, CE EN55032 Class A	
	EMS	ESD	EN61000-4-2
		RS	EN61000-4-3
		EFT	EN61000-4-4
		Surge	EN61000-4-5
		CS	EN61000-4-6
		PFMF	EN61000-4-8
Vibration	Compliance with IEC 60068-2-6		
Shock	Compliance with IEC 60068-2-27		
Freefall	Compliance with IEC 60068-2-32		
MTBF	Mean Time Between Failure (MTBF) greater than 500,000 hours		

Physical Dimensions



Ordering Information

Model	Description
Carat55-D2GF8GP-DP	*Industrial DIN-rail L2 managed full Gigabit PoE+ Ethernet switch *2 x 1000BaseSFP slots + 8 x 10/100/1000BaseT(X) PoE+ ports *All PoE+ ports support 802.3at with max. 30W output power *48 VDC redundant power inputs *IP40 protection
Carat 55 series products recommendation	
Carat55-D2GF4GT-D3	DIN-Rail Layer 2 Industrial Ethernet Switch, 2 Gigabit SFP Optical Slots, 4 Gigabit TX, 18-72VDC Redundant Power Inputs, Protection

	Class IP40
Carat55-D2GF8GT-D3	DIN-Rail Layer 2 Industrial Ethernet Switch, 2 Gigabit SFP optical slots, 8 Gigabit TX, 18-72VDC redundant power inputs, IP40 protection rating
Carat55-D2GF4GP-DP	DIN-Rail Layer 2 Industrial Ethernet Switch, 2 Gigabit SFP optical slots, 4 Gigabit TX ports, all TX ports support up to 30W (802.3at standard) power supply, 48VDC redundant power input, IP40 protection rating
Carat55-D2GF8GP-DP	DIN-Rail Layer 2 Industrial Ethernet Switch, 2 Gigabit SFP optical slots, 8 Gigabit TX ports, all TX ports support up to 30W (802.3at standard) power supply, 48VDC redundant power input, protection grade IP40

More information

For more information about Transcend products, please visit our website or contact us via our email ： **info@transcendcom.com**

We will contact you within 24 hours.

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