

## Managed Gigabit Ethernet Switch — DR5010P8C2F

### Product Description:

DR5010P8C2F, a Layer 2+ Managed Gigabit Switches support both IPv4 and IPv6 protocols software Layer 3 static routing capability, and provide 8 10/100/1000Mbps Gigabit Ethernet ports, 2 Gigabit SFP slots.

The DR5010P8C2F is programmed for advanced switch management functions such as **802.1Q VLAN** and **Q-in-Q VLAN**, **Multiple Spanning Tree protocol (MSTP)**, **loop** and **BPDU guard**, **IGMP snooping**, and **MLD snooping**. Also, the **Link Layer Discovery Protocol (LLDP)** is the Layer 2 protocol included to help discover basic information about neighboring devices on the local broadcast domain.



### Feature:

- ◆ Support L2+ Switching features including 802.1Q VLAN, Mirroring, Port isolation, IGMP, Snooping, DHCP Snooping, LLDP, IP Source Guard, ARP inspection, ACLs etc.
- ◆ Support spanning tree STP (802.1D) and RSTP (802.1W) and MSTP (802.1s).
- ◆ Support enhanced management through WEB, CLI, TELNET, SSH, SNMP.
- ◆ Support cable diagnosis
- ◆ Support dual firmware backup mechanism
- ◆ Support G.8032 quick ring protocol. Self-recovery time <20ms.
- ◆ Support IEEE1588 v2, transparent clock(TC)
- ◆ Support DDM, SFP digital diagnostics monitoring
- ◆ Support IPV4 and IPV6 software based static routing functions
- ◆ Support memory and CPU monitor

## Hardware Specification:

Model	DR5010P8C2F
Copper Ports	8 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
Fiber Ports	2-100/1000BASE-X SFP interfaces, supports 100/1000Mbps dual mode
Console Ports	1 x RS-232-to-RJ45 serial port (115200, 8, N, 1)
Switch Architecture	Store-and-Forward
Switch Fabric	20Gbps/non-blocking
Throughput	14.88Mpps @64 bytes
Address Table	8K entries
Share Data Buffer	4.0 Mb
Jumbo Frame	9600 Bytes
SDRAM	1Gb
Flash Memory	128Mb
Flow Control	IEEE 802.3x pause frame for full-duplex, Back pressure for half-duplex
Reset Button	> 2 sec: Factory default and reset
Power Supply	100~240V AC, 50/60Hz, 4A (max.)
Power Consumption	12V, 45watts/1122 BTU
LED Indicators	<p>Power: Green</p> <p>Solid on- power work normal, off- power disconnected</p> <p>System: Green</p> <p>Blink-work normally, solid on- soft work abnormal, fast blink- soft upgrade</p> <p>10/100/1000T RJ45 Interfaces (Port 1 to Port 8): 1000 LNK/ACT (Green), 10/100 LNK/ACT (yellow)</p> <p>Blink- port connected with data transmission; Solid on- port connected without data transmission</p> <p>100/1000Mbps SFP Interfaces (Port 9 to Port 10): Green</p> <p>Blink- port connected with data transmission; Solid on- port connected without data transmission</p>
EMC	<p>Surge Immunity: IEC61000-4-5</p> <p>ESD Protection: ESD IEC61000-4-2</p> <p>EFT IEC61000-4-4</p>
Dimension	280x213x44.5mm
Weight	2.5kg
Working Temperature	-10 °C to 45°C
Storage Temperature	-20°C to 70 °C
MTBF	50,000hrs

## Certificates

- CE Marking
- EN 300 386 V2.2.1:2022 Telecommunication network equipment - Harmonised Standard for ElectroMagnetic Compatibility (EMC) requirements
- EN 50121-4:2016+A1:2019 Railway applications. Electromagnetic compatibility Emission and immunity of the signalling and telecommunications apparatus
- EN 50155:2021, Railway applications. Rolling stock. Electronic equipment
- EN 55011:2016+A2:2021 Industrial, scientific and medical equipment. Radiofrequency disturbance characteristics. Limits and methods of measurement
- EN 55022:2010 Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
- EN 60950-1:2005 Information technology equipment – Safety – Part 1: General requirements
- EN IEC 61000-3-2:2019, EN 61000-3-3:2013, EN 61000-4-2:2009, EN 61000-4-3:2006+A2:2010, EN 61000-4-4:2012, EN 61000-4-5:2014+A1:2017, EN 61000-4-6:2014, EN 61000-4-8:2010, EN 61000-4-11:2004+A1:2017, EN 61000-6-4:2007 Electromagnetic compatibility (EMC) Testing and measurement techniques
- IEC 60068-2-27:2008 Environmental testing-part2-27:test- test ea and guidance: shock
- IEC 60068-2-31:2008 Environmental testing-part2-31:Test- test Ec: Rough handling shocks, primarily for equipment-type specimens
- IEC 60068-2-64:2008 Environmental testing-part2-64:2008 Test- test Fh: Vibration, broadband random and guidance
- IEC 60215:2016 Safety requirements for radio transmitting equipment-General requirements and terminology
- IEC 61967-1:2018 Integrated circuits- Measurement of electromagnetic emissions-Part 1: General conditions and definitions
- IEC 62151: 2000 Safety of equipment electrically connected to a telecommunication network
- Directive 2002/95/EC (RoHS 1),
- CFR Part 15, Su voltage 2014/35/EU Directive
- UL (UNDERWRITERS LABORATORIES)

## Layer 2 functions

Port configuration	Auto-negotiation Flow Control Port Mirror: TX/RX/BOTH; Many-to-1 monitor Traffic statistics
Link Aggregation	Static link aggregation LACP Algorithm based on Source/Destination MAC Algorithm based on Source/Destination IP
MAC Table	Aging Time Static MAC address Dynamic MAC address management
VLAN	4094 Active VLANs 4094 VID 802.1Q Tag VLAN Port VLAN Protocol VLANMAC VLAN Voice VLAN 802.1ad Q-in-Q tunneling Private VLAN (Protected port)GARP/GVRP
ACL	256 ACLs L2, L3 & L4 Time-based ACL
Spanning tree	802.1D Spanning Tree Protocol (STP) 802.1w Rapid Spanning Tree Protocol (RSTP) 802.1s Multiple Spanning Tree Protocol (MSTP) Loop Guard Root Guard TC-BPDU Guard BPDU Guard BPDU Filter
Ring Protection	<20ms G.8032 ERPS Ring
Multicast	256 groups IGMP v1/v2/v3 Snooping, Fast Leave

	<p>MLD Snooping</p> <p>Multicast VLAN</p>
QOS	<p>8 mapping IDs to 8 level priority queues</p> <p>CoS port-based</p> <p>CoS 802.1p-based</p> <p>CoS DSCP-based</p> <p>Scheduling algorithms SP, WRR, SP+WRR</p> <p>Storm Control (Broadcast, Multicast, Unknown Unicast)</p> <p>Bandwidth control per port</p>
Security Features	<p>Port Security</p> <p>MAC address filter</p> <p>ARP Association (Manual, ARP scanning, DHCP snooping)</p> <p>ARP Protection</p> <p>DoS (Denial of Service)</p> <p>Classification of packages based on: End.MAC, IP End, TCP / UDP Ports, Protocol Type;</p> <p>802.1x Authentication (port-based &amp; MAC-based)</p> <p>TACACS/TACACS+ Authentication</p> <p>RADIUS Authentication</p> <p>DHCP Filter</p> <p>Guest VLAN</p> <p>SSLv2/SSLv3/TLSv1</p> <p>SSHv1/SSHv2</p> <p>Restriction of WEB access based on: IP Address, And. MAC and Port; Port Isolation</p> <p>Loopback detection</p>
Management	<p>SNMP v1/v2c/v3 with Full Private MIBs</p> <p>RMON 4 groups</p> <p>WEB (HTTP/HTTPS)</p> <p>CLI (Telnet, Console, SSHv1/v2)</p> <p>Firmware upgrade via console/web/TFTP</p> <p>Configuration Backup/Reload</p> <p>Dual Firmware</p> <p>LLDP</p>
Synchronization, IEEE1588	Support IEEE1588v2 transparent clock
Other Features	DNS Client

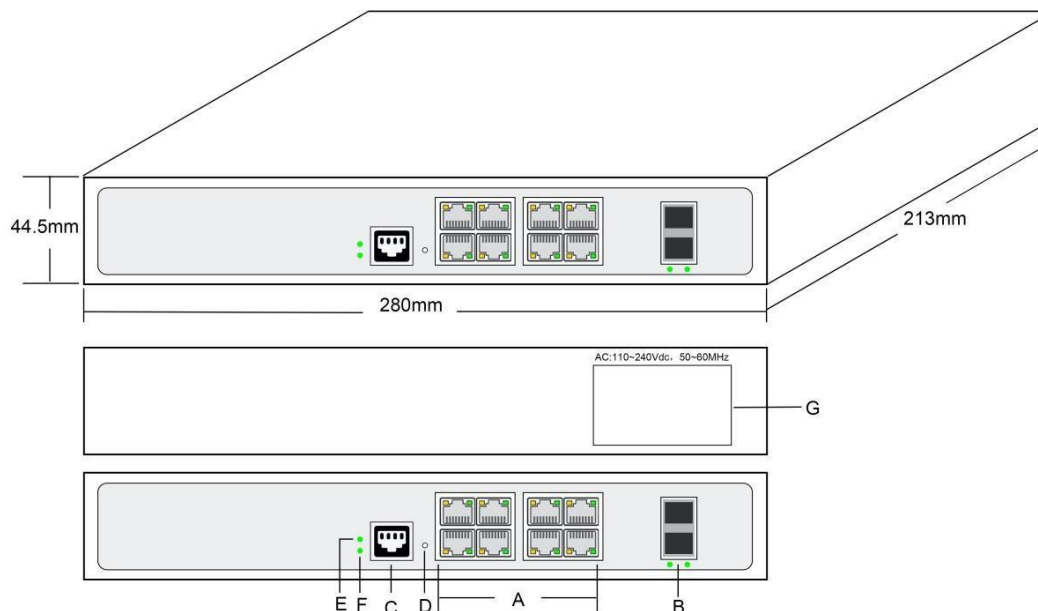
	DHCP Relay DHCP Client DHCP Snooping DHCP Option 82 NTP/SNTP Client UPNP UDLD
Maintenance	Cable Diagnostics Ping SFP DDM(Digital Diagnostics Monitoring) Thermal protection System log (Local and Remote) Memory and CPU Monitoring

### Layer 3 functions

Static Routing	IPv4 Unicast: Static Routing(Software Base) IPv6 Unicast: Static Routing(Software Base)
IPV6	IPv6 neighbor discovery (ND) Path maximum transmission unit (MTU) discovery Internet Control Message Protocol (ICMP) version 6 TCPv6/UDPv6 Ping6 Telnet(v6) Http/Https Interface IPV6 ACL IPV6



## Dimension:



A: 8x 10/100/1000Mbps RJ45 Ports

B: 2x Gigabit SFP Uplink Ports

C: Console Port

D: Reset Key

E: Power LED Indicator

F: System Status LED Indicator

G: AC Power Input: 100~240V, 50~60Hz

## Order Information:

Product Model: DR5010P8C2F

Product Description: L2+ Managed Switch, 8-Port 10/100/1000BASE-T +2-Port 100/1000X SFP, 1x console port

Order note: SFP module is not included, need to order it separately

Package lists	L2+ Managed Switch, 8-Port 10/100/1000BASE-T +2-Port 100/1000X SFP, 1x console port (DR5010P8C2F)
	Power Cable
	Mounting Kits
	Warranty Card
	User Guide