

ISCOM2828F(Ver.C) Intelligent Aggregation Switch

Datasheet

ISCOM2828F is an intelligent Fast Ethernet Switch which provides industry leading port density and power supply redundant for Metro Ethernet access and aggregation. Its high-efficient L2 switching fabric enables excellent wire-speed forwarding capability provision. ISCOM2828F is integrated with advanced Access Control List and bandwidth management policies for provisioning of

flexible network construction, customized QoS, complete network management and high dependability that perfectly satisfy carrier's requirement. ISCOM2828F is especially highlighted for its Q-in-Q function for enhanced user identification. Its highest available switching performance with high density Ethernet ports is particularly suitable for Carrier Class Ethernet.



ISCOM2828F Intelligent Metro Ethernet Aggregation and Access Switch

Feature

Basic Feature

Switching Mode	Store and Forward mode, buffer size: 256M bit
Packet Forwarding	MTU:9000 byte, default:1,526 bytes DLF forward control / Jumbo frame
Bandwidth Profile	Max rate limit:1,048,576Kbps Burst configuration Max burst size: 512KB Ingress rate limit per port Egress flow shaping per port Rate limit per VLAN The value are from 64Kbps to 100Mbps per FE port or up to 1Gbps per GE port with 64Kbps granularity
Storm Control	Broadcast / multicast / DLF storm control Control mode:Global,pps Default value 1024 pps
Link Aggregation	Up to 6 trunk groups Up to 8 ports in each trunk group Load balance based on MAC Load balance based on MAC and IP
Mirror	Mirroring per port mirroring for ingress & egress ports Separate mirroring configurations for ingress & egress ports
MAC Address Table	16K MAC address Add/remove MAC address View MAC address statistic Search MAC address Aging time:10-1000000s MAC table threshold per port MAC table limit:1-255
Port based Security Mac Address	security MAC per port port-based security MAC range <1-100> Mac Address violation mode per port add / remove static ; sticky security Mac Address per port sticky security Mac Address learning per port
Multicast	1K multicast addresses Static multicast groups IGMP Snooping (V1,V2,V3) Multicast filtering & unknown multicast discard MVR
STP	STP,RSTP & MSTP 64 instances / 255 STG

Specification

Performance Capacity	Switching fabric: 12.8Gbps 64MB SDRAM 8MB flash 32MB Switch buffer 1K IGMP groups
Management port	1 console (RJ45)
Serial port configuration	9600bps/8bit/none parity/1 stop bit/none flow control
Port specification	24 10/100BASE-FX SFP 2 COMBO (10/100/1000BASE-T+1000BASE-X SFP) 2 1000BASE-X SFP
Indicators	Power Supply (flashing) System (flashing) fixed 100BASE-FX: LNK/ACT indicator fixed 1000BASE-X: LNK/ACT, 1000M indicator fixed 1000BASE-T: LNK/ACT, 1000M indicator
Dimension	442(W)*360(D)*43.8(H)mm
Weight	≤5.8Kg
Power supply	AC: 90~264V, 47~63Hz DC: -48V
Power consumption	≤ 40W (full load)
Working ambience	Temp: 0~50 centigrade RH: 10~90% non-condensing
Storage ambience	Temp: -25 ~ 70 centigrade

Flow control	IEEE 802.3x in full duplex mode Back pressure in half duplex mode Separate configurations for ingress & egress
VLAN	IEEE 802.1Q VLAN 4K active VLANs
QinQ	Port QinQ Double-tagging VLAN swapping
VLAN Groups	128 VLAN groups VLAN groups statistics CoS-to-queue mapping based on VLAN group VLAN groups CoS value remarking VLAN groups rate limit DSCP remarking
Transparent Relay Relay	BPDU DOT1X LACP
Digital Diagnostic	SFP digital diagnostic function
Port Loop-back Detection	Individual port will be shutdown if loopback is detected
Port Backup	Support backup
Ethernet Ring	RAISECOM Ethernet ring: ≤ 50 ms recovery time Max 8 ethernet rings ,max 124 devices in each ring
Advanced Feature	
ACL	MAC-based IP-based ACL ACL map (L2~L4 byte) user customized ACL(offset range:22~62 bytes)
Filter	ACL hardware filter Egress port filter Indicated ingress / egress port filtering Hardware supports max 1024 data flow Switch access IP packet filter
QoS	Global CoS to queue mapping Global DSCP to queue mapping Global IP Precedence to queue mapping Port TRUST mode TRUST CoS priority TRUST DSCP priority TRUST IP precedence priority Global queue scheduling 8 queues per port SP WRR SP+WRR WRR weight range:1-15 Flow statistic Flow-based mirror Flow-based rate limit Flow-based redirection Flow-based VLAN swapping Flow-based rewriting of 802.1p CoS & internal priority Flow-based change DSCP,IP precedence Flow-based ACL in egress direction

Safety compliance	CE UL
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Compliance

MIB Management	802-1x-2004-MIB DISMAN-PING-MIB DOT3-OAM-MIB IEEE8021-CFM-MIB81 RFC1213 RFC1493 RFC1757 RFC1907 RFC2233 RFC2571 RFC2572 RFC2573N RFC2573P RFC2573T RFC2574 RFC2575 RFC2665 RFC2674P RFC4363Q TRACEROUTE RAISECOM-ACL-MIB RAISECOM-COMMON-MANAGEMENT-MIB RAISECOMDOT1XMIB RAISECOM-EXTEND-OAM-UPGRADE-MIB RAISECOM-EXTOAM-MIB RAISECOM-IPSOURCEGUARS-MIB RAISECOM-KEEPALIVE-MIB RAISECOM-OAM-MIB RAISECOM-OPTICAL-MONITOR-MIB RAISECOM-PPPOEAGENT-MIB RAISECOM-QOS-MIB RAISECOM-RCMP-MIB RAISECOM-RELAY-MIB RAISECOM-REMOTE-MANAGEMENT-LOCAL-MIB RAISECOM-REMOTE-MANAGEMENT-REMOTE-MIB RAISECOM-RNDP-MIB RAISECOM-RTDP-MIB
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Maintenance	Debug information output PING (Packet Internet Groper) Telnet Client / Trace route Port statistics Port dynamic statistic
Password Recovery MEF 9 & 14	Support Support
Management Feature	
System Management	CLI / ARP / Telnet / Console / SNMP / Web management 16 Layer 3 interfaces, Super VLAN, max 4094 VLAN SSH Version 2 server (muti-clients) RMON Group 1,2,3 & 9 Bridge MIB (RFC1493) RAISECOM NMS System log Hierarchical alarms Link alarm per port Keepalive report Fault pass through Module information management
Cluster Management	RAISECOM Neighbor Discovery Protocol (RNDP) RAISECOM Topology Discovery Protocol (RTDP) RAISECOM Cluster Management Protocol (RCMP) RAISECOM Cluster management
Auto Configuration	Auto configuration
Software Upgrade	Xmodem / FTP upgrade in BOOTROM FTP / TFTP
Scheduling	System task scheduling
Time Management	Timezone / Time modification DST / NTP System time synchronization by SNTP Client
DHCP	DHCP Snooping DHCP Client / DHCP Server DHCP Option82 / DHCP Relay
OAM	802.3ah OAM (Discovery, Link Performance, Remote loopback, Fault detection and Performance Stats per OAM standards) OAM ACTIVE / PASSIVE Mode OAM MIB Variable Get Function OAM Event Function Extended OAM
CFM	802.1ag, Y.1731 protocol, support 256 MEP, 256 MA Connectivity Check Loopback Linktrace
LLDP	Discovery Remote Base on Link Layer Get Remote Basic Information
SLA	Layer-2 / Layer-3 SLA
Error Tolerance & Redundancy	System fault report Fast recovery during serious error

RAISECOM-SCHEDULE-MIB
RAISECOM-SYSLOG-SERVICE-MIB
SWITCH-SYSTEM-MIB
RAISECOM-UPGRADE-MIB
RAISECOM-USER-MIB
RC802-1X-MIB
RCCFM
RCDOT1AG
RCQINQ
RCSLA
RCVLANGROUP
RMONMIB
SWITCH-AUTOCONFIG-MIB
SWITCH-DAI-MIB
SWITCH-DHCPCLIENT-MIB
SWITCH-DHCPOPTION-MIB
SWITCH-DHCPSPNOOPING-MIB
SWITCH-ERING-MIB
SWITCH-FILTER-MIB
SWITCH-IFEXTEND-MIB
SWITCH-IPDHCPSEVER-MIB
SWITCH-L3FILTER-MIB
SWITCH-LINKSTATETRACK-MIB
SWITCH-MACCONFIG-MIB
SWITCH-MSTP-MIB
SWITCH-MVR-MIB
SWITCH-NTP-MIB
SWITCH-PORTBACKUP-MIB
SWITCH-PORTMIRROR-MIB
SWITCH-PORTSTATISTIC-MIB
SWITCH-RATELIMIT-MIB
SWITCH-RSTP-MIB
SWITCH-SNMP-MIB
SWITCH-SYSTEM-MIB
SWITCH-TRUNK-MIB
SWITCH-VLANCFG-MIB

Ordering Information

Part Number	Description
ISCOM2828F-AC/D	Manageable intelligent layer-2 aggregation switch with 24 *100BASE-FX SFP, 2*COMBO, 2*1000BASE-X SFP, redundancy AC power supply
ISCOM2828F-DC/D	Manageable intelligent layer-2 aggregation switch with 24 *100BASE-FX SFP, 2*COMBO, 2*1000BASE-X SFP, redundancy DC power supply
ISCOM2828F-AC/S	Manageable intelligent layer-2 aggregation switch with 24 *100BASE-FX SFP, 2*COMBO, 2 *1000BASE-X SFP, single AC power supply
ISCOM2828F-DC/S	Manageable intelligent layer-2 aggregation switch with 24 *100BASE-FX SFP, 2*COMBO, 2*1000BASE-X SFP, single DC power supply

Standard	
	IEEE 802.1Q VLAN
	IEEE 802.3ad Link Aggregation
	IEEE 802.1ad QinQ
	IEEE 802.1D Spanning Tree Protocol
	IEEE 802.1w RSTP
	IEEE 802.1s MSTP
	IEEE 802.1x Security
	IEEE 802.1p CoS Prioritization
	IEEE 802.3x Flow Control
	IEEE 802.3ah OAM
	IEEE 802.1ag Connectivity Fault Management
	ITU Y.1731 Services OAM
	Static Routing
	IGMP v1v2v3 Multicast
	RMON I and II standards
	SNMPv1v2v3 and
	SNMPv3
	MEF9 MEF14