

# 24x10/100/1000TX or 24x1000SX(LX) 3-Slot Gigabit Ethernet Modular Chassis Managed Switch



## Benefits

<ul style="list-style-type: none"> <li>■ System Interface/Performance           <ul style="list-style-type: none"> <li>➢ Store-and-Forward Switching Architecture</li> <li>➢ Back-plane (Switching Fabric): 48Gbps</li> <li>➢ 6Mbits Packet Buffer</li> <li>➢ 16K MAC Address Table</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Security           <ul style="list-style-type: none"> <li>➢ Port Security: MAC address entries/filter</li> <li>➢ IP Security: IP address security management to prevent unauthorized intruder.</li> <li>➢ Login Security: IEEE802.1X/RADIUS</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ 3-slot Gigabit Module Hot-swappable           <ul style="list-style-type: none"> <li>➢ 8 x 10/100/1000T RJ45</li> <li>➢ 8 x 1000T Fiber</li> <li>➢ 8 x 1000T SFP</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Spanning Tree           <ul style="list-style-type: none"> <li>➢ IEEE802.1w Rapid Spanning Tree</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ VLAN           <ul style="list-style-type: none"> <li>➢ Port Based VLAN</li> <li>➢ 802.1q Tag VLAN</li> <li>➢ GVRP</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ IGMP           <ul style="list-style-type: none"> <li>➢ IGMP v1/v2</li> <li>➢ 256 multicast groups and IGMP query</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ CoS           <ul style="list-style-type: none"> <li>➢ Per port provides 8 priority queues</li> <li>➢ Strict and WRR priority rule</li> <li>➢ Port Base, Tag Base, IPv4 Type of service and IPv4 Different service</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Port Mirror: Monitor traffic in switched networks.           <ul style="list-style-type: none"> <li>➢ TX Packet only</li> <li>➢ RX Packet only</li> <li>➢ Both of TX and RX Packet</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ SNMP           <ul style="list-style-type: none"> <li>➢ SNMP v1/v2c</li> <li>➢ SNMP Trap</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ System Event Log           <ul style="list-style-type: none"> <li>➢ System Log Server/Client</li> <li>➢ SMTP e-mail Alert</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ Bandwidth Control           <ul style="list-style-type: none"> <li>➢ Ingress Packet Filter and Egress Rate Limit</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ LLDP           <ul style="list-style-type: none"> <li>➢ IEEE 802.1ab Link Layer Discovery Protocol</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ Port Trunk with LACP</li> </ul>	<ul style="list-style-type: none"> <li>■ Access Control List</li> </ul>

## Standard Compliance

IEEE Standard	IEEE 802.3 10BASE-T
	IEEE 802.3u 100BASE-TX
	IEEE 802.3z Gigabit fiber
	IEEE 802.3ab 1000Base-T
	IEEE 802.3x Flow control and Back pressure
	IEEE 802.3ad Port trunk with LACP
	IEEE 802.1w Rapid spanning tree
	IEEE 802.1p Class of service
	IEEE 802.1q VLAN Tagging
	IEEE 802.1x User authentication
	IEEE 802.1ab LLDP

## Hardware Specification

Switch Architecture	Back-plane (Switching Fabric):48Gbps
Connector	RS-232 console: 1 x DB-9 Female Gigabit copper module: 8 x RJ-45 MINI GBIC module: 8 x MINI GBIC (SFP) socket Gigabit Fiber module: 8 x SC for Gigabit SX or LX Gigabit copper + MINI GBIC module: 4 x RJ-45 + 4 x MINI GBIC
Packet Buffer	6Mbits
Mac Address	16K MAC address table
Flash ROM	8Mbytes
System memory	32Mbytes
Jumbo Frame	10 KB
Switch architecture	Store and forward
Protocol	CSMA/CD
LED	System Power Gigabit copper module: Link/Activity, Full duplex/collision Gigabit Fiber module: Link/Activity MINI GBIC module: Link/Activity Gigabit copper + MINI GBIC module: RJ-45 (Link/Activity, Full duplex/ collision), MINI GBIC (Link/Activity)
Power Supply	AC 100~240V 50/60Hz, Redundant Power: DC (12V~48V)
Power Consumption	35 Watts
Operating Humidity	5% to 95% (Non-condensing)
Operating Temperature	0°C to 60°C
Storage Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40°C to 70°C
Case Dimension	440mm(W) x 280mm(D) x 44mm(H)
Ventilation	2 FAN with fail detection
EMI	FCC Class A, CE
Safety	UL, cUL, CE/EN60950-1

## Software Feature

Management	SNMP v1/v2c, Telnet, RMON1, CLI and Web management.
SNMP MIB	RFC 2863 Interface Group MIB, RFC 1213 MIBII, RFC 1493 Bridge MIB, RFC 2674 VLAN MIB, RFC 1643 Ethernet Like MIB, RFC 1215 Trap MIB, RFC 1757 RMON MIB, Private MIB
SNMP Trap	Cold start/Warm start trap, Link down/Link up trap, Authentication fail trap,
Flow Control	IEEE802.3x Flow control: Flow control for 10/100/1000 full duplex, Back pressure for 10/100 half duplex
VLAN	Port based VLAN, up to 24 groups IEEE802.1Q Tag VLAN Static VLAN groups up to 4K entries and dynamic VLAN groups up to 2048, the VLAN ID can be assigned from 1 to 4094. GVRP
Port Trunk with LACP	IEEE802.3ad with LACP function. Up to 7 trunk groups with failover feature and the member up to 8 ports.
Spanning Tree	Support IEEE802.1w Rapid Spanning Tree

Class of Service	Per port 8 priority queues and support strict and WRR priority rule. Weight round ratio (WRR): 1:2:3:4:5:6:7:8 Weight round ratio (WRR):1:1:2:2:3:3:4:4 Weight round ratio (WRR):1:1:2:2:4:4:8:8
Quality of Service	Port based, Tag based, IPv4 Type of service, IPv4 Different service.
IGMP	IGMP snooping v1,v2 256 multicast groups and IGMP query
Port Security	128 entries of MAC address for static MAC and another 128 for MAC filter
Port Mirror	3 mirroring types: "RX, TX and Both packet".
Bandwidth Control	Per port support ingress rate limiting and egress rate shaping control. The rate limiting and rate shaping can be setting 64kbps by each level.(64kbps, 128kbps,256kbps...etc).
IP Security	IP address security to prevent unauthorized intruder.
Login Security	Support IEEE802.1x User-Authentication and can report to RADIUS server. <ul style="list-style-type: none"> <li>➤ Reject</li> <li>➤ Accept</li> <li>➤ Authorize</li> <li>➤ Disable</li> </ul>
Access Control List	The system provides control list on Source IP & Destination IP
DHCP	DHCP client and DHCP Server.
DNS	Provide DNS client feature and support Primary and Secondary DNS server.
System log	1000 records (Maximum) Provide remote storage ability and also can view the log by Web/Telnet/SNMP interface.
SNTP	Support RFC 2030 SNTP client.
SMTP	System supports 5 mail accounts and 2 Mail servers for Primary and Secondary. The SMTP will auto send event message to supervisor whom is pre-defined in the SMTP system through the pre-defined mail server.
LLDP	Support IEEE 802.1ab Link Layer Discovery Protocol

### Order Information

Order Number	Product Family	Description
26 1000 501	DragonLine	3 Slots Modular Gigabit Chassis Managed Switch 19" 1U
26 1000 510	DragonLine	MIC 8x10/100/1000T
26 1000 511	DragonLine	MIC 8x1000SX (SC/MM/550m)
26 1000 512	DragonLine	MIC 8x1000LX (SC/SM/10km)
26 1000 513	DragonLine	MIC 8xMini-GBIC
26 1000 514	DragonLine	MIC 4x10/100/1000T + 4 Mini-GBIC module