

# 6x10/100TX + 2x100FX Industrial Ethernet Switch (Managed / Ring)



## **Benefits**

■ System Interface/Performance	■ Case/Installation  > IP-30 Protection  > DIN Rail and Wall Mount Design  > Metal housing
<ul><li>■ Power Supply</li><li>➤ Wide-range Redundant Power Design</li><li>➤ Power Polarity Reverse Protect</li></ul>	■ Spanning Tree  > Support IEEE802.1d Spanning Tree  > Support IEEE802.1w Rapid Spanning Tree
<ul><li>VLAN</li><li>➢ Port Based VLAN</li><li>➢ Support 802.1 Q Tag VLAN</li></ul>	<ul> <li>Ring</li> <li>Ring, Dual Homing, and Couple Ring Topology</li> <li>Provide redundant backup feature and the recovery time below 300ms</li> </ul>
<ul> <li>QoS (Quality of Service)</li> <li>Support IEEE 802.1p Class of Service,</li> <li>Per port provides 4 priority queues</li> <li>Port Base, Tag Base and Type of Service Priority</li> </ul>	<ul> <li>■ Bandwidth Control</li> <li>➤ Ingress Packet Filter and Egress Rate Limit</li> <li>➤ Broadcast/Multicast Packet Filter Control</li> </ul>
<ul> <li>■ Port Mirror: Monitor traffic in switched networks</li> <li>➤ TX Packet only</li> <li>➤ Both of TX and RX Packet</li> </ul>	■ System Event Log
■ IP Security : IP address security management to prevent unauthorized intruder	■ SNMP Trap
■ IGMP with Query mode for Multi Media Application	■ TFTP Firmware Update and System Configure Restore and Backup

## **Standard Compliance**

IEEE Standard	IEEE 802.3 10Base-T Ethernet	
	IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet	
	IEEE802.3x Flow Control and Back Pressure	
	IEEE802.1d Spanning Tree/ IEEE802.1w Rapid Spanning Tree	
	IEEE802.1p Class of Service	
	IFFF802 1O VI AN Tag	

## **Hardware Specification**

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Switch Architecture	Back-plane (Switching Fabric): 1.6Gbps Packet throughput ability (Full-Duplex): 1.19Mpps @64bytes		
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port		
Memory Buffer	1Mbits		
MAC Address	2K MAC address table		
Flash ROM	512Kbytes		
DRAM	8Mbytes		
Connector	10/100TX: 6 x RJ-45 with auto MDI/MDI-X function 100M fiber: 2 x SC type connector for Singlemode or Multimode type fiber cable		
Network Cable 10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable			
	EIA/TIA-568 100-ohm (100m)		
	100Base-TX: 2-pair UTP/STP Cat. 5 cable		
	EIA/TIA-568 100-ohm (100m)		
Optical Cable	SC (Multimode): 50/125µm~62.5/125µm		
	SC (Singlemode): 9/125µm~10/125µm		
	Available distance: 2km (Multimode) / 30km (Singlemode)		
	Wavelength: 1310nm (Multimode/Singlemode)		
Protocol	CSMA/CD		
	Per port: Link/Activity (Green), Full duplex/Collision (Yellow)		
LED	Per unit: Power (Green), Power 1 (Green), Power 2 (Green), Fault (Yellow), Master (Green)		
Power Supply	DC 12 ~48V		
	Redundant power with polarity reverse protect function and connective removable terminal		
Davis Caravination	block for master and slave power		
Power Consumption	6 Watt		
Operating Humidity	5%~95% (Non-condensing) Standard 0°C ~ 60°C		
Operating Temperature			
Storage Temperature	Wide Operating Temperature -40°C~+75°C -40°C~85°C		
Case Dimension			
Installation	IP-30 Case protection, 54 mm (W) x 105mm (D) x 135 mm (H) Provide DIN rail kit and wall mount ear for wall mount or DIN-type cabinet install		
EMI	FCC Class A, CE EN6100-4-2, CE EN6100-4-3, CE EN-6100-4-4,		
	CE EN6100-4-5, CE EN6100-4-6		
Safety	UL, cUL, CE/EN60950		
Stability Testing	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)		

## Software Feature

Management	SNMP v1 v2c, Web interface management	
SNMP MIB	RFC 1213 MIBII, RFC 1493 Bridge MIB, RMON RFC 1757, RFC 2674 VLAN MIB, RFC 1643 Ethernet like MIB, RFC1215 Trap MIB, IGMP MIB	
	Private MIB for switch information, ring, port alarm, TFTP firmware upgrade, reset, port mirror, IP security	
VLAN	Support Port based VLAN and IEEE802.1Q Tag VLAN	
	Both of port based and Tag based VLAN group up to 64 VLANs	
Spanning Tree	Support IEEE802.1d Spanning Tree and IEEE802.1w Rapid Spanning Tree	
Ring	Support Ring, Dual Homing, and Couple Ring	
	Provide redundant backup feature and the recovery time below 300ms	
Quality of Service	The quality of service determined by port, Tag and IPv4 Type of service	
Class of Service	Support IEEE802.1p class of service, per port provides 4 priority queues	
Port Mirror	Support TX packet only or both of TX and RX packet	
IGMP	Support IGMP v1 and Query mode. Up to 256 groups	
IP Security	Support 10 IP addresses that have permission to access the switch management	
Bandwidth Control	Support ingress packet filter and egress packet limit	
	The egress rate control supports all of packet type and the limit rates are 128Kbps, 256Kbps,	
	512Kbps, 1Mbps, 2Mbps, 4Mbps, and 8Mbps	
	Ingress filter packet type combination rules are Broadcast/Multicast/Unknown Unicast packet,	
	Broadcast/Multicast packet, Broadcast packet only and all of packet. The packet filter rate can	
	be set follow as:1Mbps, 2Mbps, 4Mbps, 8Mbps, 16Mbps, 32Mbps, 64Mbps	



Flow Control	Support Flow Control for Full-duplex and Back Pressure for Half-duplex		
System Log	Support System log record and remote system log server		
SMTP	Support SMTP Server and 4 e-mail accounts for receiving event alert		
Relay Alarm	Provides one relay output for port breakdown, power fail and provide DIP switch to mask link down port		
	Alarm Relay current carry ability: 1A @ DC24V		
SNMP Trap	Up to 3 Trap stations		
	Cold start, Port link up, Port link down, Authentication Failure, Private Trap for power status,		
	Port Alarm configuration, Fault alarm, Ring topology change		
DHCP	Provide DHCP client function to obtain IP address from DHCP server		
SNTP	Support SNTP to synchronize system clock in Internet		
Firmware Update	Support TFTP firmware update, TFTP backup and restore		
Configuration upload and download	Support text format configuration file for system quick installation		

## **Order Information**

Part Number	Product Family	Description
26 670 302	DragonLine	6x10/100TX+2xFX /MM
		Industrial Ethernet Switch
	DragonLine	6x10/100TX+2xFX /MM
26 670 302E	2.090.120	Industrial Ethernet Switch
		Wide Operating Temperature (-40°C~+75°C)
26 670 352	DragonLine	6x10/100TX+2xFX /SM
	2.09020	Industrial Ethernet Switch
26 670 352E	DragonLine	6x10/100TX+2xFX /SM
	Bragonzino	Industrial Ethernet Switch
		Wide Operating Temperature (-40°C~+75°C)