

BC3248FM6T

**48-Ports Gigabit L3 Managed Fiber Switch with
6-Ports 10G SFP+ Uplink**

Datasheet



Key Features:

Ports: Provide 48*1.25Gbps SFP with 6*10Gbps SFP+

Wide Application: Designed for Railway, traffic etc some Industrial environment

Surge protection: Protect the device from lighting surges and others electrical hazards

Managed: Support remote web managed,VLAN and storm control and IPV6 management etc.
Layer3 Features, Static route, RIP, OSPF etc.

Working Temperature: -20 to 55 degrees operating temperature

Installation: Rack mount with easy installation

Layer 3 10GE Routing Switch

The BC3248FM6T is L3 10G Switches based on new generation of high-performance hardware and our Operating System Platform (TOS). It provides a large capacity, high-density GE interfaces, and 10GE uplink interfaces. With extensive service features and IPv6 forwarding capabilities, the BC3248FM6T is applicable to various scenarios. For example, it can be used as an access or aggregation switch on campus networks or an access switch in data centers. The BC3248FM6T integrates many advanced technologies in terms of reliability, security, and energy saving. It employs simple and convenient means of installation and maintenance to reduce customers' OAM cost and help enterprise customers build a next-generation IT network.

Comprehensive QoS policies and security mechanisms

The BC3248FM6T supports strict ARP learning, which prevents ARP spoofing attacks that exhaust ARP entries. The BC3248FM6T also provides IP source guard to prevent DoS attacks caused by MAC address spoofing, IP address spoofing, and MAC/IP spoofing.

The BC3248FM6T supports DHCP snooping, which generates user binding entries based on users' access interfaces, MAC addresses, IP addresses, IP address leases, and VLAN IDs. DHCP snooping discards invalid packets that do not match any binding entries, such as ARP spoofing packets and IP spoofing packets. This prevents hackers from using ARP packets to initiate man-in-the-middle attacks on campus networks. The interface connected to a DHCP server can be configured as a trusted interface to protect the system against bogus DHCP server attacks.

Technical Datasheet

Technical Specifications	BC3248FM6T
1G SFP ports	48
10G SFP+ ports	6
Console Port (For config)	Yes
Performance Specification	
CPU	Dual-Core 2GHz MIPS InterActive CPU subsystem
Packet buffer memory (Dynamically shared across only used ports)	24MB
Forwarding modes	Store-and-forward
Bandwidth	720 Gbps
Priority queues	8
MAC address database size (48-bit MAC addresses)	32K
Multicast groups	1K
Number of IPv4 static routes	256
Number of IPv6 static routes	256
Number of VLANs	4094
Number of VLANs(Open QinQ)	16,760,836(4094*4094)
Number of ARP cache entries	1024 ARP
Number of DHCP snooping bindings	512
Access Control Lists (ACLs)	100 shared for MAC, IP and IPv6 ACLs (ingress)
Packet forwarding rate (64 byte packet size) (Mpps)	232.64
Jumbo frame support (bytes)	Up to 12K packet size
Mean Time Between Failures (MTBF) @ 25°C	162,121 hours
1G Fiber Latency (64-byte; 1518-byte; 9216-byte frames)	2.980µs; 3.101µs; 3.179µs
10G Fiber Latency (64-byte; 1518-byte; 9216-byte frames)	2.330µs; 2.561µs; 2.7129µs

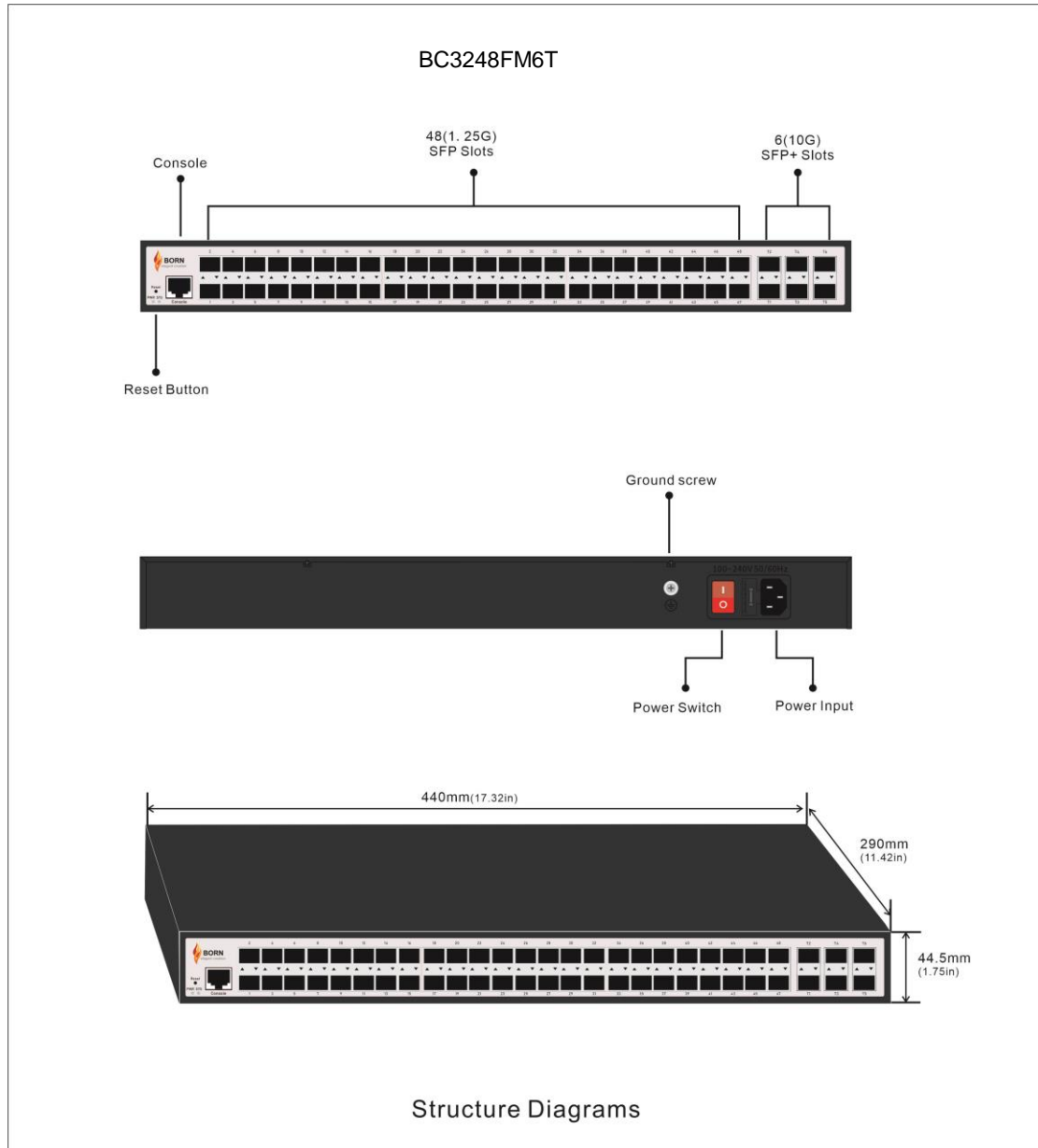
L2 Services - VLANs	BC3248FM6T
IEEE 802.1Q VLAN tagging	Yes
QinQ VLAN tagging	Yes
IP-based VLANs	Yes
MAC-based VLANs	Yes
Protocol-based VLAN	Yes
Voice VLAN	Yes
VLAN mapping	Yes
L2 Services - Availability	
Broadcast, multicast, unknown unicast storm control	Yes
IEEE 802.3ad - LAGs (LACP)	Yes
IEEE 802.3x (full duplex and flow control)	Yes
IEEE 802.1D Spanning Tree Protocol	Yes
IEEE 802.1w Rapid Spanning Tree Protocol	Yes
IEEE 802.1s Multiple Spanning Tree Protocol	Yes
Layer 2 DHCP Relay	Yes
L2 Services - Multicast Filtering	
IGMP snooping (v1, v2 and v3)	Yes
MLD snooping support (v1 and v2)	Yes
IGMP snooping querier (v2)	Yes
MLD snooping querier (v1)	Yes
Multicast VLAN Registration (MVR)	Yes
L3 Services - DHCP	
DHCP client	Yes
DHCP snooping	Yes
DHCP Server	Yes
L3 Services - Routing	
IPv4 static routing	256
IPv6 static routing	256

Link Aggregation		BC3248FM6T
IEEE 802.3ad - LAGs (LACP)		Yes
Manual LAG		Yes
# of LAGs / # of members in each LAG		26 LAGs with max 8 members in each LAG
Network Monitoring and Discovery Services		
802.1ab LLDP		Yes
SNMP		v1, v2, V3
RMON group 1,2,3,9		Yes
Network Security		
IEEE 802.1x		Yes
RADIUS accounting		Yes
Access Control Lists (ACLs)		Yes
IP-based ACLs (IPv4 and IPv6)		L2 / L3 / L4
MAC-based ACLs		Yes
TCP/UDP-based ACLs		Yes
Control MAC # static entries		48
Port-based security by locked MAC addresses		Yes
Dynamic ARP inspection		Yes
Quality of Service (QoS)		
Port-based rate limiting		Yes ingress and egress
Port-based QoS		Yes
Support for IPv6 fields		Yes
DiffServ QoS		Yes ingress
IEEE 802.1p COS		Yes
Destination MAC and IP		Yes
IPv4 and v6 DSCP		Yes
TCP/UDP-based		Yes
Weighted Round Robin (WRR)		Yes
Strict priority queue technology		Yes

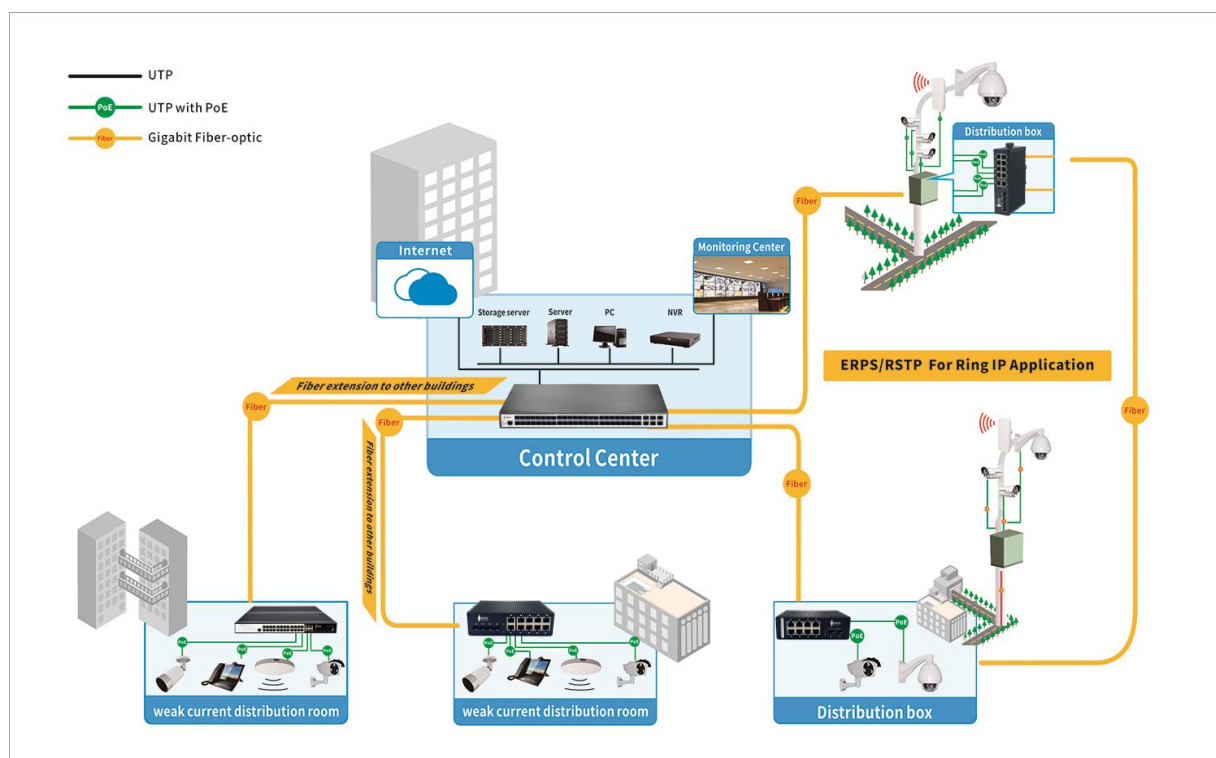
IEEE Network Protocols		BC3248FM6T
<ul style="list-style-type: none"> • IEEE 802.3 Ethernet • IEEE 802.3u 100BASE-T • IEEE 802.3ab 1000BASE-T • IEEE 802.3az Energy Efficient Ethernet (EEE) • IEEE 802.3ad Trunking (LACP) • IEEE 802.3z 1000BASE-SX/LX • IEEE 802.3ae 10GBASE-SX/LX • IEEE 802.3x Full-Duplex Flow Control 		<ul style="list-style-type: none"> • IEEE 802.1Q VLAN Tagging • IEEE 802.1AB LLDP with ANSI/TIA-1057 (LLDP-MED) • IEEE 802.1p Class of Service • IEEE 802.1D Spanning Tree (STP) • IEEE 802.1s Multiple Spanning Tree (MSTP) • IEEE 802.1w Rapid Spanning Tree (RSTP) • IEEE 802.1x RADIUS Network Access Control
Management, Monitoring & Troubleshooting		
Password management		Yes
Admin access control via RADIUS and TACACS+		Yes
IPv6 management		Yes
SNMP v1/v2c/V3		Yes
RMON group 1,2,3,9		Yes
Port mirroring		Yes ingress and egress
Many-to-one port mirroring		52
Cable test utility		Yes
TLS/HTTPS Web-based access (version)		Yes (v1.2)
File transfers (uploads, downloads)		TFTP / HTTP
HTTP upload/download (firmware)		Yes
Syslog (RFC 3164)		Yes
USB port for firmware and config upload/download		Yes
LEDs		Yes
Per port		Link, Activity;
Per device		Power, system
Physical Specifications		Yes
Dimensions		440 x 290 x 46 mm (17.32x 11.42 x 1.81 in)
Weight		<6kg (13.23 lb)
Power Consumption (when all ports used, line-rate traffic)		52W
Idle power consumption (all ports link-down standby) (Watts)		24W
Energy Efficient Ethernet (EEE) IEEE 802.3az		Yes (deactivated by default)
Fan		2

Environmental Specifications		BC3248FM6T
Operating		
Operating Temperature		-20° to 55°C
Humidity		90% maximum relative humidity (RH), non-condensing
Altitude		10,000 ft (3,000 m) maximum
Storage		
Storage Temperature		-30° to 75°C
Humidity (relative)		90% maximum relative humidity, non-condensing
Altitude		10,000 ft (3,000 m) maximum
Electromagnetic Emissions and Immunity		
Certifications		CE mark, commercial
		FCC Part 15 Class A, VCCI Class A
		Class A EN 55022 (CISPR 22) Class A
		Class A C-Tick
		EN 55024
		CCC
		47 CFR FCC Part 15, SubpartB, Class A ICES-003: 2016 Issue 6, Class A
		ANSI C63.4:2014
		IEC 60950-1:2005 (ed.2)+A1:2009+A2:2013 AN/NZS CISPR 22:2009+A1:2010
		CLASS A
Safety		
Certifications		CB mark, commercial
		CSA certified (CSA 22.2 #950)
		EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 IEC 60950-1:2005 (ed.2)+A1:2009+A2:2013
		AN/NZS 60950.1:2015
		CCC (China Compulsory Certificate)
Warranty and Support		
Hardware Limited Warranty		Limited Lifetime*
Technical Support via Phone and Email*		Limited Lifetime*
Limited Lifetime* 24x7 Online Chat		Limited Lifetime*
Technical Support		Limited Lifetime*
Package Contents		
All models		Smart industrial fiber switch
		AC Power cord with C13 connector (localized to region of sale)
		Brackets and screws for rack mounting
		Rubber protection caps, which are already installed in the SFP sockets
		Installation guide

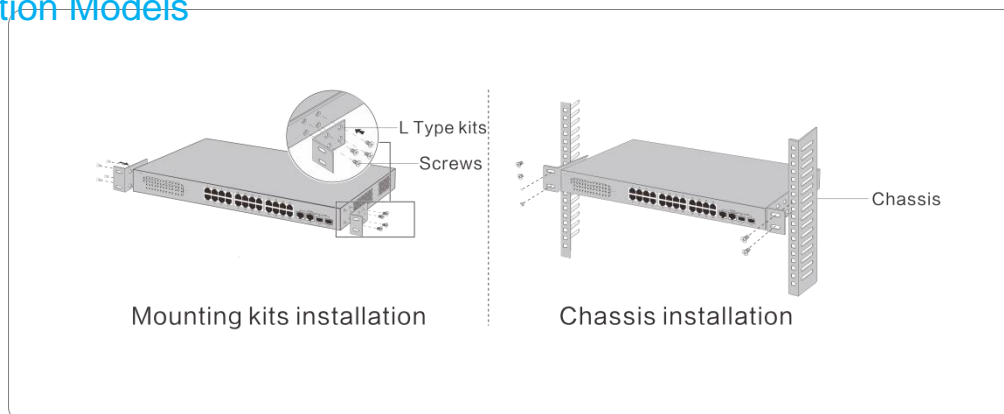
Mechanical Drawing



Applications



Installation Models



Ordering Information

BC3248FM6T

48 Ports Gigabit Managed Fiber switch With 6 Ports 10G SFP+, Rack mount Installation,



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