



The Comnet CNG6F2T4MPB is an industrial grade, Managed Ethernet Layer 2 Switch. It provides Type4, IEEE 802.3bt PoE to four 10/100/1000BASE-T(X) ports. Two 1G SFP* ports are also included. Up to 360 watts of PoE power is available for distribution across all 4 TX ports. All SFP ports should utilize Comnet SFPs for fiber, connector type and distance. The CNG6F2T4MPB supports Layer 2+ full management software features. These management features provide PoE Control, Network Control, Management, Monitor and a host of Security features.

Software Features

- STP/RSTP/MSTP (IEEE 802.1D/W/S)
- Ethernet Ring Protection Switching (ERPS) (G.8032)
- Quality of Service (802.1p) for real-time traffic
- VLAN (802.1Q) with VLAN tagging and GVRP supported
- IGMP v2/v3 (IGMP snooping support) and MLD v1/v2 for filtering multicast traffic
- Supports bandwidth management
- Supports application-based QoS management
- Port configuration, status, statistics, monitoring, security via web interface
- DHCP Client/Server, DHCP Snooping, DHCP Relay
- Custom User Access Rights
- Link Aggregation
- Supports Loop Protection function
- Multicast VLAN Registration (MVR)
- Supports IP Multicast Profile (IPMC)
- Link Layer Discovery Protocol (LLDP)

Key Features

- 2 x 1G FX SFP Port
- 4 x 10/100/1000Base-TX RJ45 Port
 - ▶ IEEE802.3bt compliant 90W Type 4 PoE
 - ▶ 360W PoE budget across full operational temperature range
- Redundant Power Supply Inputs
- Supports Static Routing
- Supports IPV6 internet protocol version
- Provided HTTPS/SSH protocol enhances network security
- Supports Device Binding security function
- Supports SNMP v1/v2c/v3 & RMON & 802.1Q VLAN Network Management
- Supports ACL, 802.1x User Authentication for security
- Supports 10K Byte Jumbo Frame Web-based, Telnet and Console (CLI) configuration
- 2 x dry contacts for Digital Input
- Alarm relay output (1A @ 24VDC)
- Limited Lifetime Warranty

Specifications

CONNECTORS

10/100/1000BASE-TX PORTS	4 × RJ-45
1000 BASE-X PORT	2 × SFP*
CONSOLE PORT	1x RJ45 USB TYPE C CONNECTOR (115200BPS, 8, N, 1)
USB PORT	1 x USB Type C
POWER	1 × 6-PIN TERMINAL BLOCK (4 DEDICATED)
DIP SWITCH	Primary/Redundant Power, Alarm Setting
DIGITAL INPUTS	2 Dry Contacts (Terminal Block)
ALARM RELAY	1 Relay Output (1A @ 24VDC) (Terminal Block)

SWITCH PROPERTIES

SWITCHING LATENCY	3.3 μS/64bytes
SWITCHING BANDWIDTH	12 GBPS
DRAM	DDR3 512 MB
FLASH	256MB
VLANS	802.1Q VLAN, Port-Based VLAN, GARP/GVRP, IP-Subnet VLAN, Protocol-Based VLAN, VLAN Translation, MAC-Based VLAN, QinQ
MAX. AVAILABLE VLANS	4096
IGMP MULTICAST GROUPS	1028
PORT RATE LIMITING	USER DEFINED
PROCESSING	STORE-AND-FORWARD
PRIORITY QUEUES	Yes (8)
NETWORK REDUNDANCY	STP, RSTP, MSTP, ERPS, Dual Homing, LACP
MAC TABLE	16K MAC ADDRESSES
JUMBO FRAME	UP TO 10Kbytes
STATIC ROUTING	Yes

POWER

INPUT POWER	REDUNDANT 48-57 VDC
POWER CONSUMPTION	<20 W MAX (NO POE) 380W MAX (W/ TYPE 4 .BT POE)
OVERLOAD CURRENT PROTECTION	PRESENT

ENVIRONMENTAL

STORAGE TEMPERATURE	-40 TO +85° C
OPERATING TEMPERATURE	-40 TO +75° C
OPERATING HUMIDITY	5% TO 95% NON-CONDENSING
MTBF	>100,000 HOURS

MECHANICAL	
INDICATING LEDS	PWR, RPS, ALM, POST, SFP, PoE, 1000M, LNK/ACT GREEN: 802.3BT POE POWER IS DELIVERED AMBER: 802.3AT/AF POE POWER IS DELIVERED OFF: NO INCOMING OR OUTGOING PoE POWER
SIZE (H × W × D)	6.35 x 2.00 x 4.72 IN (16.2 x 5.0 x 12 CM)
INSTALLATION	DIN-RAIL/Wall
WEIGHT	2.14 LB / 0.97 KG

SECURITY FEATURES
TRAFFIC MONITOR
PRIORITY QUEUE
ACL
VLAN (802.1Q) TO SEGREGATE AND SECURE NETWORK TRAFFIC
RADIUS CENTRALIZED PASSWORD MANAGEMENT
SNMPV3 ENCRYPTED AUTHENTICATION AND ACCESS SECURITY
HTTPS / SSH ENHANCE NETWORK SECURITY
SWITCH/PORT BASED, NAS, ACL, ARP INSPECTION AND IP SOURCE GUARD
AAA RADIUS SERVER AUTHENTICATION
TACACS+
SNTP

ETHERNET STANDARDS
IEEE 802.3 FOR 10BASE-T
IEEE 802.3U FOR 100BASE-TX
IEEE 802.3AB FOR 1000BASE-T
IEEE 802.3Z FOR 1000BASE-SX/LX
IEEE 802.3 FOR NWAY AUTO-NEGOTIATION
IEEE 802.3X FOR FLOW CONTROL
IEEE 802.3AD FOR LACP (LINK AGGREGATION CONTROL PROTOCOL)
IEEE 802.3BT FOR POWER SOURCING EQUIPMENT (PSE) AND POE UP TO 90 WATTS PER PORT (4-PAIRS TYPE 3/TYPE4)
IEEE 802.3AT FOR POWER SOURCING EQUIPMENT (PSE) AND POE UP TO 30 WATTS PER PORT
IEEE 802.3AF FOR POWER SOURCING EQUIPMENT (PSE) AND POE UP TO 15 WATTS PER PORT
IEEE 802.3AZ FOR ENERGY EFFICIENT ETHERNET
IEEE 802.1AB FOR LLDP (LINK LAYER DISCOVERY PROTOCOL)
IEEE 802.1AD FOR QinQ
IEEE 802.1D FOR STP (SPANNING TREE PROTOCOL)

ETHERNET STANDARDS (CONTINUED)	
IEEE 802.1P FOR COS (CLASS OF SERVICE, PRIORITY PROTOCOLS)	
IEEE 802.1Q FOR VLAN TAGGING	
IEEE 802.1S FOR MSTP (MULTIPLE SPANNING TREE PROTOCOL)	
IEEE 802.1W FOR RSTP (RAPID SPANNING TREE PROTOCOL)	
IEEE 802.1X FOR PORT AUTHENTICATION	
IEEE 1588v2 FOR PTP	

REGULATORY COMPLIANCE	
EMI	FCC PART 15 SUBPART B CLASS A EN55011:2016 CLASS A CISPR 32 (EN55032: CLASS A) EN61000-6-4
EMS	EN 55035 EN 61000-6-2 EN 61000-4-2 (ESD) EN 61000-4-3 (RS) EN 61000-4-4 (BURST) EN 61000-4-5 (SURGE) EN 61000-4-6 (CS) EN 61000-4-8 (PFMF)
SHOCK	IEC60068-2-27
FREE FALL	IEC60068-2-31
VIBRATION	IEC60068-2-6

Ordering Information	
Part Number	CNG6F2T4MPB

*SFP MODULE(S) - COMNET SFP MODULES RECOMMENDED. SFP'S SOLD SEPARATELY.
(BASED ON REQUIREMENTS; CONTACT TECHNICAL SUPPORT FOR ASSISTANCE)
48-57 VDC POWER SUPPLY - SOLD SEPARATELY

