

## TOM1000 Series Transportation Layer 2 DIN-Rail Gigabit Industrial Switches



The TOM1000 Series Transportation layer 2 DIN-Rail Gigabit Industrial Switches at most can support 4 100/1000BaseX SFP slots + 8 10/100/1000BaseT ports or 4 100/1000BaseX SFP slots + 8 PoE 10/100/1000BaseT ports, which are specially designed for harsh industrial environments, providing economic solutions for industrial Ethernet connections. The working temperature of these switches is  $-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$ .

TOM1000 Series Transportation Layer 2 DIN-Rail Gigabit Industrial Switches use dual 9.6~60VDC & 18~30VAC redundancy inputs, and PoE models use dual 48~54VDC redundancy inputs, DIN rail mounted. These switches adopt rugged aluminum alloy housing, and passed high level tests of EMI/EMC. All the models have gone through the strict aging test, meeting the requirements of transportation industry.

### Features and Benefits

- Up to 56Gbps backplane bandwidth
- Wide and varied power supply range
- Non-rust aluminum alloy and torx screws
- Support network management
- All ports support line speed forwarding and automatic turnover, supporting long distance transmission
- Support uploading and downloading configuring files
- PoE models support IEEE 802.3af/at compliant PoE
- Each PoE port support IEEE 802.1af and 802.1at
- Lightning protection: power supply port  $\pm 4\text{KV}$ , RJ45 port  $\pm 4\text{KV}$
- Small and easy to install, plug and play without configuration
- Fanless design, wide working temperature and quiet operation
- MTBF  $\geq 300,000$  hours

## TOM1000 Series Transportation Layer 2 DIN-Rail Gigabit Industrial Switches

### Technical Specifications

- IEEE 802.3 CSMA/CD method and physical Layer specifications
- IEEE 802.1p Priority Queuing
- IEEE 802.1q VLAN tagging
- IEEE 802.1d Spanning Tree Algorithm
- IEEE 802.1w Rapid Spanning Tree
- IEEE 802.1s Multiple Spanning Tree
- IEEE 802.3ac VLAN Tagging
- IEEE 802.1x Authentication
- IEEE 802.3ad Link Aggregation
- IEEE 802.3af/at PoE
- IEEE 802.3x Flow Control
- IEEE 802.3 Ethernet
- IEEE 802.3u Fast Ethernet
- IEEE 802.3z Gigabit Ethernet
- IEEE 802 Networks
- RFC 768 UDP
- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 826 ARP
- RFC 854 Telnet Client & Server
- RFC 862 Echo Protocol
- RFC 863 Discard Protocol
- RFC 1027 Using ARP to implement Transparent Subnet Gateways
- RFC 1059, 1119 NTPv1/2
- RFC 1112 IGMP
- RFC 1191 Path MTU Discovery
- RFC 1542 Bootstrap Extensions & DHCP
- RFC 1851 The ESP Triple DES Transform
- RFC 1866 HTML
- RFC 1994 PPP Challenge Handshake Authentication Protocol (CHAP)
- RFC 2068 HTTP
- RFC 213 DHCP Server
- RFC 2138 RADIUS
- RFC 2139 RADIUS Accounting
- RFC 2236 IGMPv2
- RFC 2474 DiffServ Precedence
- RFC 2475 DiffServ Core and Edge Router Functions
- RFC 2597 DiffServ Assured Forwarding
- RFC 2598 DiffServ Expedited Forwarding
- RFC 2644 Directed Broadcasts
- RFC 2865 Remote Authentication Dial In User Service (RADIUS)
- RFC 3046 DHCP Relay Agent Information Option
- RFC 3222 Forwarding Information Base
- GMRP GARP
- GVRP GARP
- SSH2 Secure Shell 2
- IGMP snooping
- SNMPv3



## TOM1000 Series Transportation Layer 2 DIN-Rail Gigabit Industrial Switches

### Switch Properties

Backplane Bandwidth:	20Gbps (6/10 ports model) 56Gbps (12 ports model)
Processing Type:	Store-and-Forward
MAC Table Size:	8K
RAM:	4.1 MB
Exchange Rate:	148,800 pps/100M ports; 1,488,000 pps/1000M ports

### Software Functions

Management Mode:	Browser, Console, Telnet, SSH 2.0, Syslog, NTP/SNTP, STD-62 SNMPv3, SNMPv1, SNMPv2, FTP/TFTP
Diagnosis Mode:	Indicator light, journal file, port mirroring, TRAP
Redundancy:	RSTP, STP, MSTP, MRD-Ring <sup>®</sup> , port trunking
Time Synchronization:	NTP
Others:	4K VLANs, IPv4/IPv6 multicast, storm control, support Jumbo Frame

### Power Parameters

Connection:	1 removable 5-contact terminal block
Input Voltage:	9.6 ~ 60VDC & 18 ~ 30VAC, dual inputs 48 ~ 54VDC, dual inputs (PoE models)
Overload Current Protection:	Supported
Reverse Polarity Protection:	Supported

### Physical Characteristics

Installation:	DIN-rail mounting
Housing:	Aluminum alloy housing
IP Rating:	IP40; IP30 (PoE model);
Dimensions (W x H x D):	43.5mm x 110mm x 105mm (6 ports model) 52mm x 140mm x 110mm (10/12 ports model)
Weight:	<0.6kg



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### Environment Limits

Storage Temperature:	-40°C~ 85°C
Operating Temperature:	-40°C~ 75°C
Ambient Relative Humidity:	5% ~ 95% (non-condensing)

### Mechanical Characteristics

Vibration:	IEC 60068-2-6
Shock:	IEC 60068-2-27
Freefall:	IEC 60068-2-31
Circuit Board:	Approved by IPC

### Electromagnetic Characteristics

EMI:	FCC 47 CFR Part 15 Class A EN55032 Class A EN55035 Class A
EMS:	IEC (EN )61000-4-2, Class 4 IEC (EN )61000-4-3, Class 3 IEC (EN )61000-4-4, Class 4 IEC (EN )61000-4-5, Class 4 IEC (EN )61000-4-6, Class 3 IEC (EN )61000-4-8, Class 5

### Industrial Certification and Testing

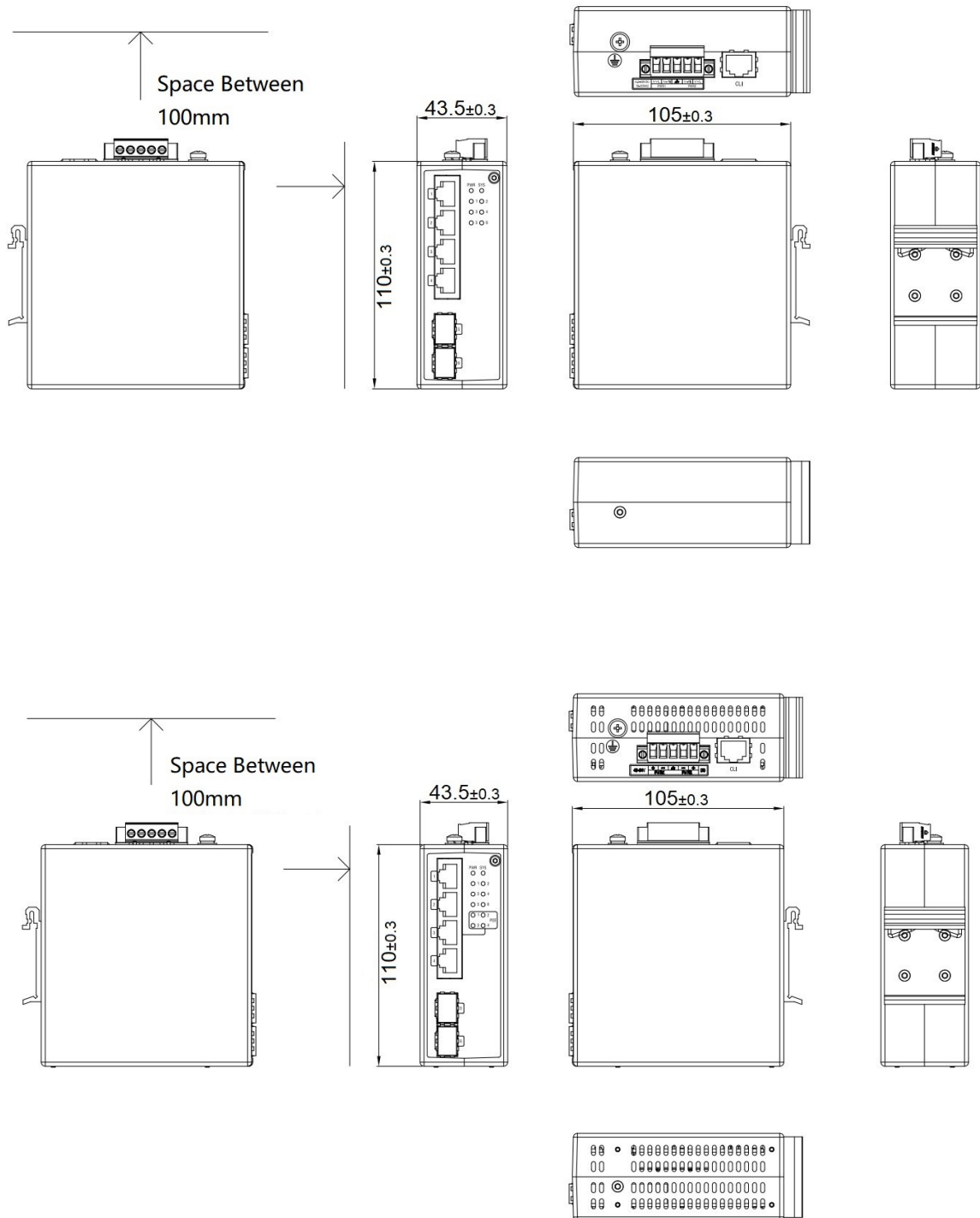
Product Safety:	EN62368-1
EMC:	EN 55032 EN 55035 EN IEC61000-3-2 EN 61000-3-3 FCC Part 15 Subpart B Class A
Others:	Test Report from Ministry of Public Security, Network Access License, RoHS

## TOM1000 Series Transportation Layer 2 DIN-Rail Gigabit Industrial Switches

### Dimensions

Unit: mm

6 Ports Model:

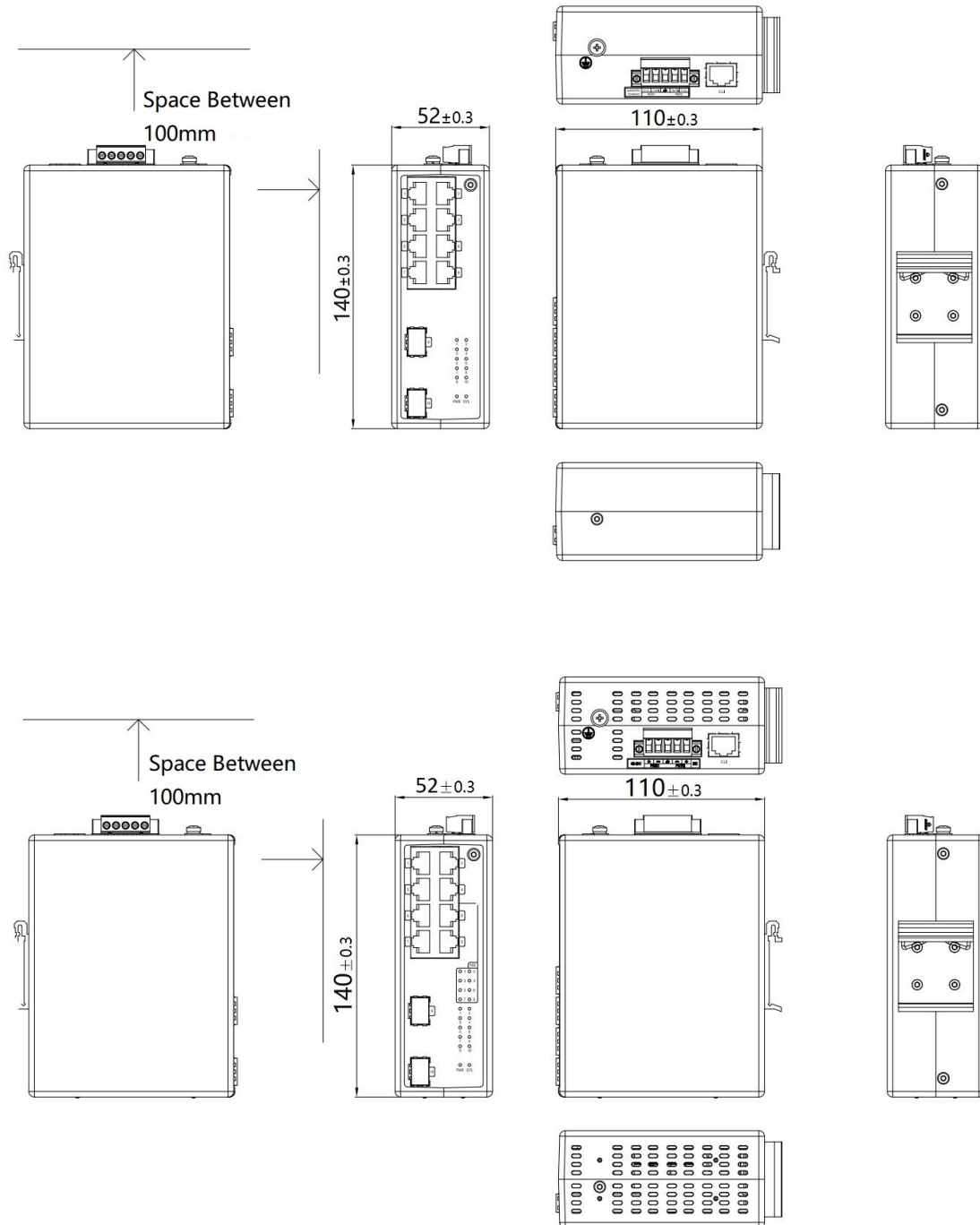


## TOM1000 Series Transportation Layer 2 DIN-Rail Gigabit Industrial Switches

### Dimensions

Unit: mm

10 Ports Model:

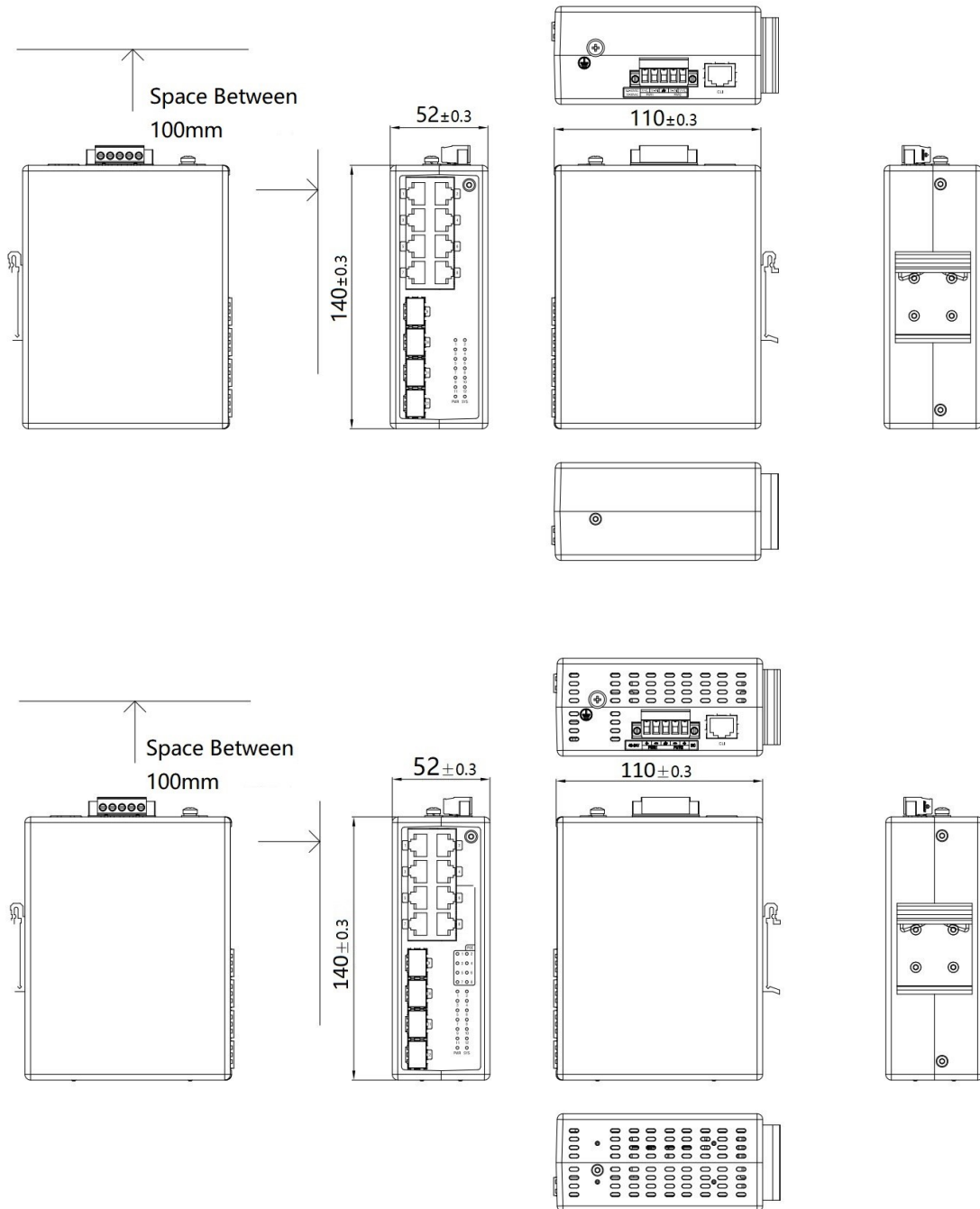


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## Dimensions

Unit: mm

12 Ports Model:



## TOM1000 Series Transportation Layer 2 DIN-Rail Gigabit Industrial Switches

### Ordering Information

P/N	Description
TOM1000-BHTB6R2040	6-Port Layer 2 Industrial Switch made from aluminum alloy, support 2 100/1000BaseX SFP ports (SFP module not included) + 4 10/100/1000BaseT ports, DIN-Rail mounted. IP40 Protection Class. Operating temperature -40°C ~ +75°C. Dual 9.6 ~ 60VDC & 18 ~ 30VAC redundant power inputs.
TOM1000-BHTB10R2080	10-Port Layer 2 Industrial Switch made from aluminum alloy, support 2 100/1000BaseX SFP ports (SFP module not included) + 8 10/100/1000BaseT ports, DIN-Rail mounted. IP40 Protection Class. Operating temperature -40°C ~ +75°C. Dual 9.6 ~ 60VDC & 18 ~ 30VAC redundant power inputs.
TOM1000-BHTB12R4080	12-Port Layer 2 Industrial Switch made from aluminum alloy, support 4 100/1000BaseX SFP ports (SFP module not included) + 8 10/100/1000BaseT ports, DIN-Rail mounted. IP40 Protection Class. Operating temperature -40°C ~ +75°C. Dual 9.6 ~ 60VDC & 18 ~ 30VAC redundant power inputs.
TOM1000-BHTB6P2040P	6-Port Layer 2 Industrial Switch made from aluminum alloy, support 2 100/1000BaseX SFP ports (SFP module not included) + 4 PoE 10/100/1000BaseT ports, DIN-Rail mounted. IP40 Protection Class. Operating temperature -40°C ~ +75°C. Dual 48~54VDC redundant power inputs.
TOM1000-BHTB10P2080P	10-Port Layer 2 Industrial Switch made from aluminum alloy, support 2 100/1000BaseX SFP ports (SFP module not included) + 8 PoE 10/100/1000BaseT ports, DIN-Rail mounted. IP40 Protection Class. Operating temperature -40°C ~ +75°C. Dual 48~54VDC redundant power inputs.
TOM1000-BHTB12P4080P	12-Port Layer 2 Industrial Switch made from aluminum alloy, support 4 100/1000BaseX SFP ports (SFP module not included) + 8 PoE 10/100/1000BaseT ports, DIN-Rail mounted. IP40 Protection Class. Operating temperature -40°C ~ +75°C. Dual 48~54VDC redundant power inputs.

### For More Information

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