



# ICP222-1T2F-2CI-TB-P(12~48VDC)

DIN-Rail Mounting 2-Port CAN Server

- Support 2 CAN ports to 2 100M Ethernet fiber ports and 1 100M copper port
- Adopt SW-Ring ring network patent technology and support single ring function. Automatic recovery time from network failure is <20ms</li>
- Support multiple operating modes like TCP Server, TCP Client, UDP Server, UDP Client, UDP Rang and UDP Multicast
- Support 5K~1000Kbps CAN baud rate
- Support 12~48VDC wide voltage input
- Support -40~75°C wide operating temperature range



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#### 3onedata Co.,Ltd.

### Introduction

ICP222-1T2F-2CI-TB-P(12~48VDC) is a CAN server that has integrated 2 CAN ports, 2 100M fiber ports and 1 100M copper port. It can implement interconnection between CAN-Bus network and Ethernet to further extend the communication range of CAN-Bus network. This product supports 2 CAN to 2 100M Ethernet fiber ports and 1 100M copper port. It adopts DIN-Rail mounting to meet the requirements of different application scenes.

Can server supports multiple network protocols, such as Ipv4, IPv6, TCP, UDP, LLDP, SSH, TELNET, SW-Ring, ARP, ICMP, ICMPv6, HTTP, HTTPS, BOOTP, DNS, DHCP and DHCPv6 protocols. It also possesses complete management functions, including Access Control, Rapid Configuration, Online Upgrading and so on. Each can port supports TCP Server, TCP Client, UDP Server, UDP Client, UDP Rang, UDP Multicast operating modes and TELNET, WEB, SSH access modes. Network management system could bring you great user experience through its friendly interface design and easy and convenient operation.

Reset button and DIP switch can achieve restore factory defaults of the device and terminal resistance access. Hardware adopts fanless, low power consumption, wide temperature and voltage design and has passed rigorous industrial standard tests, which can suit for the industrial scene environment with harsh requirements for EMC. It can be widely used in PLC control and management, Building Automation System, Health Care Automation System, measuring instrument and environmental forces monitoring system.

### **Features and Benefits**

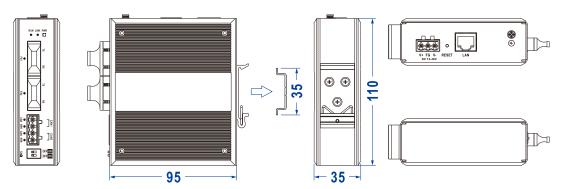
- Support 1 10/100Base-T(X) copper port and 2 100Base-FX Ethernet fiber ports
- Support 5kbps~1000kbps line-speed non-blocking communication
- Support multiple operating modes like TCP Server, TCP Client, UDP Server, UDP Client, UDP Rang and UDP Multicast
- SW-Ring could implement network redundancy and prevent network storm
- Support cross-gateway and cross-router communication
- Support time setting for heartbeat and overtime disconnection, which can disconnect idle TCP automatically
- Support CAN port status and parameter monitoring, making communication state clear to be seen
- Support automatic reconnection from network interrupts to establish reliable TCP connection
- Flexible CAN data framing setting can meet user's various needs in data partition
- TCP enables multiple users to monitor and manage CAN device simultaneously
- Stand-alone or multi-device communication is supported in UDP mode, which enables multiple users to monitor or manage CAN device simultaneously
- Support multiple configuration forms like Windows configuration tool, TELNET, SSH

and WEB

- Support manual configuration or automatic IPv4 acquisition by DHCP or BOOTP, and manual configuration or automatic acquisition of IPv6 network address by DHCPv6 or SLAAC.
- LLDP can achieve automatic topology discovery, which is convenient for visual management
- Support IP address and MAC address filtering, which can achieve accurate access control easily
- Support graded user management to implement humanized authority management
- File management is convenient for the device rapid configuration and online upgrading
- SSHD and HTTPS can guarantee the access security of data
- Network diagnosis and troubleshooting could be conducted via Ping, Traceroute and packet capture diagnosis
- ARP function is supported, which can prevent the MAC address of the device from being aged by the switch or router and unable to communicate

### **Dimension**

Unit: mm



## **Specification**

	Standard: IEEE 802.3 for 10Base-T,
	IEEE 802.3u for 100Base-TX and 100Base-FX
	Protocols: IPv4, IPv6, TCP, UDP, ARP, LLDP, HTTP, SW-Ring,
	HTTPS, SSH, TELNET, ICMP, ICMPv6, DHCP,DHCPv6,
Ethernet	DNS, BOOTP
	100M copper port: 1 10/100Base-T(X), RJ45, Automatic Flow
	Control, Full/half Duplex Mode, MDI/ MDI-X
	Autotunning
	100M fiber port: 2 100Base-FX, optional SC/ST/FC

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	<ul> <li>Transmission distance of fiber port:</li> <li>multimode: 2km</li> <li>single mode: 20/40/60/80/100/120km</li> <li>Transmission wavelength of fiber port:</li> <li>multimode: 1310nm</li> <li>single mode: 1310nm or 1550nm</li> <li>Work mode: TCP Server, TCP Client, UDP Server, UDP Client, UDP Rang and UDP Multicast</li> </ul>
CAN Interface	Standard: CAN2.0A, CAN2.0B Interface quantity: 2 CAN ports CAN signals: CAN1H, CAN1L, CAN2H, CAN2L Duplex mode: 2-wire Half Duplex Mode Baud rate: 5kbps~1000kbps Load capacity: support concurrent transmitting of 110 nodes Transmission distance: 40m~10km Interface form: adopt 4-pin 5.08mm pitch terminal blocks Terminating resistance: built-in 120Ω terminating resistance controlled by DIP switch Interface protection: 2.5kVDC withstand voltage isolation
Configuration Method	WEB configuration management, TELNET configuration, Windows configuration tool, SSH configuration
Redundancy Technology	SW-Ring
Indicator	Power indicator, running indicator, copper port indicator, fiber port indicator, CAN indicator, CAN error indicator
Power Supply	12~48VDC 3-pin 5.08mm pitch terminal blocks Support non-polar connection
Power Consumption	No-load: 2.3W@12VDC (normal temperature), 2.4W@12VDC (high temperature) Full-load: 2.4W@12VDC (normal temperature), 2.5W@12VDC(high temperature)
Working Environment	Operating temperature: -40~75°C Storage temperature:-40~85°C Relative humidity: 5%~95% (no condensation)

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Physical Characteristic	Housing: IP40 protection, metal Installation: DIN-Rail mounting Dimension (W x H x D): 35mm×110mm×95mm Weight: 350g			
Industrial Standard	<ul> <li>IEC 61000-4-2 (ESD, electrostatic discharge), Level 3</li> <li>Air discharge: ± 8kV</li> <li>Contact discharge: ±6kV</li> <li>IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 3</li> <li>Power supply: ±2kV</li> <li>CAN port: ±1kV</li> <li>Ethernet port: ±1kV</li> <li>IEC 61000-4-5 (Surge), Level 3</li> <li>Power supply: common mode±2kV, differential mode±1kV</li> <li>CAN port: common mode±2kV, differential mode±1kV</li> <li>Network port: common mode±2kV, differential mode±1kV</li> <li>Shock: IEC 60068-2-27</li> <li>Free fall: IEC 60068-2-32</li> <li>Vibration: IEC 60068-2-6</li> </ul>			
Authentication	CE, FCC, RoHS			
Warranty	3 years			

# **Ordering Information**

Available Models	100M Copper Port	100M Fiber Port	CAN	Power Supply
ICP222-1T2F-2CI-TB-P(12-48VDC)	1	2	2	12~48VDC



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