Cybersecurity Industrial Ethernet I/O Modules

ETS-7200 Series

Fast Boot
< 5 Seconds

Comprehensive Cybersecurity
TLS encryption,
DDoS Protection,
802.1Q, 802.1p

Industrial Communication
Modbus TCP / MQTT
OPC UA

mDNS
Local Hostname Resolution

IoT Communication
CoAP LwM2M
MQTT

Rule Engine

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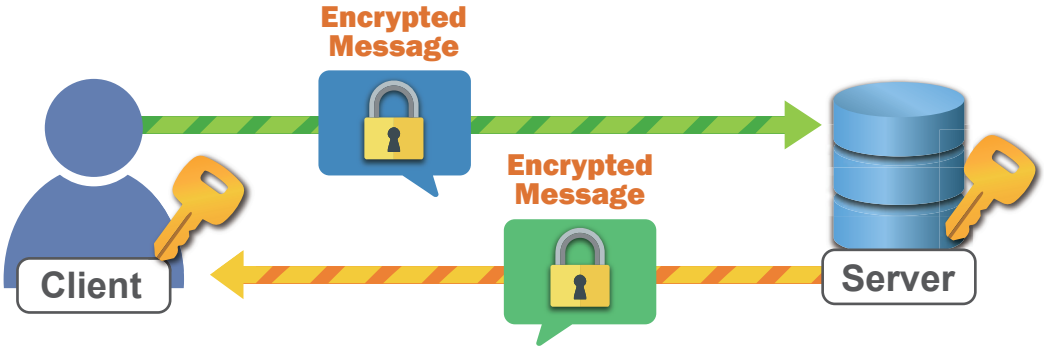
ETS-7200 Cybersecurity Industrial Ethernet I/O Modules

The ETS-7200 modules support RESTful API and Industrial IoT communication protocols, including Modbus TCP and MQTT client. These modules are designed with comprehensive cybersecurity mechanisms, such as support for SSL/TLS certificates for encryption, to ensure that sensor data is transmitted securely and protected from unauthorized access.

Features

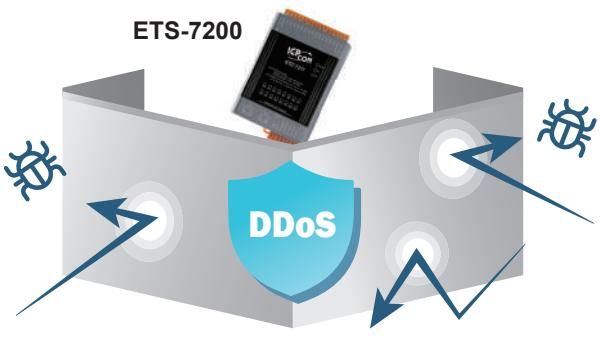
SSL/TLS Encryption for Ensured Security and Data Protection

The ETS-7200 modules support SSL/TLS, offering continuous security from initial configuration to online operation. They provide comprehensive protection for communications, ensuring that data remains private, intact, and authentic, making the module ideal for building secure systems.



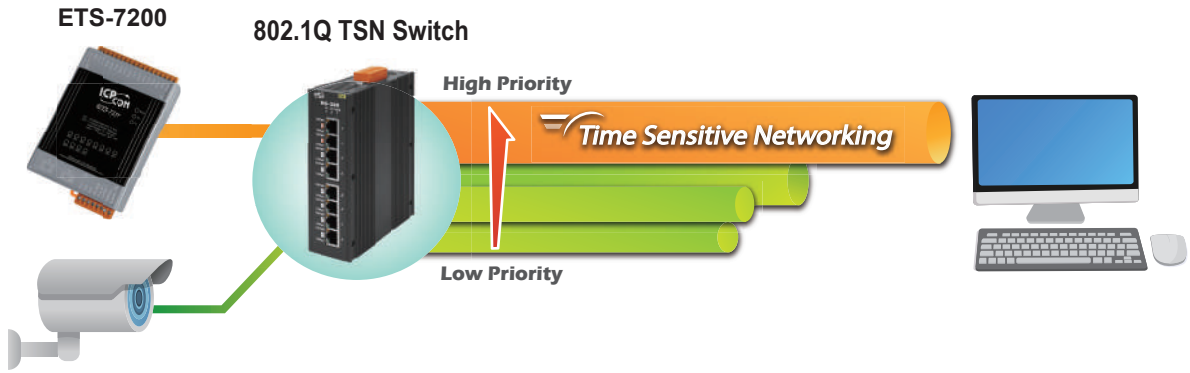
Denial-of-Service (DoS/DDoS) Attack Defense

Equipped with robust defense mechanisms, the ETS-7200 protects against DoS and DDoS attacks. It actively regulates network traffic to reduce the impact of large volumes of abnormal network packets on Ethernet operations, ensuring that the module remains functional and reliable.



802.1Q and 802.1p Tagging for Prioritized Network Transmission

Supporting 802.1Q and 802.1p priority tagging, the ETS-7200 module tags data frames on selected network protocols for use with 802.1Q compliant switches. In environments with limited network bandwidth, this configuration effectively preserves network resources for time sensitive network communication, ensuring low-latency and high-reliability transmission.

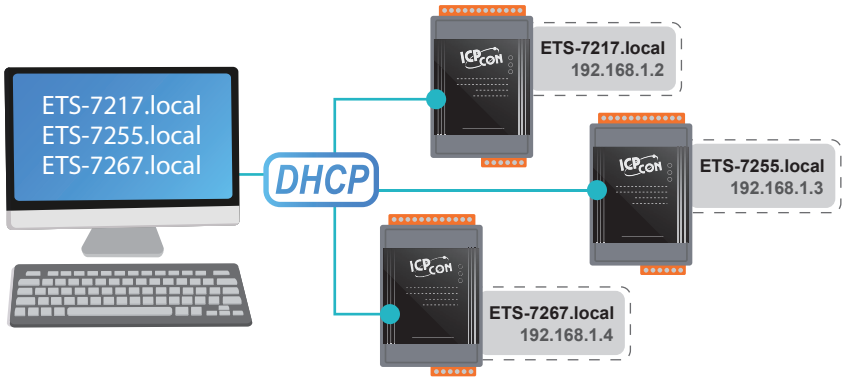


Rule Logic Engine for Streamlined Edge Control

Built-in logic engine that supports IF-THEN-ELSE rules to make decisions with physical I/O and software points. This capability enables stable and efficient execution of automated monitoring tasks. The logic engine also supports encrypted and unencrypted e-mail notifications to efficiently notify relevant personnel when specific events occur.

mDNS Hostname Resolution for Easy Connection

mDNS (Multicast DNS) protocol, allowing easy-to-remember domain names (e.g., EthernetIO.local) for local network communication with compatible browsers and software. Whether the module operates with static or dynamic IP addresses, users can maintain communication through the fixed mDNS domain name, helping to prevent problems associated with IP address changes.



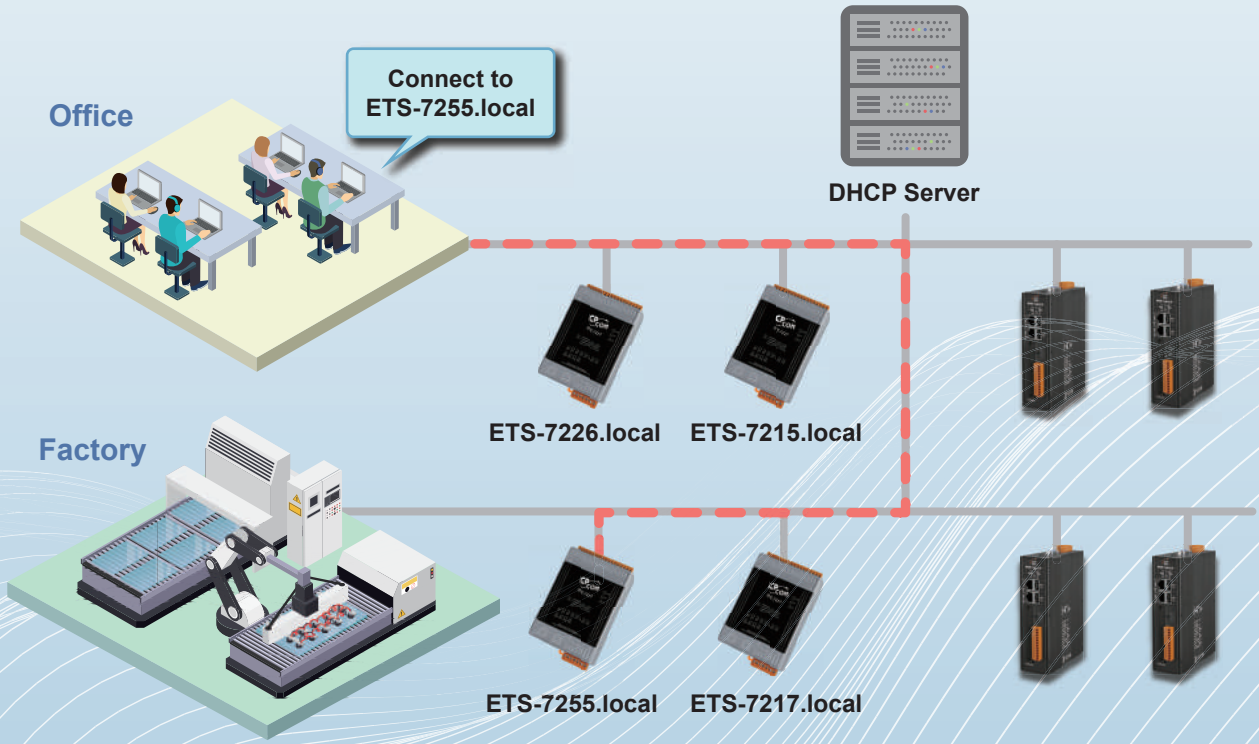
Securing smart traffic light systems

Smart traffic lights, or intelligent traffic lights, are vehicle traffic control systems that combine traditional traffic signals with a range of sensors and artificial intelligence to intelligently balance vehicle and pedestrian traffic. They can be part of a larger smart transportation system and securing smart traffic light systems is crucial for safeguarding smart city infrastructure against Cyberattacks.

ETS-7200 provides a one-stop Cybersecurity solution that supports encrypted transmissions such as HTTPS, Modbus TCP with SSL/TLS. It effectively safeguards data security, preventing data theft or tampering, meeting the Cybersecurity requirements of smart traffic system deployment.

Zero-configuration and mDNS

Obtaining a static IP address may not always be possible in an IT/OT converged network environment. The Multicast Domain Name System (mDNS) protocol is a zero-configuration, multi-platform service designed to resolve hostnames to IP address on networks without relying on static IP address. The host can access the ETS-7200 via its hostname (e.g., ETS-7200.local), eliminating concerns about communication being affected by IP changes. Zero-configuration networking allows Industrial Ethernet to automatically establish device networks without manually configuring a DHCP server, DNS services, or network settings for each device connecting to the network. This simplifies network management, reduces the risk of errors, and increases operational efficiency.



Selection Guide

Analog Input

Model	AI			DO		
	Channel	Voltage & Current Input	Sensor Input	Channel	Type	Sink/Source (NPN/PNP)
ETS-7217	8	±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±20 mA, 0 ~ 20 mA, 4 ~ 20 mA	-	4	Open Collector	Sink (NPN)
ETS-7215	7	-	RTD: Pt100, Pt1000, Ni120, Cu100, Cu1000	-	-	-
ETS-7218Z/S	10	±15 mV, ±50 mV, ±100 mV, ±500 mV, ±1 V, ±2.5 V ±20 mA, 0~20 mA, 4~20 mA	Thermocouple J, K, T, E, R, S, B, N, C, L, M, LDIN43710	3	Open Collector	Sink (NPN)
ETS-7219Z/S	10	±15 mV, ±50 mV, ±100 mV, ±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, ±20 mA, 0~20 mA, 4~20 mA	Thermocouple J, K, T, E, R, S, B, N, C, L, M, LDIN43710	3	Open Collector	Sink (NPN)

Multifunction I/O

Model	AI		AO		DI/Counter		DO	
	Channel	Voltage & Current Input	Channel	Voltage & Current Output	Channel	Type	Channel	Type
ETS-7226	6	±500 mV, ±1 V, ±5 V, ±10 V, 0 ~ 20 mA, ±20 mA, 4 ~ 20 mA	2	0 ~ 5 V, ±5 V, 0 ~ 10 V, ±10 V 0 ~ 20 mA, 4 ~ 20 mA	2	Dry (Source), Wet (Sink,Source)	2	Open Collector (Sink)

Digital I/O

Model	DI			DO			
	Channel	Type	Sink/Source (NPN/PNP)	Channel	Type	Sink/Source (NPN/PNP)	Max. Load Current @ 25 °C
ETS-7255	8	Dry, Wet	Sink (NPN)	8	Open Collector	Source (PNP)	650 mA/channel

Relay Output & Digital Input

Model	Relay Output				DI		
	Channel	Relay	Type	Max. Load Current @ 25°C	Channel	Type	Sink/Source (NPN/PNP)
ETS-7260	6	Power Relay	Form A (SPST N.O.)	5.0 A/channel	6	Wet	Sink/Source (NPN/PNP)
ETS-7267	8	Power Relay	Form A (SPST N.O.)	5.0 A/channel	-	-	-