

Schneider Series Service Manual

TSXETG100

1. Description

The TSXETG100 module is a part of Schneider Electric's TSX Micro PLCs series. It operates with a rated supply voltage of 24 V DC and supports several Ethernet protocols, including Modbus TCP/IP and HTTP. The unit also facilitates serial communication through Modbus RTU and ASCII protocols, enabling flexible connectivity options for industrial applications.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Line TSX Micro PLCs
Part	Number TSXETG100
UPC	785901524939
Weight	3.00 lbs (1.36 kg)
Rated	Supply Voltage 24 V DC
Ethernet	Protocols Supported Modbus TCP/IP, HTTP, FTP, SNMP, ARP
Serial	Communication Protocols Modbus RTU and ASCII
Ethernet	Connection Type RJ45 10/100 Mbps
Serial	Link Connection Types RS485 (57.6 kbps), RS232 (38.4 kbps)
Max	Number of Connected Devices Less than 32 on Modbus serial link
Mounting	Support Symmetrical DIN rail
Local	Signaling 3 LEDs for serial link communication (RS485, RX, TX) and 4 LEDs for Ethernet communication (LK, RX, TX, 100)
Air	Temperature for Operation 32-140 °F (0-60 °C)
Relative	Humidity 5-95 % at 104 °F (40 °C) without condensation
IP	Degree of Protection IP30
Standards	Compliance EN 61000-4-2/3/4/5/6/8, UL 508, CSA C22.2 No 14-M91, EN 55022, FCC class A, EN 61000-6-2
Product	Certifications cUL, UL
Web	Services Diagnostic on Ethernet and Modbus links via predefined web pages
Range	of Product
ConneXium	
Pr	

3. Product Information

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Technical specifications for TSXETG100

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Product Certifications cUL, UL

Web Services Diagnostic on Ethernet and Modbus links via predefined web pages

Range of Product

ConneXium

Product or Component Type

Ethernet Modbus gateway/router

Product destination

All products compatible with Modbus standard

Concept

Transparent Ready

Web server

Class B10

[Us] rated supply voltage

24 V DC

Complementary

Web services

Via predefined web pages : diagnostic on Ethernet and Modbus links

Predefined web pages

Access to connected products list, reading of Modbus devices registers

Communication Service

SNMP agent, device administration with a SNMP manager

Read/write Modbus registers of connected devices

Miniature firewall on-board (IP address filtering) and password protection

BOOTP protocol, FDR client

Supply

Power supply device PoE IEEE 802.3af

Integrated connection type

Ethernet TCP/IP RJ45 10/100 Mbps 1 twisted pair

Serial link 5-way removable terminal block Modbus RTU and ASCII RS485 57.6 kbps

Serial link micro switches Modbus RTU and ASCII RS485 57.6 kbps

Serial link RJ45 RS232 38.4 kbps

Maximum Number of Connected Devices

Modbus serial link: 32

Port Ethernet

10BASE-T/100BASE-TX

Mounting Support

Symmetrical DIN rail

Marking

CE

Local signalling

3 LEDs for serial link communication (RS485, RX, TX)

4 LEDs for Ethernet communication (LK, RX, TX, 100)

Width

2.8 in (72 mm)

Height

3.2 in (81 mm)

Depth

3.0 in (76 mm)

Environment

Ambient Air Temperature for Operation

32...140 °F (0...60 °C)

Relative humidity

5...95 % 104 °F (40 °C) without condensation

IP Degree of Protection

IP30

Standards

EN 61000-4-2/3/4/5/6/8

UL 508

CSA C22.2 No 14-M91

EN 55022 FCC class A

EN 61000-6-2

Product Certifications

cUL

UL

Ordering and shipping details

Category

18225-PLC NTRK HRDWR & PROWORX SOFTWARE

Discount Schedule

PC41

GTIN

00785901524939

Returnability

No

Country of origin

IN

Packing Units

Unit Type of Package 1

PCE

Nbr. of units in pkg.

1

Description

The Schneider Electric TSXETG100 is an efficient communication module within the TSX Micro PLCs lineup. It utilizes a 24-V DC-rated supply voltage, which is integral to its operation.

Users can leverage various Ethernet protocols, including Modbus TCP/IP, HTTP, FTP, SNMP, and ARP, allowing for robust networking capabilities.

In addition to Ethernet functionalities, the module supports serial communication with protocols, including Modbus RTU and ASCII. It features an RJ45 Ethernet connection type capable of 10/100 Mbps speeds. Serially, connections can be established utilizing RS485 at 57.6 kbps or RS232 at 38.4 kbps.

The unit is designed to support less than 32 devices connected through its Modbus serial link, offering significant versatility for different configurations. Mounting with symmetrical DIN rail support is straightforward, ensuring a secure and efficient installation. Local signaling on the TSXETG100 includes three LEDs for serial communication and four LEDs dedicated to Ethernet communication, facilitating real-time diagnostics and monitoring.

The TSXETG100's physical dimensions are 72 x 81 x 76 mm, making it compact enough for various deployment scenarios. The module operates effectively within a temperature range of 32 to 140 °F (0 to 60 °C) and maintains performance in relative humidity levels from 5% to 95% at the upper-temperature limit, provided that condensation is absent. It has an IP30 degree of protection, shielding it from dust and accidental contact with solid objects.

The TSXETG100 complies with several industry standards, including EN 61000-4, UL 508, and FCC class A, ensuring reliability and safety within industrial applications. Additionally, it holds cUL and UL product certifications, validating its adherence to critical safety standards. Web services allow diagnostic capabilities over Ethernet and Modbus links, simplified via predefined web pages, enhancing usability and troubleshooting.