

C3X43

TPS

Industrial Dual SIM Cellular VPN Router
1 Eth + 1 RS232 + 1 RS485



INTRODUCTION

The TPS Industrial Dual SIM Cellular VPN Router (C3X43 series) is a rugged cellular router offering state-of-the-art mobile connectivity for machine to machine (M2M) applications. C3X43 series is used extensively in industrial applications such as pipeline monitoring, water treatment, Gas & Electricity distribution networks and many similar environments where a hardened product with bulletproof cellular communications is required. C3X43 series has extensive overvoltage protection, high EMC immunity and has a DIN-rail / panel mount form-factor making it ideal for use in any kind of industrial automation enclosure.

- The following software features are present on C3X43 series:
- Smart Roaming** – intelligent network selection tool for roaming SIMs
 - VPN** – Simple remote access on any SIM using VPN
 - TPSC** – Router Management Platform – very feature rich
 - Data Guard** – Automatically stop data overruns to avoid billshock
 - Secure Reboot** – System integrity and protection against tempered attacks using link watch
 - Link Watch** – Intelligent network management based on ping or DNS

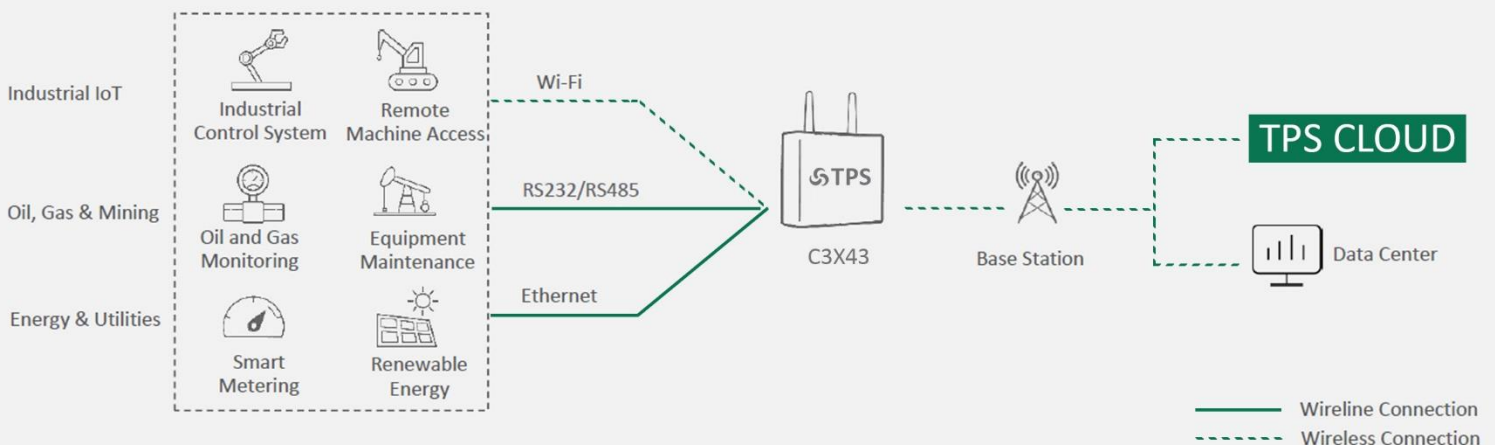
TPSC is TPS's router monitoring service that is fully compatible with the C3X43 series. It allows customer to see a location overview of their routers quickly and simply on a map. Features such as data usage, signal strength, current network and much more can then be viewed on a per router basis. Over-the-air updates are supported for Firmware, router configuration and Apps serving as essential 'insurance' if anything was not quite right during deployment.

KEY FEATURES

- * **Dual SIM DSSS for persistent 2G/3G/4G cellular network connection**
- * **WebUI + CLI**
- * **IPsec/OpenVPN/GRE/PPTP/DMVPN**
- * **Management and maintenance via Web/CLI/SMS/SNMP/Radius/TPS Cloud**
- * **TPS industrial design (9~65 VDC, desktop or DIN rail mounting)**

TPS CLOUD

APPLICATION EXAMPLE



SPECIFICATIONS

Cellular Interface

Number of antennas	2 (MAIN + AUX)
Connector	SMA-K
SIM	2 x Standard SIM
Standards	GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA/HSPA+/DC-HSPA+/TD-SCDMA/CDMA(CDMA1X/EVDO)/FDD LTE/TDD LTE

Ethernet Interface

Number of ports	1 x 10/100 Mbps LAN port
Magnet isolation protection	1.5 KV

Serial Interface

Number of ports	1 x RS232 , 1 x RS485
Connector	5pin 3.81mm terminal block (for RS232) , 2pin 3.81mm terminal block (for RS485)
ESD protection	±15 KV
Baud rate	110 bps ~ 230400 bps
Flow control	RTS/CTS (for RS232)

Others

Reset button	1 x RST
LED indicators	1 x PWR, 1 x Status, 1 x WWAN, 1 x WLAN, 1 x 2G, 1 x 3G, 1 x 4G, 4 x RSSI
Built-in	RTC, Watchdog, Timer

Software

Network protocols	PPP, PPPoE, TCP, UDP, DHCP, ICMP, NAT, HTTP, HTTPS, DNS, ARP, BGP, RIP, OSPF, NTP, SMTP, Telnet, VLAN, SSH2, DDNS, etc.
VPN tunnel	IPsec, OpenVPN, GRE, PPTP, DMVPN
Firewall	DMZ, anti-DoS, Filtering (IP/Domain name/ MAC address), Port Mapping, Access Control
Remote management	WebUI, CLI, SMS, Raidus
Serial port	Transparent, TCP Client/Server, UDP, Modbus RTU Gateway

Wi-Fi Interface

Number of antenna	1
Connector	RP-SMA-K
Standards	802.11 b/g/n, Supports server and client modes
Frequency bands	2.4 GHz
Security	WEP, WPA, WPA2, WPA3
Encryption	128/256 AES

DI/DO

Type	2 x DI + 2 x DO, wet contact
Isolation	3 KV
Socket form	4 x 2pin 3.81mm terminal block
Level	3-30 VDC = High 0-1 VDC = Low
Absolute maximum VDC	30 VDC (DI), 9 VDC (DO)
Absolute maximum ADC	10 mA (DI/DO)

Power Supply and Consumption

Connector	3.81mm screw terminal block
Input voltage	9 ~ 65 VDC
Power consumption	Idle: 100 mA@12 V Data link: 400 mA (peak) @12 V

Physical Characteristics

Ingress protection	IP30
Housing & Weight	Metal, 500 g
Dimensions	100 x 100 x 40 mm
Installations	Desktop, 75 mm DIN rail mounting
Operating temperature	-40 ~ +75 °C
Storage temperature	-40 ~ +85 °C
Relative humidity	5 ~ 95% RH

Regulatory and Type Approvals

Environmental	RoHS 2.0, WEEE
EMI	EN 55032: 2012/AC: 2013 (CE & RE) Class B
EMS	IEC 61000-4-2 (ESD) Contact Level 2; Air Level 3 IEC 61000-4-3 (RS) level 3 IEC 61000-4-4 (EFT) level 3 IEC 61000-4-5 (Surge) Level 3 IEC 61000-4-6 (CS) level 3

ORDERING INFORMATION

Model	PN	Category	Dual SIM	POE	DI/DO	RS232	RS485	Ethernet	Dual SIM Redundancy
C3X43	C3143-A	Cat 4	X	X	✓	✓	✓	✓	X
	C3143-U	Cat 1	✓	X	✓	✓	✓	✓	X
	C3243-A	Cat 4	X	X	X	✓	✓	✓	X
	C3243-U	Cat 1	✓	X	X	✓	✓	✓	X
	C3443-A	Cat 4	X	✓	X	X	X	✓	X
	C3443-U	Cat 1	✓	✓	X	X	X	✓	X