Cybertec 2455X

LTE Performance Cellular Router with 4GX

Summary of benefits

- 100 Mbps downlink, 50 Mbps uplink
- PPP Server/PPP Client/Modem Emulation
- Location information provided by GPS
- DNP3 Outstation
- Email and/or SMS functionality for remote monitoring, diagnosis and event management
- Dual SIM
- Power Supply and Serial Port, galvanic isolation to 1.5kVDC
- Supports Telstra 4GX 700MHz (Band 28)
- 5 Year warranty

This item is used in the following applications

Utilities
- Pole-top device connectivity for power utilities.
- SCADA and telemetry communications
- Smart metering - oil & gas, water and renewable energy

Mining & Resources
- Machine temperature and vibration reporting
- Failover for monitoring systems

Agriculture
- Irrigation control
- Generator monitoring

Business Services
- Intelligent transport
- Parking meters
- Building automation and control
- CCTV security surveillance
- Digital signage management

The Cybertec 2455X is a high performance Long Term Evolution 4G cellular router designed to provide the highest level of reliability and availability in industrial applications where 700MHz (B28) compatibity is required.

With built-in Dual-SIM fail-over, a secondary cellular network provider can be used should the primary provider's connection fail. The architecture alleviates potential issues with network service provider outages and increases functionality.

Incorporating an integrated two port Ethernet switch and Serial RS232 interface, the Cybertec 2455X provides secure remote cellular connectivity to a multitude of Ethernet and serial based devices.

Sophisticated features such as smart multi-level watchdog technology delivers long-term operational stability while comprehensive remote management and diagnostic tools provide cost-effective maintenance and control over the cellular network.

Product Features

Wireless Network
Support for 2G, 2.5G, 3G, 3.5G and 4G networks
UMTS/HSPA: 850 / 900 / 2100 MHz LTE Bands 3,7, 28: 700 / 1800 /2600 MHz
3G Bands 1, 8, 5 - 850 / 900/ 2100 MHz
LTE max: Uplink 50 Mbps, Downlink 100 Mbps
3G max: HSUPA Uplink 5.76 Mbps, DC-HSPA+ Downlink 42bps
Circuit Switched Data (CSD) not supported

Networking & Functionality
Serial IP Gateway/Modbus IP Serial Gateway/ DNP3 IP Serial Gateway
PPP Server/PPP Client/ Modem Emulation
Built-in 2-port 10/100 fast Ethernet
1 x RS232 DCE galvanically isolated serial port
Location information provided by GNSS

Management
DNP3 Outstation
Email and/or SMS functionality for remote monitoring, diagnosis and event management

Security
High performance firewall, SSL and IPsec VPN services

CYBERTEC

Wireless Network

LTE

Supported Bands	700 (B28) / 1800MHz (B3) / 2600MHz (B7)
Transmit Power	Class 3 (0.25 W, 24 dBm)
Maximum Downlink Speeds	LTE 100Mbps
Up-link Speeds	LTE 50Mbps
Circuit-Switched Data	

HSPA+ / UMTS

Supported Bands	850MHz (B5) / 900MHz (B8) / 2100MHz (B1)
Transmit Power	Class 3 (0.25W, 24 dBm)
Maximum Downlink Speeds	HSPA+ 42Mbps UMTS 384kbs
Up-link Speeds	HSPA+ 5.76Mbps UMTS 384kbs
Circuit-Switched Data	64, 14.4 and 9.6 Kbps

Power

Standard

Rated Voltage	12 - 48 VDC
Rated Current	800 mA (Max)
Operating Voltage	10 to 60 VDC
Operation Current	380 mA @ 12VDC
Idle Current	180 mA @ 12VDC
Connection Detachable Screw Terminal	
Galvanic Isolation	1.5kV
Polarity Dependant, Reverse Polarity Protection	

Standby Timer

Standby Current	80mA @ 12V
System will hibernate according to Time Profile	
Configured with WEB interface	

LED Indicators

System Information

Power /Status (STS)
Network 1 (NET 1) & Network 2 (NET 2)

Ethernet link/activity

Connectors

Ethernet

2 x Fast Ethernet Switch Ports, Auto-Sensing/Auto-Negotiation and Auto MDI/MDI-X Connection

Serial

RS232 DCE Port

Serial Port Galvanic Isolation 1.5kVCD

Antenna

Main: SMA Female Connector

RxDIV: SMA Female Connector

GPS: SMA Female Connector

Networking

Features

Dynamic Host Configuration Protocol (DHCP) Server

Network and Port Address Translation (NAT/NAPT)

Port Mapping/Forwarding

DNS Proxy

Bridging

DHCP Server Client

Routing

Static/Dynamic Routing

Policy-Based Routing

Quality of Service

Routing Information Protocol (Ripv1/Ripv2)

Virtual Router Redundancy Protocol (VRRP)

Security

Stateful Packet Inspection

NAT/Packet Filtering

Protection against Denial of Service attacks

IP Security (IPSec)

Layer 2 Tunnelling Protocol (L2TP)

Point-to-Point Tunnelling Protocol (PPTP)

OpenVPN SSL VPN

3DES and AES (128/256) Encryption Support

Serial

DNP3 IP Serial Gateway

Modbus IP Serial Gateway

Serial UDP/TCP Gateway

Reverse Telnet RFC2217 Server

Modem Emulator

Send, Receive and Manage SMS Message

Management

General

Web Based HTTP/HTTPS management

Over the Air Firmware Upgrade

Simple Network Management Protocol (SNMP)

Diagnostic Test

SMS Monitor & Control

DNP3 Outstation

Telnet

RADIUS User Access Control

Event Notification: SNMP, DNP3 and SMS

Approvals

C-Tick, CE Type, RoHS, RCM, RED, FCC Compliant

Environmental

Operating

Temperature	-30 to +70°C
Humidity	0 to 90% Relative Humidity Non Condensing

Storage & Transport

Temperature	-40 to 80°C
Humidity	0 to 90% Relative Humidity Non Condensing

Physical Characteristics

Dimensions

53mm (w) x 103mm (h) x 110mm (d) [including DIN clip]

Warranty

5 Years

Ordering Information

Part Number	Description
C Model 2455X	Cybertec 2455X High Speed 4G Cellular Router
Optional	
C PLUGPACK 12V	Plug Pack Adapter
C GPS Antenna	GPS Antenna

What's in the box

- C Model 2455X
- Quick start guide
- 2 x Blade antennas
- 1 x Power terminal block

NB: Box content may differ on bulk product orders