Cybertec 2255X

3G/4G Cellular Router

Summary of benefits

- Supports LTE including 700MHz
- Fallback to high speed 3G (42 downlink / 23 uplink)
- Location information provided by GPS
- DNP3 Outstation
- Email and/or SMS functionality for remote monitoring, diagnosis and event management
- 5 Year warranty

Cybertec 2255X - product front

The Cybertec 2255X is a 4G cellular router with fallback to 3G, designed to extend the connectivity capabilities of the 2155 by incorporating an additional 8 in and 5 out digital I/O.

The inclusion of multiple serial ports allows concurrent transmission of different serial data streams across the cellular network. For instance the 2255X can provide simultaneous connections for both polled SCADA data from the communications port and diagnostic data from the configuration port of the same device. This way remote maintenance and management of the device can be performed without a technician having to visit the site.

The integrated digital I/O provides alarm/event triggering and interlocking capabilities as well as the ability to set/ reset remote devices over the cellular network.

Product Features

Wireless Network	
Support for 3G and 4G networks	
UMTS/HSPA 850/900/2100 MHz	
LTE BANDS 1, 3, 5, 8, 28, 700/850/900/1800/2100	
HSPA+: 42 Mbps downlink, HSPA+: 5.75 Mbps uplink	
LTE Cat1: 10 Mbps downlink, 5 Mbps uplink	
Supports circuit-switched data	
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 Serial Port	
2 x RS232 DTE Serial Ports	
8 x Isolated Digital Inputs (Max 60VDC)	
5 x Isolated Digital Outputs (Closed contact, max 60VDC @ 250mA)	
Location information provided by GPS on seperate antenna	
Management	
DNP3 Outstation	
Email and/or SMS functionality for remote monitoring, diagnosis and event management	
Security	
High performance firewall, SSL and IPsec VPN services	
Physical Characteristics	
Dimensions	154mm (l) x 103mm (w) x 55mm (h)

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

CYBERTEC

Wireless Network

HSPA+/ UMTS

Supported Bands	850/900/2100 MHz
Transmit Power	Class 3 (0.25W, 24 dBm)
Maximum Downlink Speeds	HSDPA 42 Mbps (Cat 10)
Up-link Speeds	HSPA 5.76 Mbps (Cat 6)
	UMTS 384 Kbps
Circuit-Switched Data	64, 14.4 and 9.6 Kbps

LTE

Supported Bands	700 (B28) / 1800MHz (B3) / 2600MHz (B7)
Transmit Power	Class 3 (0.25 W, 24 dBm)
Maximum Downlink Speeds	LTE 10 Mbps
Up-link Speeds	LTE 5 Mbps
GPRS/EDGE Multislot	Class 12
Circuit-Switched Data	14.4 and 9.6 Kbps

Power

Standard

Rated Voltage	10 to 60 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	
Polarity Dependant, Reverse Polarity Protection	

Standby Timer

Standby Current 10mA @ 12V

System will hibernate according to Time Profile

Configured with WEB interface

LED Indicators

System Information

Power (PWR) Status (STS)

Ethernet link/activity

Connectors

Ethernet:

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

Serial:

1 x RS232 DCE, 2 x RS232 DTE
10 Way 3.81mm pitch INPUT connector
10 Way 3.81mm pitch OUTPUT connector

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 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

Optional IP66

An industrialised IP66 Enclosure is also available to protect the router from dust, water, shock and vibration

Warranty

5 Years

Ordering Information

Part Number	Description
C Model 2255X	Cybertec 2255X Modem

Optional	
C PLUGPACK 12V	Plug Pack Adapter
C GPS Antenna	GPS Antenna
C MODEL DIN KIT	DIN Kit

What's in the box

- C Model 2255X
- Quick start guide
- 2 x Blade antennas
- 2 x DIO terminal blocks
- 1 x Power terminal block

NB: Box content may differ on bulk product orders

Cybertec 2255X - product back