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

The Cybertec 2155X is a 4G cellular router with fallback to 3G, designed to provide the highest level of reliability and availability in industrial applications.

Incorporating an integrated 2 port Ethernet switch and Serial RS232 interface, it can provide secure remote cellular connectivity to a multitude of Ethernet and serial based devices. Sophisticated features such as smart multi-level watchdog technology ensure long-term operational stability while comprehensive remote management and diagnostic tools provide enhanced maintainability 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
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   153mm (l) x 103mm (w) x 33mm (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:

RS232 DCE Port

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

Mean Time Between Failures (MTBF)

Ground Benign	2,050,939 hours @40°C
Ground Fixed	512,735 hours @40°C

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 2155X	Cybertec 2155X 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 2155X
- Quick start guide
- 2 x Blade antennas
- 1 x Power terminal block

NB: Box content may differ on bulk product orders