

ZyWAN Cellular Routing Modems

Description

The ZyWAN is a cellular routing modem for GSM/GPRS, EvDO/1xRTT CDMA and iDEN networks. It is ideally suited for wireless applications such as internet access, AVL, telemetry, SCADA, mobile computing, and AMR. A key differentiator is that the ZyWAN operates as a fully configurable embedded Linux router enabling firewalling, DHCP, DNS and NAT. ZyWAN provides network real-time access to any Ethernet, 802.11 or serial device for mobile and fixed data applications.

A GPS adapter provides a sophisticated tracking program and raw NMEA data strings for mapping applications. The tracking program reports the device location, speed and heading on regular intervals and caches data when out of network. To easily manage the ZyWAN, a WEB GUI interface presents a simple tool to quickly change settings locally or over-the-air. Each of the ZyWAN products is available in a number of customer ready application configurations.

Features

- GSM/GPRS, iDEN, EvDO/1xRTT CDMA connectivity
- Dual RJ45 Ethernet ports
- Dual USB 1.1 ports
- 3 x serial ports (2 x RS232 and 1 x RS232/422/485 selectable)
- Ignition sense
- 10 - 30V DC input with transient protection
- Antennas: SMA for cellular and GPS, RP-TNC for 802.11
- I/O expansion bus

Router Functions

- DHCP
- Routing
- Firewalling
- Security AES, 3DES, SSH, IPsec, etc.
- NAT (Network Address Translation)
- Terminal server and client
- DNS client

Optional Interfaces

- GPS NMEA 0183 with serial, UDP and TCP/IP connectivity
- 802.11b - via CompactFlash or USB interface
- VGA and touch-screen interface



Applications

Field Force Automation

- AVL - Automatic Vehicle Location
- Commercial Delivery
- Fleet Monitoring
- Fuel Services
- Utilities
- Water and Sewer
- HVAC - Heating Ventilation and Air Conditioning
- Telecommunications
- Cable
- Security

Public Safety

- Homeland Security
- Emergency Medical
- Police and Fire Communications

Utilities, Oil and Gas

- AMR - Automatic Meter Reading
- EMS - Energy Management Systems
- C&I meters
- SCADA
- Load Management
- Substation Automation
- EFM - Electronic Flow Measurement

Internet Access

- PDA, Laptop or PC
- Wi-Fi Hotspot

Financial

- ATM - Automated Teller Machines
- POS - Point-of-Sale Terminals
- Gaming Machines

ZyWAN Cellular Routing Modems

Specifications

General

Processor/Clock Speed	520MHz Intel PXA270 XScale processor
OS	Linux 2.6 Arcom optimized Kernel
Dimensions	238mm x 137mm x 65mm (W x L x H)
Weight	3lbs
Mounting	Panel mount
Memory	64MB of soldered SDRAM/64MB Flash
Watchdog	Hardware with start-up or software trigger
Serial Ports	2 x RS232 and 1 x RS485/422/232 selectable
Diagnostics	Serial MMI or Telnet
Networking	2 x RJ-45 10/100BaseT
USB Ports	Dual USB ports
VGA/Touch-screen	Standard DB15 RGB female

Cellular Networks

iDEN

- TX 806-825 / 896-902MHz
- RX 851-870 / 935-941MHz
- TX Power - .6 Watts

GSM/GPRS

- Quad Band GSM/GPRS Class 10 radio device
- GSM 850/900MHz power class 4 (33dBm)
- GSM 1800/1900MHz power class 1 (30dBm)

EvDO / 1xRTT CDMA

- Dual Band - 800MHz North American cellular band
- 1900MHz North American PCS band
- Supports RX diversity in both 800MHz and 1900MHz

GPS

- 12 channel continuous tracking receiver with 32 correlators
- Accurate 1PPS timing output
- Very high sensitivity 156dBm (Tracking)

Vehicle Bus Interface

- J1708
- OBD II

Power Specifications

Input Power	10 - 30V DC
Over & Reverse Voltage Protection	100V DC
Ignition Sense Input	12V DC protected
Power	8W

RF Antenna Connectors

iDEN Cellular	SMA Female
GSM/GPRS Cellular	SMA Female
EvDO & 1xRTT Cellular	SMA Female Receive / SMA Female Diversity
GPS	SMA Female
802.11b	RP-SMA Female

Environmental

Humidity	5% to 95% RH (non-condensing)
-----------------	-------------------------------

Without 802.11

iDEN Cellular

Temperature range	Operating -20°C to +65°C Storage -40°C to +85°C
--------------------------	--

GSM/GPRS Cellular

Temperature range	Operating -20°C to +65°C Storage -40°C to +85°C
--------------------------	--

EvDO & 1xRTT CDMA Cellular

Temperature range	Operating -20°C to +65°C Storage -40°C to +85°C
--------------------------	--

With 802.11

Temperature range	Operating 0 to +60°C Storage -20°C to +70°C
--------------------------	--

802.11b,g

Network Architecture	Support ad-hoc, peer-to-peer networks and infrastructure communications to wired Ethernet and Cellular networks
Roaming	IEEE802.11b,g compliant (b only for USB internal option, CF option is b,g compliant)
Security	64/128-bit WEP / WPA data encryption

Ordering Information

ZyWAN-GPRS1000 The ZyWAN-GSM/GPRS is a GPRS Quad Band routing modem providing cellular connectivity to supported networks

ZyWAN-iDEN1000 The ZyWAN-iDEN is a Motorola iDEN based routing modem providing cellular connectivity to iDEN compliant networks

ZyWAN-EvDO1000 The ZyWAN-EvDO is an EvDO REV A, REV 0 and 1xRTT CDMA compliant routing modem providing cellular connectivity to compliant networks

ZyWAN-SDK The ZyWAN-SDK is a hardware and software Development Kit for the OEM and ASP (Application Service Provider) for a quick-to-market certified cellular solutions

Check our website for more details

©2008 Arcom

Specifications are subject to change and do not form part of any contract. All trademarks are recognized.