The **COM1000**[™] *Industrial Internet Appliance*[™] is a unique blend of Serial and TCP/IP network communications interfaces, IP networking protocols, digital and analog inputs, relays, and embedded applications - all combined to help serve many of today's unique and often

complex industrial networking & security challenges.

Designed by experienced telecommunications and network engineers, the COM1000 provides you with a single device that can be seamlessly integrated into LAN, WAN, and WIRELESS projects. Its embedded applications provide quick and easy means of connecting serial devices to IP networks, Internet enabling legacy devices, or integrating remote devices with today's advanced 3G wireless data networks.

And the COM1000 is ready-to-go. It's not a platform for development, nor does it require any special scripting language or programming tools to learn. This is a simple, rugged, ready-to-deploy network appliance. Just wire-it-up, set up the applications you want to use, and off you go. It's just that simple.

Integrated Internetworking Functions

The COM1000 provides the following networking functionality:

- TCP/TELNET access to RS-232 and RS-485 devices over a LAN or WIRELESS IP network
- LAN-to-WAN or LAN-to-WIRELESS connections via PPP over RS232 Modem port
- Support for Ethernet, Circuit-Switched Data, RAS, SMS, CDMA, 1XRTT, GSM and GPRS
- Dynamic DNS Updates for changes in LAN or Wireless IP Addresses
- Protocols: Ethernet, IP, UDP, TCP, NTP, PPP, HTTP, FTP, SMTP, Telnet, IMPP (Instant Message)
- RS232 to RS485 interchange/conversion and UDP PAD functionality for both port types

Embedded Applications

As a stand-alone device, the COM1000 can:

- Log Analog Values
- Count Contact Closures
- Trigger a RELAY based upon a timer
- Trigger a RELAY (NO/NC) upon a change in status of DIGITAL INPUTS (Contact Closures)
- Trigger a RELAY (NO/NC) upon a change in a high or low ANALOG VALUE (Set Points)

When connected to a LAN or PPP connection, the COM1000 can:

- Update DNS hostname tables to reflect change in IP Address (Dynamic DNS)
- Send email message on change in DIGITAL INPUT (Contact Closure) ANALOG VALUES (Set Point)
- Initiate Outbound UDP Packets or TCP Sessions based upon either of the above

When connected to a TERMINAL (RTU, PLC, or Logger) the COM1000 can also:

- Store serial data
- Trigger a RELAY based upon a serial data event or value
- Send UDP Packets or initiate TCP Sessions upon arrival of Serial Data Stream
- Send an email upon arrival of Serial Data Stream (Serial data can be included in message)
- Monitor serial data and initiate email, UDP or TCP when needed (Report By Exception)
- Change Icon/Send Message using Instant Messenger upon serial data event or value
- Provide Instant Messenger access interface to the serial device (Instant Message Device ServerTM)

Use it by itself ...

The fully integrated DIGITAL INPUTS, ANALOG INPUTS, and RELAY allow you to use one event to trigger another. Connect the ANALOG INPUT and RELAY, and you have a monitor that can start or stop off equipment. Connect a switch to one of the (4) DIGITAL INPUTS, or a bar-code reader or PIN pad to the RS232 input and you have a turnkey ALARM system or access control interface. Just use your imagination.

Use it on your LAN ...

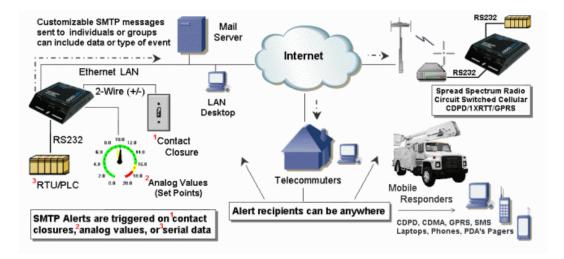
The COM1000 can initiate TCP sessions, wrap message or data streams in UDP packets, log events to a text file for transfer via FTP, or even directly send email or Instant Messenger (IM) alerts based upon changes in DIGITAL INPUTS, ANALOG VALUES, or SERIAL DATA STREAMS. Packets and email messages can either stay on your Local LAN or be sent over the Internet or wireless networks to remote servers or field personnel.

Connect your Serial devices ...

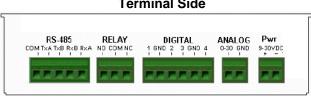
The COM1000 is both an RS232 and RS485 Device Server all in one - but not just or Telnet. You can connect your RTU, PLC, or Data Logger to the RS232 or RS485 ports and select from a number of data transport options, including: UDP, TCP, FTP, SMTP, Telnet, or Instant Messenger.

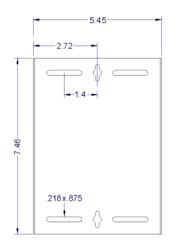
Use it in the field ...

The COM1000 can send serial DATA or ALARMS over ANY wireless network. Its' unique controls and intelligence can wirelessly enable any device on any network - Circuit-Switched Data, SMS, 3G, 802.11, spread-spectrum or even private radio. This capability lets you do all the things listed above over wireless. You now can send SMS or email ALARM messages based on DIGITAL or ANALOG alerts right to your phone or PDA. A complete wireless ALARM solution right at your fingertips!



Network Side ETHERNET Link Tx/Rx **TERMINAL** MODEM Tx/Rx (11) PWR Reset PPP **Terminal Side**





Specifications:

Configuration

Terminal / Telnet Interface AT Commands MS Windows® Utility

Protocols

Ethernet, IP, UDP, TCP, NTP, PPP, DNS, DDNS, ICMP, FTP, SMTP, HTTP, Telnet, IMPP, CS Data, SMS, 1XRTT, GPRS

Network Interfaces

(1) RJ45 10BaseT Ethernet PPP over RS232 DTE

Serial Interfaces

- (1) RS232 DB9F DCE (1) RS232 DB9M DTE
- (1) RS485 Terminal Block

Serial Port Specs

Baud: 300 - 115200 bps Parity: None, Odd, Even Stop Bits: 1, 2 Data Bits: 7, 8

Flow Control

Hardware RTS/CTS Software XON/XOFF

RS232 Port Signals TX, RX, GND, RTS, CTS, DSR, DTR, DCD

Real-Time Clock Yes; Synched via NTP

Physical Dimensions (H x W x D) 1.4" x 5.45" x 7.46"

Weight 1.3 lbs

Enclosure Material 18 GA CRS

Environmental

Operating Temp - 40° to +70° C

Humidity

5-95% Non-condensing

LEDs

Power (GRN) DCE Serial Tx/RX (GRN) DTE PPP Connect (GRN) RJ45 Link/Activity (GRN) RJ45 Collisions (RED)

Power Requirements 9-30VDC 300mA @12VDC

Part Number COM1000ETH

Rev: COM1000_040913

