

ETA Comm Technologies Inc. is a provider of physical layer one test automation solution, with the unique capability of pure copper connection. ETA Comm offers a comprehensive suite of products designed to provide customers with economical automated test solutions

Today's equipment testing whether in the R+D Lab, or on the production floor, continues to increase in complexity. Ask to do more testing with fewer resources, successful companies are automating their testing process. An automated test solution from ETA Comm offers the most cost effective answer.

ET-2600 switches may be grouped in sets of **up to four units with the group acting as a single switch**. User can interact with multiple switches using an optional multi-switch library. The choices are designed to give the most flexibility to the design of a user installation.

The ET-2600 is designated to be accessed by **multiple users** and will mediate between these users using a lightweight access control mechanisms that is designated user friendly. Although an individual user's resources will be monitored for activity and may be returned to the pool if that user is inactive for an extended period, there is also a safeguard "back door" that allows specified users to control the entire switch so that unused resources can be freed.

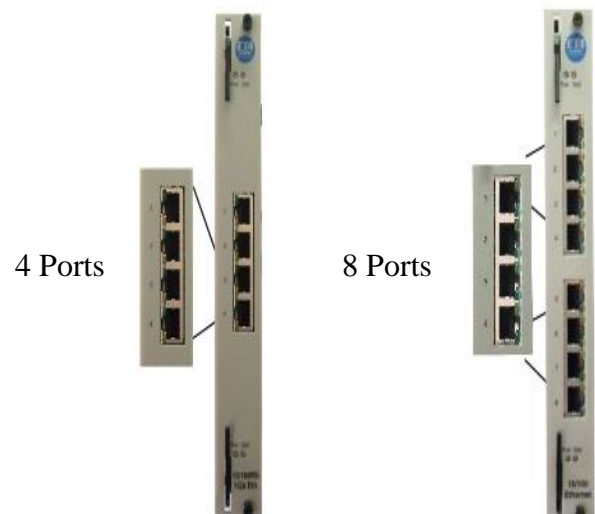
Options & Interface

- 10/100 Ethernet Card with (8) RJ-45 ports
- 10/100/1000 Ethernet POE Card with (4) RJ45 ports
- T1/E1/J1 Card with (8) RJ-45 ports
- POTS/xDSL Card with (8) RJ-45 ports
- POTS/xDSL Card with (1) RJ21 connector

ET-600 System
32 Ports Maximum



ET-2600 System
192 Ports +
Maximum 768 Ports



Environmental conditions

ET-2600 is designed for indoor use only. Environmental conditions must fall within the following specified ranges:

Operating Temperature: 5°C to 40°C

Operating Altitude: up to 2000 m

Relative Humidity: up to 80% for temperatures up to 31°C, decreasing linearly to 50% at 40°C

Pollution: Pollution Degree 2 in accordance with IEC 664

Transient Overvoltages: Transient overvoltages according to Installation Category II (up to 1500V surge)

In addition, supply voltage fluctuations are not to exceed +/- 10% of the nominal voltage.

Note that the chassis is grounded via 115VAC / 230VAC connector ground pin. No additional Grounding is needed.

The internal power supply will operate on any input voltage from 90 to 250 VAC, 47-63 Hz, At a maximum of 6.3 amps. Please note that while there is an internal fuse protecting the internal Power supply, the fuse is not user accessible.

Serial Cable and 10/1000 Ethernet Connection

The CPU Card must be connected to the CTL Card with a serial cable “9 pin”

Picture below “Figure 3”

The Control Card uses an FPGA to send commands to the other cards thru the LVDS backplane bus. There is no CPU on the Control Card. The firmware for the FPGA is stored in one EEPROM, While other information such as the MAC address and IP address are stored in a second EEPROM. The Connect_ET Server application makes decisions and provides all the data needed by the FPGA To set up connections.

The CPU card is connected to the controller card using the supplied serial card. If for any reason a User cannot find this card on the network then they can also use this serial port to access the card. The connection to the computer acting as a terminal is made using a null modem cable and the port Is set to 115200 Baud, 8 data bits, 1 stop bit and no parity. The login shell is started when the system Starts and fails to find a controller card so the system has to be rebooted to use the serial port shell. After the usual Linux startup information the user will get the login request. Once in the shell they Can use the *vi* editor to change settings such as the hostname and network port configuration. The Base operating system is standard Linux 2.4 so configurations can be easily adjusted by persons Familiar with Linux configuration, however users will find it a lot more convenient to access the Shell across the network using *ssh*.

Internal web server

Once contact with the card is established then the internal web server can be used to configure the card, upgrade its firmware and setup and tear down connections. The card can be accessed with Utilities such as *ssh* and *scp*, however it is strongly recommended that users not interfere with the Internals unless they are experienced and (preferably) are in communication with ETA-Comm Representative. The file system is carried on a Compact Flash memory so damaging the file system will not cause irreparable damage to the card but even so restoring the system will inconvenience. Applications interact with the switch using ONC-RPC through a small shim library on the applications host.

Linux users

Linux users will usually have ONC-RPC support installed with their distribution since it is also used by other common services such as NFS. Therefore, they only need the *etacom.a* static library for applications support or the *etacom_tcl.so* shared library for TCL support.

Windows users

Windows users usually need ONC-RPC support so they will need to put *oncrpc.lib* in their Windows system or system32 directory. This is an open source package, If you need the source for this and are unable to find it on the Internet then ETA Comm can supply it. The Windows libraries are *etacom.lib* for applications linkage and *etacomm_tcl.dll* for TCL support.

ETA Comm supplies sample applications that, along with the documentation, demonstrate how applications use the interface. The TCL/Tk application – *testpanel.tcl* – can be used as a simple remote user interface ‘as is’. This application was primarily test and designed to work with TCL revision 8.4 or newer, it may however work with earlier versions as well.

General Specifications:

- ET-600 Number of cards 4
- ET-2600 number of cards 24
- Up to 192 ports, T1/E1, 10/100Ethernet, POTS/DSL
- Up to 96 ports, 10/100/1000 Gigabit Ethernet, Power Over Ethernet card
- Protocol, LVDS Commands

CPU Card & Controls

- RJ-45 connector 10/100/1000 Ethernet
- Web-browser

Serial Interface

- DB9 serial connector
- Rate 115 baud
- 8 data bits, no parity, 1 stop bit, no flow control
- Maximum cable length 15 meters

Technology

- Matrix Switching
- Relay Technology
- Relay Life expectancy 1 million connections +
- 48 VDC

Management Interface Port

- RJ-45 connector 10/100/1000 Ethernet
- Protocol, TCP/IP
- DB9 serial port

Weight

- ET-600, 4 cards system 17.8 Lbs. “without cards”
- ET-2600, 24 cards system 43.4 Lbs “without cards”

Dimensions

- 8.5”W x 14.3”D x 10.5”F
- 17.4”W x 14.8”D x 21”F

Software

- Build in Web browser server Rev. 16
- CLI Command Library
- ETA Comm static library
- TCL Support

Agency Approvals

- UL, FCC Class A, CE