

EM203A Ethernet Module

Introduction

The **EM203A** is a member of our [X20X](#) family of modules. The module is a dual-use device: depending on the loaded firmware it can work as a fixed-function, ready-to-run serial-to-Ethernet converter or as a BASIC-programmable controller*.

As a serial-to-Ethernet converter, the EM203A allows you to quickly network-enable practically any serial device.

As a BASIC-programmable controller, the EM203A offers a low-cost, rapid development alternative to expensive and complex computing platforms, such as Linux-based boards.

The EM203A works with any suitable magnetics front-end, such as the YCL-PTC1111-01G RJ45 connector with integrated magnetics.



Hardware Features

- Compact dimensions: **30.1x18.1x12.5mm**.
- Power consumption: 230mA@5VDC.
- 100BaseT Ethernet port (no magnetics).
- TTL serial port (TX,RX,RTS,CTS,DTR,DSR).
- Four onboard status LEDs.
- Firmware is upgradeable through the serial port or network.
- EM203A_RJ203A-SK Starter Kit available.
- CE- and FCC-approved.

Serial-to-Ethernet Converter Features

- Full/half-duplex serial port modes**.
- 8KB data buffers (one in each direction).
- All serial port lines can be used as remotely controlled I/O.
- Onboard EEPROM stores user-configurable parameters (settings).
- Setup through the serial port or network (UDP commands or Telnet session).
- Over-the-network IP address configuration.
- "On-the-fly" serial port control commands.
- Serial-side commands to control network connections.
- Direct control of ADSL modems.
- Supported network protocols include UDP, TCP, ARP, ICMP (PING), DHCP, PPPoE, and LCP.
- Supplied with the [Device Server Toolkit \(DST\)](#) for *Windows*. The DST includes [Virtual Serial Port Driver \(VSPD\)](#), a.k.a. "COM redirector". A [Linux version](#) of the VSPD is also available.

BASIC-programmable Controller Features

- Executes **your** Tibbo BASIC application.
- **Absolute flexibility** - think of your device as a miniature computing platform.
- Supplied with [TIDE](#) (Tibbo IDE) featuring built-in debugger.
- Integrated web server supports dynamic content generation.
- Numerous high-level objects speed up and simplify coding. Available objects include:
 - **Sock**- up to 16 simultaneous TCP or UDP connections;
 - **Ser**- UART communications;
 - **Io**- control serial port lines;
 - **Stor**- read to and write from the EEPROM;
 - **Romfile**- add static (ROM) data to your project;
 - And [more...](#)

** Please specify EM203A-xP on your order if you wish to receive the EM203A in BASIC-programmable controller configuration.*

*** Full-duplex mode is suitable for RS232 and RS422 comms., half-duplex mode- for RS485 comms.*

*Note - This product is currently unavailable in the UNITED STATES.
You are not authorized to re-export the EM203A and the RJ203A to the UNITED STATES.*

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