

### Introduction

The EM100 is Tibbo's original **10BaseT Ethernet-to-serial Module** for onboard installation. The EM100 is highly integrated and requires only one external component- RJ45 Ethernet connector. The EM100 has the lowest power consumption of all Ethernet Modules offered by Tibbo. Economical pricing makes the Module an ideal choice for low-cost applications.



### Features

- Compact, dimensions only 46x28x13mm
- Low power consumption: **40mA@5VDC**
- Fully sealed design
- One 10BaseT Ethernet port with **built-in Ethernet magnetics**
- One serial (TTL) port with full- or half-duplex operation\*; baudrates of up to 115200bps; 5 parity modes (none, even, odd, mark, space); 7 or 8 data bits; optional RTS/CTS flow control
- Serial port includes RTS, CTS, DTR, DSR and two additional lines; all lines can be used as remotely controlled I/O
- Four LED lines\*\* provide Module status information
- Two internal 510-byte routing buffers
- Onboard EEPROM stores numerous user-definable functioning parameters (Setting)
- Supported network protocols include UDP, TCP, ARP, ICMP (PING) and DHCP
- Module setup can be performed through the serial port or network (over-the-network IP-address configuration is also supported)
- Specialized "on-the-fly" commands for serial port control, "modem" commands to control network connections, status commands for remote status monitoring, etc.
- Internal firmware is upgradeable through the serial port or network
- Supplied with Device Server Toolkit (DST) for *Windows*, including Virtual Serial Port Driver (VSPD) (COM redirector)
- LINUX version of the VSPD is also available
- Works with TIBBO.NET
- EM100-SK Starter Kit available
- CE- and FCC-approved

\* Full-duplex mode is suitable for RS232 and RS422 comms., half-duplex mode- for RS485 comms. RS232/422/485 transceivers are **not** built in

\*\* LEDs must be connected externally