SE-100M

Embedded Serial-to-Ethernet Module with nine digital I/Os

- ☑ Adds Ethernet connectivity for RS-232/422/485 devices
- ☑ 10/100Mbps Ethernet; 38,400bps serial data rate
- ☑ Supports TCP/Server, TCP/Client and UDP mode
- ☑ Provides six TTL-level programmable digital I/Os
- ☑ Provides three CMOS-level programmable digital I/Os
- ☑ Web/Telnet/Serial consoles for device configuration
- ☑ Windows utility included for device management
- ☑ Firmware upgradeable

Introduction

The SE-100M is a mini-mighty Serial-to-Ethernet embedded module which adds network function for legacy RS-232/422/485 devices.

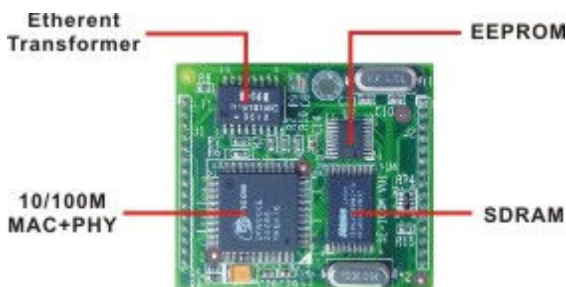### ☒ Serial-to-Ethernet Data Conversion

The SE-100M provides a transparent data channel between serial device and the TCP/IP network, so that the serial device can be accessed by using standard TCP/IP protocols.

☒ Versatile Operation Modes

The SE-100M can behave as a TCP server, a TCP client or an UDP node on a Ethernet network to fulfill versatile application requirements.

☒ Programmable Digital I/O

Besides, the SE-100M also provides 6 TTL plus 3 CMOS digital I/Os. A pre-defined ASCII command set is provided for users to control these I/Os through LAN/WAN.

Etherent Transformer

EEPROM

10/100M MAC+PHY

SDRAM

Specifications

Form Factor

- ▷ Type: 30-pin dual-inline drop-in module
- ▷ Pitch: 2.00mm
- ▷ WxLxH: 40x45x13mm

Network Interface

- ▷ Type: 10/100BaseT, auto-detect
- ▷ Protocols: TCP, UDP, HTTP, Telnet, IP, ICMP, ARP
- ▷ IP addressing: DHCP, Static IP

Operation Modes

- ▷ TCP/Server, TCP/Client and UDP mode

Serial Interface (TTL-level)

- ▷ Signals: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
- ▷ Baud: 1,200 to 38,400 bps
- ▷ Parity: None, Even, Odd
- ▷ Data bits: 7,8
- ▷ Stop bit: 1,2
- ▷ Flow control: None, RTS/CTS, XON/OFF

Programmable Digital I/O

- ▷ PIO0~PIO5: TTL level compatible
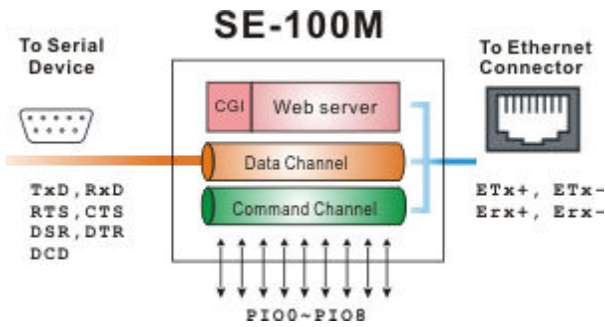- ▷ PIO6~PIO8: CMOS level compatible

Configuration Methods

- ▷ Web console, Telnet Console and Serial Console
- ▷ Windows utility (included in CD)

General

- ▷ Power input: 5VDC
- ▷ Power consumption: 100mA@+5VDC
- ▷ Operation temp.: 0~70C, 5~95% RH
- ▷ Storage temp.: -20~85C, 5~95% RH
- ▷ Regulation: CE/FCC compliant
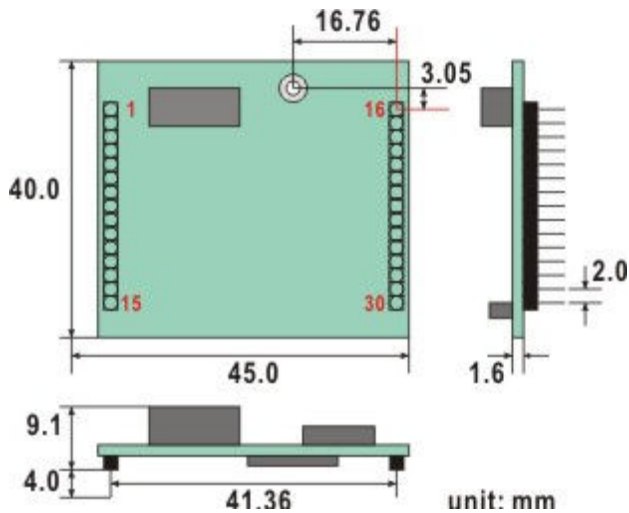- ▷ Warranty: 2 years

Block Diagram

Pin Assignment

ETx+	1		16	RxD
ETx-	2		17	TxD
ERx+	3		18	RTS
ERx-	4		19	CTS
Link/Act	5		20	DCD
PIO0	6		21	DSR
PIO1	7		22	DTR
PIO2	8		23	PIO4
PIO3	9		24	PIO5
Reset	10		25	PIO6
Ready	11		26	PIO7
SW1	12		27	PIO8
SW2	13		28	NC
GND	14		29	NC
+5V	15		30	GND

Dimensions

Ordering Information

☒ **SE-100M**

Serial-to-Ethernet Embedded Module with nine GPIOs

☒ **SE-100M-EV**

Evaluation Kit for SE-100M, including one SE-100M module, one carrier board , one power adapter and one SDK CD-ROM.