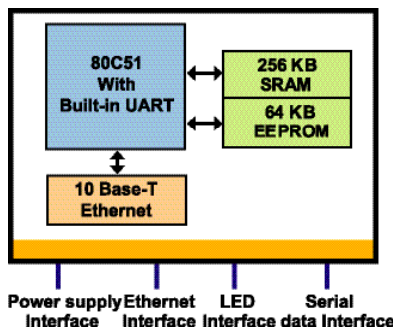


# Embedded Device Server with built-in UART, NEMO10



## Features

- Single-chip DIL type network enabler for on-board installation
- Compact size, 45mm x 45mm x 18.5mm
- Built-in UART for device interface, data transfer rate up to 115Kbps
- Supports 10Base-T Ethernet interface
- Supports ARP, IP/ICMP, TCP, Telnet, DHCP and Management by Telnet or console port or HelloDevice Manager
- +5V input, 0.3W low power consumption



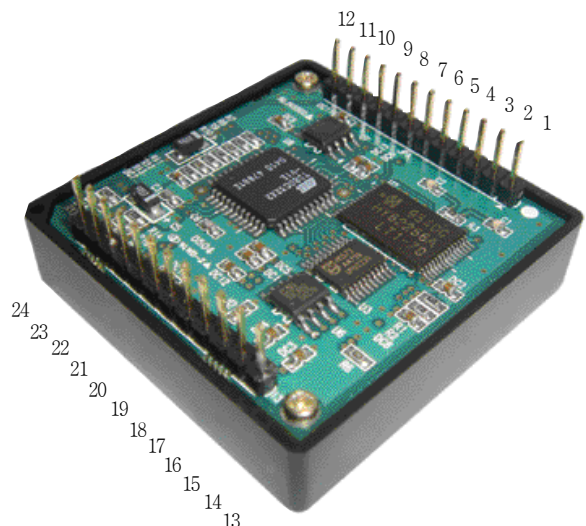
The **NEMO10** is a cost-effective and easy-to-use single-chip network enabler module for system integrators and manufacturers who need a way to rapidly make their devices network-ready at a minimal transition cost. The NEMO10 is designed for integration into user devices by on-board installation. On one end, the NEMO10 is connected to the device via built-in UART interface. On the other end, it is connected to the Ethernet RJ45 connector on the board. Within the single-chip DIL package, the NEMO10 has its own TCP/IP-Ready microprocessor, UART for serial interface and built-in 10Base-T Ethernet controller that handle the entire communication between devices over Ethernet.

Bundled with Serial/IP, COM Port redirector from Tactical Software, the NEMO10 supports reliable serial-TCP communication with users' devices for existing users' serial applications. The Windows-based configuration software, HelloDevice Manager, simplifies initial installation and management.

## Dimensions and Pin Assignment Information

Pin No.	Description
1	GND
2	Reset
3	LED (Ethernet Tx)
4	LED (Ethernet Rx)
5	LED (Ethernet Link/Collision)
6	Ethernet Tx-
7	Ethernet Tx+
8	Ethernet Rx+
9	Ethernet Rx-
10	Vcc
11	LED (Ready)
12	LED (Ethernet Act)

Pin No.	Description
13	Vcc
14	Console/Data switch
15	Serial DSR
16	Serial CTS
17	Serial DTR
18	Serial RTS
19	Serial Rx
20	Serial Tx
21	Factory Reset switch
22	GND
23	LED (Serial Tx)
24	LED (Serial Rx)



(45mm x 45mm x 18.5mm, 24 pin DIL package, 2.54 mm pitch)

# Embedded Device Server with built-in UART, NEMO10

## Specifications

### Hardware

- \* 8-bit microprocessor,
- \* 32KB SRAM, 64KB EEPROM

### External Interface pins

- \* 24-pin Dual In Line Interface for UART, Ethernet, LED and Power

### Serial Interface

- \* Built-in UART
- \* Serial speeds 1200bps to 115Kbps
- \* Flow Control: Hardware RTS/CTS
- \* Signals: Rx, Tx, RTS, CTS, DTR,
- \* DSR, GND
- \* Parameters:
  - Parity: None, Even, Odd,
  - Data Bits: 7, 8,
  - Stop Bits: 1, 2

### Network Interfaces

- \* 10 Base-T Ethernet
- \* Supports static and
- \* dynamic IP address

### Protocols

- \* ARP, IP/ICMP, TCP server and client, Telnet, DHCP client

### Security

- \* Password-protection

### Management

- \* Telnet or HelloDevice™ Manager or Serial Console

### Power

- \* 5V DC  $\pm$  10%, 60mA@5VDC

### Environmental

- \* Operating temperature: 0 ~ 50 C
- \* Storage temperature: -20 ~ 66 C
- \* Humidity: 90% Non-condensing

### Physical properties

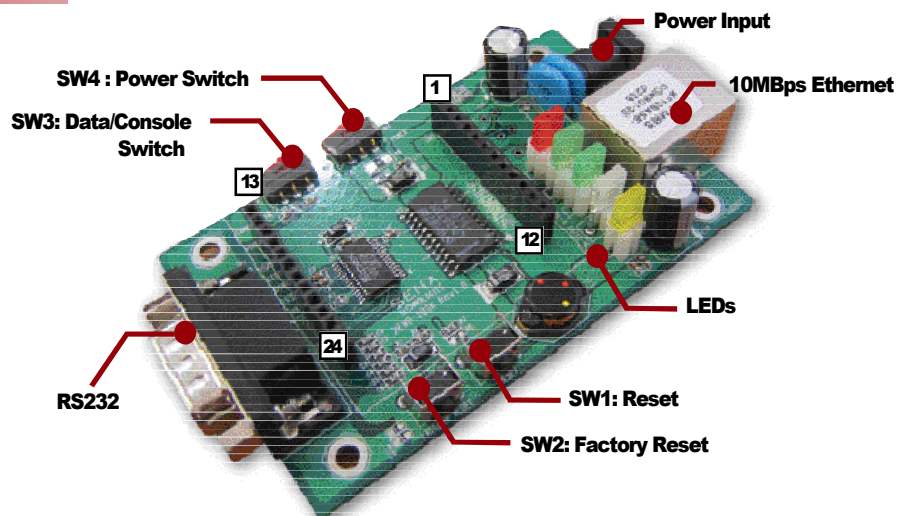
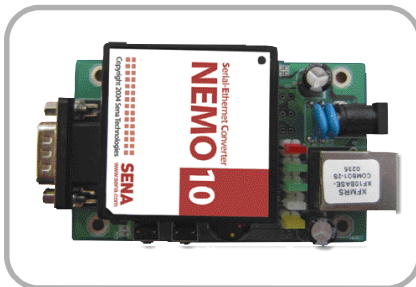
- \* Dimension (L x W x H) 45 x 45 x 18.5 (mm) 1.8 x 1.8 x 0.7 (in.)
- \* Weight: 20g

### Warranty

- \* 1-year limited warranty

## NEMO10 Starter Kit

The NEMO10 Starter Kit includes the evaluation board with the sample circuitry for the NEMO10 interface, power, Ethernet, LED, switches for user device development.



## Ordering Information

**NEMO10** Nemo 10Base-T serial device server module

**NEMO10-SK** Starter kit for the NEMO10

### Includes:

- NEMO10 module
- Demo board
- External 110V or 230V power supply
- Serial console/data cable
- CD-ROM

For more information, please visit us at <http://www.sena.com>

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