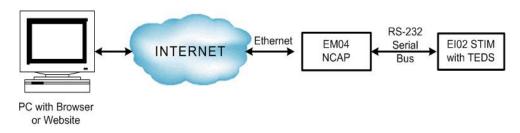
## Esensors



## **IEEE p1451.2 Prototyping Kit** (Internet Version)

## Introduction

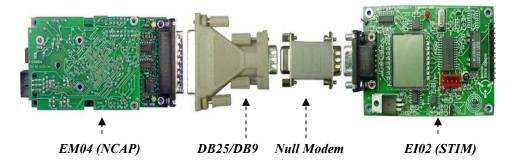
The IEEE 14541.2 (Dot 2) smart transducer interface standard is being revised by a working group and is expected to utilize the standard RS232 and RS485 serial buses as the main options (replacing the TII). Also the Transducer Electronic Data Sheet (TEDS) format is being changed. The prototyping kit consists of an Internet compatible Network Capable Application Processor (NCAP) and a Smart Transducer Interface Module (STIM) which can be reprogrammed to suit various applications. It is intended for engineers who are considering future Dot 2 application.



## Description

The **EM04** interface exchanges digital data between an RS232 serial bus and the Internet through Ethernet. Using TCP/IP format, commands from a website (browser) are sent to the EM04 NCAP which converts the commands to standard IEEE1451.2 format and retransmits them to a STIM through the serial port. Received sensor digital data from the STIM is reformatted within the NCAP (h-command set) and sent through the Internet, via Ethernet, back to the originating website. The NCAP supports several forms of the Transducer Electronic Data Sheet (TEDS).

The **EI02** is a prototype STIM with three inputs and two outputs. The input consists of two sensors (Photodiode and Hall Effect) and an analog input. The outputs consist of a relay output and a D/A voltage output. A standard RS232 serial connection is used with power provided over the 9-pin sub D connector. An internal PIC16F873 microcontroller can be reprogrammed by the user. Source code (PIC C) is provided but because the standard is not finalized, the data formats and TEDS are provisional and subject to change.



Price **Dot2 Kit (Internet Version)** -- Available at \$800

To order, or for further information -- Contact designer@eesensors.com