The Model 400B76 TEDS (Transducer Electronic Data Sheet) Sensor Interface Kit offers the capability to communicate with TEDS sensors over a USB port of a Windows® PC. With an intuitive graphical interface to the data in a TEDS sensor, the 400B76 reads TEDS from, and writes TEDS to, sensors with a single mouse click. Model 400B76 supports more TEDS templates than any other previously available TEDS sensor interface kit and also supports three commonly used memory chips: DS2430A, DS2431 and DS2433. Providing all of the hardware and software required to interface with TEDS sensors, the Model 400B76 kit supports IEEE 1451.4™ templates, LMS International templates, and manufacturer defined templates. Principle types of transducers supported are accelerometers, microphones, charge amplifiers, microphone preamplifiers and bridge sensors. A triaxial adapter (optional) is available for direct interface with triaxial accelerometers with one mouse-click.

Features:

- Allows updating of sensor calibration data
- Supports IEEE P1451.4™ (Version 0.9) and IEEE 1451.4™ (Version 1.0) templates
- Enables communication (both read and write) to TEDS Sensors from a Windows® PC
- Supports more TEDS templates than any other available interface
- Flexible data decoding engine allows support of new TEDS templates by simply copying files
- Allows conversion of accelerometer and microphone templates from version 0.9 to version 1.0
- USB powered, plug and play
- Triaxial accelerometer support
Model 400B76 simplifies communication with different sensors from different manufacturers by supporting a broad selection of templates in a single software interface. The 400B76 also supports three commonly used memory chips: DS2430A, DS2431 and DS2433. Designed to use the typical USB type interface available on most PC’s today, the 400B76 includes all necessary components to plug a TEDS sensor into a PC and both read and write TEDS.

TEDS Templates Supported

IEEE ICP® Accelerometer Templates
0 – Basic Accelerometer (v0.9)
1 – Accelerometer with Transfer Function (v0.9)
2 – Accelerometer with 2 gains (v0.9)
3 – Accelerometer with 2 gains and Transfer Function (v0.9)
4 – Charge Amplifier (v0.9)
5 – Charge Amplifier with Accelerometer (v0.9)
6 – Charge Amplifier with 2 gains (v0.9)
25 – Accelerometer and Force Transducer with and without Transfer Function (v1.0)
26 – Charge Amplifier with and without Accelerometer (v1.0)

IEEE Bridge Sensor Templates
33 – Load cells, Torque Transducers, etc. (v1.0)

Manufacturer Templates
0 – PCB Pressure Sensor (v0.9)
1 – PCB Impulse Hammer (v0.9)
0 – The Modal Shop Force Sensor (v0.9)

IEEE Microphone Templates
12 – Microphone with Integrated Preamplifier (v0.9)
13 – Microphone with Integrated Preamplifier and Transfer Function (v0.9)
14 – Microphone with Integrated Preamplifier and 2 gains (v0.9)
15 – Microphone with Integrated Preamplifier, 2 gains, and Transfer Function (v0.9)
16 – Microphone Preamplifier (v0.9)
17 – Microphone Preamplifier and Microphone (v0.9)
18 – Microphone Preamplifier with 2 gains (v0.9)
20 – Microphone Preamplifier with 2 gains and Transfer Function (v0.9)
22 – Microphone Preamplifier with 2 gains and Transfer Function (v0.9)
27 – Microphone with Built-In Preamplifier, no gain, with or without Transfer Function (v1.0)
28 – Microphone Preamplifier with or without Microphone (v1.0)

LMS International Accelerometer Templates
117 – LMS Free Format
118 – LMS Geometry Format – Aerospace Resolution
118 – LMS Geometry Format – Automotive Resolution

OEM Licensing Available

The broad support of the above templates in the 400B76 is made possible by the KTEDS-005 software libraries. TMS supports the widest range of TEDS templates in any currently available TEDS encoding/decoding engine.

KTEDS-005 is already the default TEDS library for supporting hardware interfaces from PCB Piezotronics and The Modal Shop. This same engine can be used in your design. Contact us today for more information on licensing this capability for your own hardware platform.

Related Products

• PCB’s Full Line of TEDS Accelerometers & Microphones
  PCB’s tradition in leading the multi-channel test & measurement market continues with a full line of TEDS sensors.

• Model 070A70 (BNC) / 070A71 (10-32) In-line TEDS Module
  Allows use of TEDS technology on non-TEDS legacy sensors.