FUTEK
ADVANCED SENSOR TECHNOLOGY, INC.

Quick Start Guide

TEDS

Transducer Electronic Data Sheet

Sensor Solutions Source
Load · Torque · Pressure · Multi Axis · Calibration · Instruments · Software

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What is TEDS?

TEDS stands for **Transducer Electronic Data Sheet**. It is an EEPROM device embedded in the sensor or sensor's connector that contains calibration information such as serial number, calibration dates, and other calibration factors.

TEDS was introduced as IEEE P1451.4 in 1997 and established the concept of "smart transducers." These chips store important calibration data that facilitate communications between sensors and their instruments, greatly reducing the calibration and setup work that the user must perform.

It is a convenient technology that allows users to bypass the tedious process of calibrating a sensor with an instrument. This avoids potential confusion, saves time and energy, and makes the sensor a true "plug and play" experience.

ADVANTAGES OF A SYSTEM WITH TEDS

- TEDS streamlines the setup of a sensor with an instrument by allowing you to bypass complicated calibration steps. This gives you a ready-to-go, plug-and-play system and greatly diminishes the opportunity for scaling & calibration errors.
- TEDS facilitates multiple sensors for one instrument, making it cost effective, easy to troubleshoot, and simple to operate.

FUTEK Sensors and Solutions that are compatible with TEDS

SENSORS	
TYPE[1]	**EXAMPLES**
Load	Pancake; S-Beam; Load Buttons; Load Washers; Threaded Rod, Donut Load Cell
Torque	Reaction and Rotary Torque; Socket Extension Torque
Pressure	Miniature; Male/Female Port

SOLUTIONS	
TYPE	**EXAMPLES**
Displays	Digital Panel Mount; Hand Held.
SENSIT	Test and Measurement Software

[1] FUTEK TEDS supports mV/V and Voltage Templates 30 and 33.

How is TEDS Implemented?

SENSORS

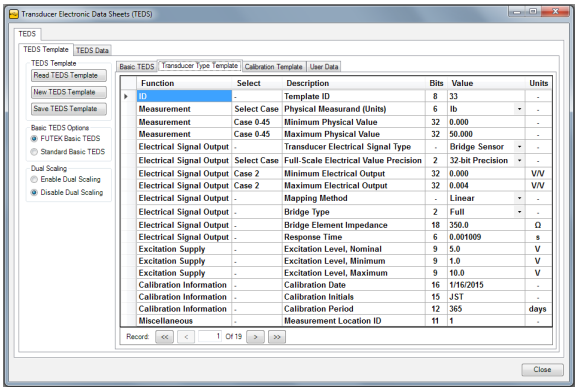
A single TEDS chip is embedded within the sensor's connector, such as DB9 or 12-Pin Binder.

Alternatively, the chip is embedded within the sensor body.

INSTRUMENTS

FUTEK displays such as the IPM650 (Intelligent Panel Mount Display) and IHH500 (Intelligent Hand Held Display) are equipped with TEDS during manufacturing, so there is no need for modification. IPM650 and IHH500 can read TEDS data upon startup or by loading it through the menu. Additionally, TEDS data will automatically create a custom channel that is programmed specifically for your sensor, allowing for easy and immediate use.

How is TEDS Implemented?



SENSIT SOFTWARE

SENSIT users have the ability to read and write TEDS information to their sensors by creating new templates. This allows users to edit the data on the TEDS chip if they should require a different setting.

Notes

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