

1451.4™

IEEE Standard for A Smart Transducer Interface for Sensors and Actuators—Mixed-Mode Communication Protocols and Transducer Electronic Data Sheet (TEDS) Formats

IEEE Instrumentation and Measurement Society

Sponsored by the
Technical Committee on Sensor Technology TC-9



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Abstract: This standard defines the protocol and interface that allows analog transducers to communicate digital information with an IEEE 1451 object. It also defines the format of the Transducer TEDS. The Transducer TEDS is based on the IEEE 1451.2™ TEDS. The standard does not specify the transducer design, signal conditioning, or the specific use of the TEDS.

Keywords: appended TEDS, basic TEDS, device configuration file, family code, IEEE 1451.4 interface, IEEE 1451.4 transducer, mixed-mode Interface (MMI), mixed-mode transducer (MMXD-CR), network capable application processor (NCAP), plug-and-play, smart transducer, TEDS, template, template ID, transducer electronic data sheet (TEDS), template description language, transparent protocol, template description language, tbom schema, transducer block

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