# The Logical Extension of the TEDS Standard

Label tab

Sensor cable

Memory chip
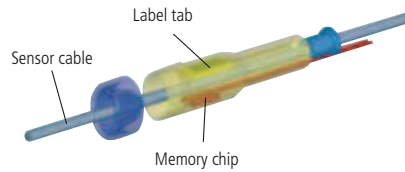
## imc Plug & Measure –
## Complex Configurations are Child's Play

The imc Plug & Measure technology is based on the Transducer Electronic Data Sheet (TEDS) concept set out in IEEE 1451.4. The digital storage of calibration and configuration information within the sensor fulfills the dream of quick and error-free test setup, even by novice users.

A TEDS sensor, or a conventional sensor equipped with a sensor recognition memory unit, contains a record of the sensor's data and the measurement device settings.

CRONOS PL reads this info and configures itself accordingly. Mislabeling channels, or mistyping calibration information becomes impossible, and incompatible measurement channel settings are recognized automatically. What could be simpler?

## Advantages and Applications

- Quick and error-free measurement configuration

- Reduction of routine work

- Recordable measurement channel recommendations (sampling rate, filter settings, etc.)

- Standardization of channel designations for sensors used

- Verification of calibration data and validity

- Quick and unambiguous traceability of calibration data, e.g. per ISO9000

- Monitoring of calibration intervals

- Measurement device-independent sensor administration

## Database Driven Sensor Administration

Administration of sensor information is supported by imcSensors, the sensor database for use with the imc Plug & Measure technology.

For the measurement system, in addition to the import of information from sensor with TEDS, parameter values can also be easily transferred from the sensor database with Drag & Drop simplicity.

In this way, TEDS information can be transferred via the imcDevices software from the sensor database to the sensor, or vice versa. For more complete sensor administration, the sensor database also supports barcode readers to track and identify transducers.

imcSensors makes the use and administration of many different sensors quick, easy and economical by the use of TEDS and imc Plug & Measure. With imcSensors it is possible to:

- Administer sensors from a central database

- Parameterize a CRONOS PL measurement channel

- Track the calibration status

- Inspect the specification sheet

imcSensors is an optional software expansion for imcDevices, although the TEDS capability of Plug & Measure is always available through imcDevices.

Especially appropriate is the CRONOS-PL's IEEE 1451.4 (TEDS) capable UNI-8 input amplifier. The all-purpose inputs of the UNI-8 allow the direct connection of a wide variety of sensors, fully exploiting the idea of "Plug & Measure".

| General | | In this group, proper |
|---|---|---|
| Model | 4356 | Model descriptor. A |
| Serial number | 0 | In general, the serial |
| Supplier | Watlow | Manufacturer's desig |
| Version | C1 | System version. Part |
| Sensor | | Group of the sensor' |
| Electrical max. | 0.05 | Electrical sensor out |
| Electrical min. | -0.006 | Electrical sensor out |
| Output impedance | 48.793 Ohm | Output impedance, i |
| Physical max. | 1300 | Maximum physical v |
| Physical min. | -273 | Minimum physical va |
| Sensor type | Thermocouple | The main sensor spe |
| Thermocouple | Type K: Ni-Cr / Ni | Non-linear character |
| Calibration | | This group contains |
| Calibrated on | | Calibration date. The |
| Calibration interval | 365 Days | Distance in time betv |
| Responsible: | | Name of entity respo |
| Construction | | All properties are list |
| Reaction time | 22 ms | Time interval for a n |
| Assembly | | In this group all prop |
| Measurement locatio... | 0 | An integer which ide |
| Internal administration | | Internal information |
| | | |
| Messages | | |
| Important note | | |
| Sensor (15357) | | The specified electrical input range ( -0.00645 not be set exactly. The channel's closest input |