

imc SENSORS

Sensor database implementing imc Plug & Measure technology Supports Smart Sensors with TEDS per IEEE P 1451.4

imc SENSORS is a ready-to-go, universal database application for administering and editing sensor information. The entries in the sensor's technical data sheet as well as its calibration values receive special treatment. Along with these values for smart sensors (TEDS) defined in IEEE P 1451.4, selections of additional sensor properties can be entered.

These can be set, edited and viewed in freely configurable tabular views.

When the sensor database is used with the Plug & Measure-capable imc measurement systems (imc CANSAS or imc CRONOS-PL/-SL/*compact/flex*), it is also possible to store a measurement amplifier channel's complete parameter data, plus the entire device parameters, along with the sensor data. For instance, if all-purpose measurement amplifiers of the type UNI8 are used, any sensor can be connected at each measurement channel, and the complete parameterization happens automatically. This significantly shortens the tooling time and ensures reproducible and defined sensor connections.

The purpose of imc SENSORS is to make sensor information quickly and comprehensively accessible and:

- to administer sensors in a central database,
- to parameterize measurement channels (e.g. in imc CANSAS or imc CRONOS-PL/-SL/*compact/flex*),
- to access the calibration history, and
- to inspect the spec sheet.

Order code: SENS-DB

Special advantages and applications

- Quick and error-free setting of measurement channels
- Reduction of routine tasks
- Records of suggested measurement channel parameter settings (sampling rate, filter settings etc.)
- Standardization of channel nomenclature of certain sensors used
- Verification of the calibration data and their validity
- Quick and reliable traceability of the calibration data per ISO9000
- Monitoring of calibration intervals
- Device-independent sensor administration

Functions

Functions	Description
Basic functions	<ul style="list-style-type: none"> • Recording of a sensor's spec sheet • Editing of a sensor's spec sheet • Filter for sensors and tabular view freely configurable • Search functions • Administration of sensors, actors and related devices • Over 200 standard properties • Parameterization for measurement channels of imc devices belonging to the groups: <ul style="list-style-type: none"> • imc CANSAS • Firmware group A (via firmware imc DEVICES) - e.g. CRONOS family, C-SERIES, SPARTAN
Extra functions	<ul style="list-style-type: none"> • History of a sensor • Trash bin (deleted sensors) • User-specific properties • Observance of IEEE P 1451.4 • Editing of non-linear characteristic curves • Treatment of special sensors with multiple outputs, e.g. triaxial accelerometers, strain gauge rosettes and more • Recognition of sensors by barcode • Report generation using MS Excel • Integrated on-line help

Interfaces

Interfaces	Description
Data storage	<ul style="list-style-type: none"> • xml-based history database • Local working with MS Access file • Connectable in the network to various database servers (e.g. Oracle, MS SQL Server or DB2) via ADO-drivers • Enables work in the network with database servers and uncoupling for a Notebook, for instance, in order to use on-board vehicles
Data exchange	<ul style="list-style-type: none"> • XML: file, storage • Import of virtual TEDS • Drag&drop to imc CANSAS and imc DEVICES/imc STUDIO for measurement channel configuration • Sensor data sheet packable for storage in an Eprom (TEDS) • imc Plug & Measure technology
Developers	<ul style="list-style-type: none"> • Sensor selection via ActiveX • COM library • Documented and open formats for xml-exchange and database

Compatibility

- imc DEVICES 2.5
- imc CANSAS 1.3 R28
- imc STUDIO 3.0 R4

System requirements

Supported operating systems	Minimum requirements for the PC
Windows 10*/11**	1 GB RAM
Windows 8 / 8.1	256 MB free hard disk drive (NTFS format)
Windows 7	

*released in conformance with the version of Windows 10 applicable at build date of imc software

**verified with Windows 11 22H2

Included in delivery

- Download with software in German and English
- Documentation in German and English (PDF)

Options and enhancements

- none

If you have problems or questions, please contact our Customer Support/Hotline:

imc Test & Measurement GmbH

Hotline (Germany): **+49 30 467090-26**

E-Mail: hotline@imc-tm.de

Internet: <https://www.imc-tm.com>

International partners

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