imc CANSAS

Software for the configuration of imc CANSAS modules
including COM libraries and LabVIEW VI

imc CANSAS allows configuration of the imc CANSAS series of modules. Modules then automatically perform the specified tasks upon application of a power supply, e.g. acquire analog data or output digital and analog variables. The entire functionality of the imc CANSAS modules is accessible from a single unified user interface.

Characteristics

- **Configuration** of measurement and output channels
- **CAN-Bus** configuration (Baud rate, identifiers)
- **Administration**: Support of all CANSAS modules and the administration of their settings in one database
- **Sensor database** (imc SENSORS): automatic parameterization by drag&drop
- **imc Plug & Measure**: measurement channels will be automatically parameterized if sensors with TEDS (electronic data sheet) are connected
- **Online data processing** of input and output channels (e.g. real time computation of filter, smoothing and decision functions) depending on module type
- **Display** of the current measurement values as simple table, for verification purposes
- **imc STUDIO** interface:
  integration of the configuration assistant into imc STUDIO
  use of a imc CRONOS device as CAN interface
  import of imc CANSAS configuration files (*.dbc)
- **synchronized data acquisition** across multiple modules: typically 10 µs, max 100 µs (depending on module type)
- **read back** of module configuration from a connected module
- "**Heartbeat**" message:
  Can be sent by the module at a specified time interval, containing status and configuration information for control and test rig applications.
- "**Guarding**": Output modules can be configured to enter a predefined state Whenever a regular guarding message fails to arrive (fail safe protection in test rig applications).
- "**Find me**" Command:
  Identification of a specific module on the bus. Selected modules can be identified by blinking of the LED.
- **Display of bus load**: expected bus load of each connected module (in % of nominal capacity depending on Baud rate)
- **Scaling** by means of two-point scaling
- Comprehensive **report** of all module settings
- **Reset-mode**: By simply applying the Reset-plug, even modules set to an unknown Baud rate can be accessed and configured.
- **Operation in a imc CANSAS rack**: recognition and indication of current slot
- **CANopen® compatible**: activation of the modules for an alternative mode with CANopen (depending on module type)
- **Language selection** using imc Language-Selector; supported: German, English, French, Japanese, Chinese, Taiwanese.

Interfaces

Configuration data exchange:

- XML-file, storage
- Export as CAN-database (.dbc)
- Export for import into imc STUDIO software (CAN-bus Assistant)
- Drag&drop to imc SENSORS

Application development:

- COM library including documentation and extensive templates and examples.
- LabVIEW™ VI

System requirements

Supported operating systems	Minimum requirements for the PC
Windows 10*/11*	1 GB RAM
Windows 8 / 8.1	100 MB free hard disk drive (NTFS format)

*released in conformance with the version of Windows 10/11 applicable at build date of imc software

Compatibility

- Operable as a stand-alone application
- imc SENSORS 1.3 R14 and higher
- imc STUDIO 5.0 R12 and higher

Supported interfaces between PC and CAN-Bus

Manufacturer		
KVASER	CAN/USB Adapter	
	Interface boards and modules - please consult vendor's documentation:	
	PCMCIA	LAPcan
Vector Informatik GmbH	Interface boards and modules:	
	PCMCIA	CANcardX, CANcardXL
	USB	CANcaseXL
	PCI	CANboardXL
	Parallelport	CANpari
	PXI	CANboardXL
DSPACE	Interface boards and modules - please consult vendor's documentation	
HORIBA	Interface boards and modules - please consult vendor's documentation	
IXXAT Automation GmbH	Interface boards and modules:	
	ISA-Interface	iPC-I320,
	PCI-Interface	iPC-I320, iPCI165, iPCI320
	Parallelport	CANDY
	PCMCIA	tinCAN
	USB	USB-to-CAN, USB-to-CAN II, USB-to-CAN compact, USB-to-CAN FD compact

Options and enhancements

- CANSAS configuration package (order code: CAN/USB-P; article number: 1050020):
  - KVASER CAN/USB adapter (supported by all 32 bit OS),
  - CANSAS-RESET plug,
  - power supply for a imc CANSAS module,
  - terminated CAN-Bus cable 2 m,
  - configuration software including COM libraries and LabVIEW™ VI for imc CANSAS
  - Getting started with imc CANSAS

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

For our international partners see https://www.imc-tm.com/distributors/.