ISMCore Software

Quick Setup Guide

METTLER TOLEDO

Introduction

Thank you for buying ISM Core™ software from METTLER TOLEDO.

ISM Core software allows you to fully leverage Intelligent Sensor Management (ISM®) technology in the workshop and for plant management. With ISM Core it is not only important tasks such as calibration and maintenance that are simplified and become more reliable; ISM Core also supports advanced sensor diagnostics, and documentation of all ISM sensor activities.

These features make ISM Core the perfect tool for use with ISM sensors to increase process analytics reliability.

Important Notes

ISM Core is self-explanatory software that supports and simplifies all maintenance and calibration procedures for pH, oxygen and CO_2 ISM sensors. With its animated and easy to understand procedures, only a minimum level of training is required for its operation. It should be easily usable for anyone that is familiar with process analytical instruments for pH, oxygen and CO_2 measurement.

Nevertheless, a proper understanding of the sensors and all related tasks is mandatory. Please refer to the respective sensor manuals for detailed information.

It is essential that personnel involved in the commissioning, operation or maintenance of these sensors, or of any associated equipment, are properly trained in all relevant processes as well as in the use and handling of the associated equipment. This includes having read and understood all instruction manuals for the sensors and accessories.

The manufacturer / supplier accepts no responsibility whatsoever for any damage resulting from improper use. The risk is borne entirely by the user / operator.

The plant operator must be fully aware of the potential risks and hazards attached to operation of the particular process or plant. The operator is responsible for correct training of the workforce, for signs and markings indicating sources of possible danger, and for the selection of appropriate instrumentation.

ISM Core, ISM, iLink, iMonitor, InPro and CalBox are trademarks of the METTLER TOLEDO Group.
All other trademarks are the property of their respective holders.

System Requirements

Minimum

- Industry standard PC, Intel Core / AMD Ryzen Processor or similar
- Microsoft Windows 10 or later
- 2 GB RAM
- 300 MB available hard disk space
- 1024 × 768 screen resolution or higher

Recommended

- Industry standard PC, Intel Core / AMD Ryzen Processor or similar
- Microsoft Windows 10 or later
- 4 GB RAM
- 500 MB available hard disk space
- 1280 × 1024 screen resolution or higher
- Microsoft DirectX compatible graphics board with 3D acceleration

ISM Core Versions

ISM Core is available in 3 versions. The versions and enabled features are shown below.
To use the preferred version, a license key of the preferred version needs to be purchased.

ISM Core™ Essential	ISM Core™ Advanced	ISM Core™ CFR
Sensor management essentials	Advanced sensor management	For pharmaceutical customers Compliance ready sensor management
• Guided sensor calibration • Guided sensor maintenance • Measurements • M100 Sensor mount transmitter configuration • InPro 6860i mA output configuration	**All ISM Core Essential features plus:** • Sensor diagnostics dashboard • Sensor database with all calibration / maintenance records • Export calibration and maintenance history in PDF / XLS • Sensor check • Application database	**All ISM Core Advanced features plus:** • CFR and Annex compliance ready user management • CFR and Annex compliance ready audit trail • CFR and Annex compliance ready electronic signature

License Keys

The license key can be ordered via a standard order process. You will receive a package with a license sheet, where you can find the license key of the preferred version.

Installation

Download the installation file from www.mt.com/ism-core. Run the installation file on the computer you want to install the ISM Core software and follow the on-screen instructions.

After the installation, you are allowed to try out the ISM Core Advanced or the ISM Core CFR versions for 90 days without having to activate the software with a license key. During the installation, you will be asked which version you would like to try.

Upgrade iSense to ISM Core

If you have iSense Two or iSense CFR (not iSense Light) installed on your computer, it is possible to upgrade iSense to ISM Core for free. The ISM Core installer detects the existing iSense version on the computer during the installation. After detection, it uninstalls iSense and installs ISM Core respectively.

If iSense Two was installed on your computer, the ISM Core installer will upgrade iSense Two to the ISM Core Advanced version. If iSense CFR is installed on your computer, the ISM Core installer will upgrade iSense CFR to ISM Core CFR.

After upgrading iSense to ISM Core, you can request an upgrade license code from www.mt.com/ism-core. You will receive an upgrade license code per e-mail for free. With this upgrade license code, you can activate your ISM Core software. Please read instructions how to activate in the Software Activation section.

It is not possible to activate the ISM Core software with an upgrade license code if iSense Two or iSense CFR was not detected on the installed computer during installation.

Attention

If you have iSense installed on your computer, please backup your database before the installation of ISM Core. The stored database can be imported later.

During installation of ISM Core, all older versions of iSense will be deleted automatically. This is necessary because of conflicts with drivers. To import a stored database, access the "Backup and Restore" sub-menu, choose the directory under which your stored database is located, and import it.

Software Activation

90 Days of Trial Phase
After installation, you will be in the trial period for ISM Core Advanced or ISM Core CFR versions (depending on what you have chosen) for 90 days. You are asked to activate the software with a license key within the 90 days trial period. If you activate the software with a valid license key, you will be able to use the activated version permanently. If you do not activate your software within the 90 days trial period of ISM Core Advanced or ISM Core CFR, the software will be downgraded to the ISM Core Essential version for further 90 days of trial. If the additional trial period of 90 days also expires for ISM Core Essential version, the software will ask for a license key and disable any functionality. The user will only be able to use the software further after providing a valid license key.

Activation Process
To activate the software, click on the "Trial" button Trial on the top or go to Settings Settings and click on License Manager. If you have internet connection, you can activate your software conveniently with the online activation process. If you have no internet access, you can complete the software activation with the offline activation process. Follow the on-screen instructions to complete the software activation process.

After starting the software you are automatically prompted to enter your workstation information.

Welcome to ISM Core

You have installed a new version of ISM Core on your computer.
You can complete your installation by:

1. Filling in your workstation information
2. Importing existing ISM Core sensor databases

☑ Remind me on next application start-up

| Now | Not now |

You can skip this step and enter the information at any time in the "Settings" menu.

General Screen Elements

① Logout: You can login/logout the user. The users and their rights can be defined in the "Settings" menu. The logged-in user's name is indicated.
             The default password for ADMIN login is "1989".

② Settings: Configure ISM Core according to your requirements.

③ Exit: Exit ISM Core software.

④ Database: View database entries.

⑤ App Database: Manage and personalize the ISM advanced diagnostic functions using the Application Database

⑥ Device Manager: Choose between multiple connected sensors. Access devices' status and settings.

Connecting a Sensor

Connect the iLink cable to the computer.

The iLink cable is automatically recognized.

! If you are using an older iLink cable it might be necessary to update the iLink firmware. Please follow the instructions under "Settings / Software and Device update".

If multiple sensors are connected, use the device manager to connect the selected sensor.

Connecting a Sensor using the iSense Dongle

The iSense dongle enables Bluetooth 4.0 low energy communication between ISM Core and M100 SM / J-Box devices.
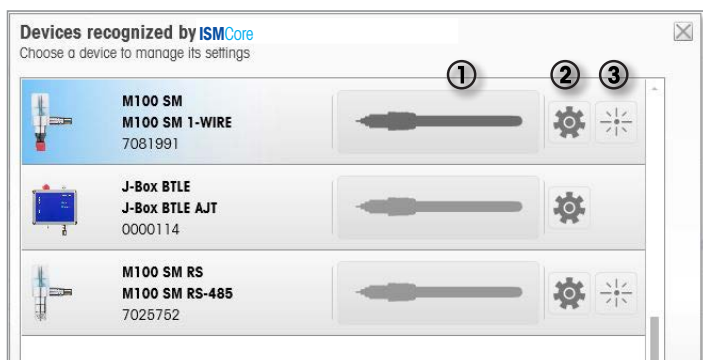
Open the device manager and wait until the detected devices are displayed. Click on the sensor button to connect to a sensor (1) or access the device configuration (2). The ping function (3) makes the LED of the selected M100 SM blink for a few seconds, and helps in identifying the device.

Screen Elements

All screens are parameter specific and you only see information that is relevant for the connected sensor.

The screens are organized in up to four levels, depending on the available functionality.

The most common three are:

① Main Menu: On the left side of the screen there are three buttons for iMonitor™ / ISM, Calibration & Maintenance, and Measurement & Configuration.

② Sub-Menu: For parameter specific sub levels there are four to five buttons, e.g. for ISM: iMonitor, Sensor Check, Details, and Information.

③ Functions: Clicking one of the above parameter specific buttons causes context specific functional buttons to appear.

In this Quick Setup Guide, the detailed functions are not explained as they should be self-explanatory for people who know the maintenance and calibration procedures for the corresponding sensors. This know-how is a prerequisite for safe operation of the sensors.

iMonitor – ISM

① ISM: Shows an overview of sensor diagnostics data such as the DLI, ACT, TTM and Calibration Data.

② Sensor Check: Starts automatic self-test procedures.

③ Details: Shows more detailed sensor diagnostics data. Autoclaving Cycles, CIP Cycles, SIP Cycles and Calibration data and more are available here. Remark: Whenever this symbol $\sim$ is visible on a value-tile, you can display all available historical data in a chart by clicking the symbol.

④ Information: To view or edit sensor specific information. The information entered in this tab will be saved in the sensor.

⑤ Calibration History: Enables the export of the sensor calibration history to PDF or Excel.

Calibration & Maintenance

! Be aware that the sub-menus are dependent on the type of sensor ISM Core is working with.
The example menu shown here is for pH sensors.

① Calibrate Sensor: Important! The change settings button accesses a menu where you can change important calibration parameters.

② Clean Sensor: After cleaning the sensor the TTM can be reset to the default value.

③ Refill Electrolyte: Only available if an InPro™ 2000i pH sensor is connected.

④ Deactivate Sensor: A worn out or defective sensor can be deactivated. If this is done the sensor can no longer be used on ISM Core or any transmitter.

Measurement & Configuration

① Measurement: Shows all important measurement values

② Configuration: Changes all sensor specific configurations and maximum values for counters.

Application Database

The Application Database allows you to fully leverage the advanced diagnostic abilities of ISM pH sensors.

The lifetime prediction algorithm (DLI) is constantly optimized while the sensor operates in a process and after each calibration on ISM Core. This knowledge can be transferred to new sensors using the App Database functions. The result is a sensor with an optimized DLI from the very first minute of operation and throughout the lifetime of each new sensor.
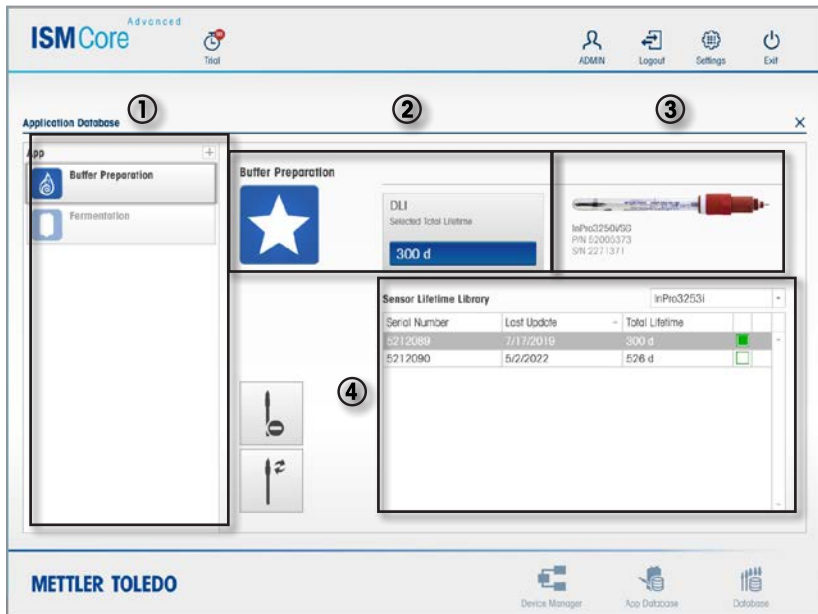
① List of existing Apps. Select an App to view and manage App information

② Selected App information

③ Connected sensor information

④ Sensor Lifetime Library: the sensors that have been already in the process appear in the Sensor Lifetime Library when added to an App. The knowledge from these sensors can be transferred to new sensors being assigned to the App.

① Create a new App for each application with different process conditions in your plant Personalize the Apps with different names and symbols.

② The DLI is different for each sensor type therefore the reference sensors are sorted per sensor type in the Sensor Lifetime Library.

③ The Total Lifetime of a reference sensor becomes the Total Lifetime of the App when selected. In the same way a new sensor will inherit information from the selected reference sensor when added to the App.

④ The action buttons allow you to assign/remove the connected sensor to the App. In detail:

• Assign to App (sensor coming from the process): the sensor's Total Lifetime and its knowledge of the process are saved in the Sensor Lifetime Library.
This function is also available during calibration

• Assign to App (new sensors): the Total Lifetime from the App (the selected reference sensor) is transferred to the new sensor. This function is also available during calibration

• Remove from App: deletes the sensor from the App. For new sensors it also resets the DLI to the default value

• Refresh SLL entry: updates the information stored on the connected sensor in the Sensor Lifetime Library (SLL). This function is also available during calibration.

License Ordering Information

Description	Order Number
License ISM Core Essential	30 846 306
License ISM Core Advanced	30 846 307
License ISM Core CFR	30 846 348

Adapters and Accessories

Description	Order Number
iLink Cables and Adapters	
iLink-1-wire cable	52 300 383
iLink-RS485 5-pin	52 300 399
iLink-RS485 VP	30 014 134
iLink Multi	30 130 631
AK9/1m/BNC-50	59 902 168
iLink Multi Cable/Set oDO (RS485)	30 355 582
ISM Core BT Dongle	30 371 387

Calibration Accessories	**Order Number**
CalBox™	52 300 400

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

For addresses of METTLER TOLEDO
Market Organizations please go to:
www.mt.com/pro-MOs

ISO 9001 certified · ISO 14001 certified

Management System
certified according to
ISO 9001 / ISO 14001

CE

www.mt.com/pro

```
*301386371*
```