INSITE 8.8.3 Release Notes

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1 Getting Started

1.1 Operating System Compatibility

Windows® 8.1 32-bit and 64-bit
Windows® 10 32-bit and 64-bit

NOTE: INSITE 8.8.3 is **not supported** on the following Operating Systems:

Windows® XP
Windows® Vista
Windows® 7
Windows® 7 Service Pack 1 (SP1) 32-bit and 64-bit (refer to 1.2)
Windows® 7 Starter Edition or Basic Edition
Windows® 8
Windows® 8.x RT Edition

Contact your local Cummins® Distributor to register your new INSITE Service Tool and obtain activation keys.

To locate your nearest distributor, please contact 1-800-CUMMINS.

1.2 Windows 7 Support Ended

As of January 2020, Microsoft's support has ended for Windows 7. Technical support for INSITE may no longer be fully available when using this operating system.

1.3 Windows 8.1 Support Ended

As of January 2023, Microsoft's support has ended for Windows 8.1. Technical support for INSITE may no longer be fully available when using this operating system.

1.4 Supported Languages

English
Chinese (Simplified)
Czech
Danish
Dutch
Finnish
French
German
Greek
Indonesian
Italian
Japanese
Korean
Norwegian
Polish
Portuguese
Romanian
Russian
Spanish
Swedish
Turkish

1.5 System Requirements

1.5.1 Recommended

COMPONENT	REQUIREMENTS
Operating System:	Windows 10 64-bit
Processor:	2.5 GHz or greater Quad Core (Intel or AMD)
RAM Memory:	8 GB
Hard Drive:	6 GB or greater available
Media Device:	Dual Layer - Double Density DVD-ROM (for use with INCAL DVDs)
Display Resolution:	1920 x 1080
Other Software:	Microsoft .NET Framework 4.7.1 or later
	Adobe Acrobat Reader v9.0 or later
Internet:	High-Speed Broadband
Available Ports:	2x USB 3.0

1.5.2 Minimum

COMPONENT	REQUIREMENT
Operating System:	Windows® 8.1 32-bit or 64-bit
Processor:	2 GHz or greater Dual-Core (Intel or AMD)
RAM Memory:	4 GB
Hard Drive:	4.5 GB available
Media Device:	DVD-ROM (for use with INCAL DVDs)
Display Resolution:	1024 x 768
Other Software:	Adobe Acrobat Reader v9.0 or later
	Microsoft .NET Framework 4.7.1 or later
Internet:	High-Speed Broadband
Available Ports:	2x USB 2.0

1.6 Operating System Requirements for Microsoft .NET Framework 4.7.1

1.6.1 General Information

Microsoft .NET Framework 4.7.1 is supported on Windows 8.1 and Windows 10.

Microsoft .NET Framework 4.7.1 is **not supported** on Windows 7 and Windows 8.

Please refer to the table below for operating system versions.

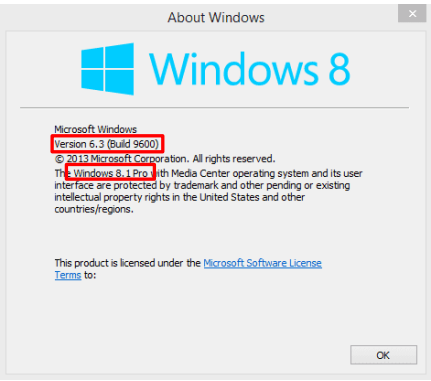
Operating System	Version	Build number
Windows 10	1607	10.0.14393
Windows 10	1703	10.0.15063
Windows 10	1709	10.0.16299
Windows 8.1	N/A	6.3.9600

Please use the link provided below for more information:
https://docs.microsoft.com/en-us/dotnet/framework/get-started/system-requirements

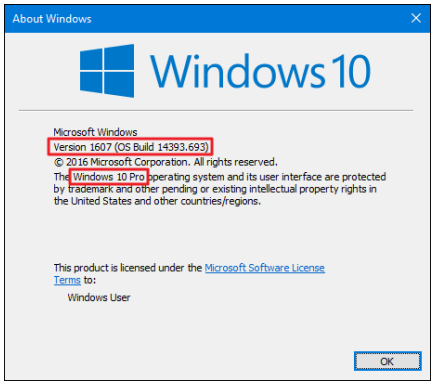
1.6.2 Locating Operating System Build

To locate the build details for the Operating System, please Press the **Windows Key + R** keys to open Run, type **winver**, then click/tap on **OK**. One of the following dialog boxes shown below should appear that will provide the Operating System version and build details.

Windows 8.1



Windows 10



1.7 Installation

Refer to the table below for the hard drive space required for the installation of INSITE 8.8.3. This is based on the assumption that the Operating System is installed on C:\

Hard Drive Space Requirements	
Upgrade (from 8.8.2)	2 GB

NOTE: It is highly recommended that you always reboot your PC after installing software.

2 Issues with INSITE 8.8.3

2.1 Connections

Error Messages for communication failures:

Error 5200: Indicates communication loss between computer and the datalink adapter.

Error 5201: Indicates communication loss between the datalink adapter and the ECM.

Error 5202: Indicates no communication could be established between the datalink adapter and the computer.

Error 5204: Indicates no communication could be established between the datalink adapter and the ECM.

If the “Auto Configure” and/or "Datalink Adapter Connection Test" do not find the adapter when connected, manually configure the Datalink adapter connection.

An Internet connection is required before selecting the following URL’s from the Help > About INSITE menu:

https://www.cummins.com/support/electronic-service-tools-support
https://www.cummins.com

2.2 Advanced ECM Data

If the display becomes distorted or cannot be completely viewed, close the Advanced ECM Data window and then reopen it. Resizing the window can cause the view to become distorted.

2.3 Calibrations

CAUTION: Please verify that the Calibration you select to download to an ECM is appropriate for that specific ECM. Permanent damage could occur if incorrect calibrations are used.

Automotive applications will have a default setting of "ON" for the Save and Restore option in the Calibration Download dialog.

Industrial applications will have a Default Setting of "OFF" for the Save and Restore option in the Calibration Download dialog.

When performing a Calibration Download, the "Save and Restore" option may be grayed out for some applications.

To decrease calibration download times, please insure that all applications other than INSITE are closed. Always use the J1939 protocol and engine connector when available.

Computers with less than the minimum recommended hardware requirements will have an extended Calibration Download time. *Screen savers and suspend modes should be disabled.*

Autodetect will not initially work for ISM, Signature/ISX, QST30

Work Around for Autodetect: Download ECM calibration using ECM Code calibration to ECM. Autodetect should function correctly after calibration transfer is completed.

When using the June 2019 or older INCAL DVDs, calibrations will not show up for ISM, Signature/ISX, QST30

Work Around for INCAL DVD users: Consult QuickServe Online (QSOL) and try to find the correct ECM calibration in the QSOL data plate. Then, download the correct ECM calibration using the ECM code search feature in INSITE. If you need any assistance, submit a ticket in QSOL to Module: Calibration Download or contact Cummins Care at 1-800-CUMMINS.

2.4 Display Graphics

The use of Large Toolbar Buttons will not display all icons on the toolbar.
Work Around: Under Tools > Options > General, select Small Buttons in Display Options.

Dual Monitors are not supported by INSITE.

To disable the "Display Feature Names" option for the view bar, uncheck the box in Tools > Options > General > Viewbar > Display Feature Names.

If your PC monitor display is set to "Large Fonts", some information in INSITE may not be displayed. It is recommended to use small fonts.

If your display scaling is set above 150%, you may experience graphical issues.

2.5 ECM Diagnostic Tests

If the display becomes distorted or cannot be completely viewed, close the ECM Diagnostic Tests window and then reopen it. Resizing the window can cause the view to become distorted.

2.6 Fault Codes

The MIL Lamp Status is not displayed when printing the Image Fault Codes in Tool Display Format.

Workaround: Print the Image Fault Codes in Text Only Format or connect to the image, open Fault Codes and select the Print icon.

2.7 Printing

When using print preview, use the tool bar magnifying glass to display the text in a larger view.

The Print options will be disabled when no printers are available. This includes the Page Setup, Print and Print Preview options.

Work around: Setup/install a printer on the PC and retry the INSITE print selection.

2.8 Simulators

Values shown in simulator do not reflect real values that would be seen when connected to an engine.

2.9 INSITE Integrated Simulator – Single & Multi-Module

All simulators for the 2007 models and above were combined into one single simulator called INSITE Integrated Simulator - Single Module and INSITE Integrated Simulator – Multi-Module. These will display all the Features and Parameters, ECM Diagnostic Tests, and Advanced ECM Data that is supported for single and multi-module engines.

2.10 Work Orders/ECM Images/Templates

Double clicking on the exported image files (.csv format) will not open them with the correct format in Microsoft Excel.

Workaround: Follow the steps below to open an exported (.csv format) image file in Excel:

1. Open the .csv image file with Microsoft Excel
2. Highlight column A
3. Click on Data > Text to Columns
   a. In Step 1 of the wizard, make sure the "Delimited" option is selected and click "Next"
   b. In step 2 of the wizard, uncheck the "Tab" box and check the "Comma" box and click "Next"
   c. In step 3 of the wizard, click on "Finish"
4. Format columns as desired.

2.11 Backing Up/Transferring Work Order Images & Templates

The following file and folder need to be backed up and copied/moved accordingly.

C:\Intelect\INSITE\UserSettings\data.wo
C:\Intelect\INSITE\WorkOrders

Alternatively, select the "Export All" from the right-click menu while highlighting any Image.

When using templates, it is recommended to verify the first template sent to the target vehicle. This helps ensure the template configuration is correct for subsequent vehicles.

When using templates, verify that the ECM code is compatible or the same.

When naming images and templates, special characters cannot be used (i.e. & ^, etc.).

3 Issues with ECM Applications

3.1 ISB

3.1.1 Calibration Selection

When calibrating a ReCon ISB ECM, the J1708 protocol must be used. The calibration will not download to the ECM successfully if J1939 protocol is used. If both J1708 and J1939 protocols are available on the Datalink, the J1708 protocol must be specified instead of Auto Detect.

3.2 C8.3G/L10G

3.2.1 Woodward Governor (GCM)

INSITE 8.8.3 will only calibrate and monitor the ECM. The GCM cannot be calibrated and no information will be shown in Features and Parameters or in Data Monitor Logger.

3.3 Signature/ISX CM570

3.3.1 Features & Parameters

J1939 Multiplexing:
If the "J1939 Multiplexing" feature and its sub-features are enabled, they cannot all be disabled at the same time. When sent to the ECM, INSITE displays an error dialog stating "The write to ECM failed for the requested parameters."

Engine Brake Control:
If a phase 8 calibration is currently in the ECM, the Engine Brake Delay Time value might be set to zero regardless of the actual value entered for this parameter in the Features and Parameters.

Workaround:
Check the value for the Calibration Software Phase in INSITE (can be found in Features & Parameters > System ID & Dataplate > Calibration Information). If it starts with 08, download the latest version of the ECM Code to resolve this issue.

3.4 ISX - CM870

The "Injector Check Valve Diagnostics Test" might not run for some earlier ECM code phases on the ISX - CM870 ECMs. Please refer to the table below for more details:

ECM Code Phase	Test Status in INSITE 8.8.3
Phase 5.4.6.02 and prior →	Test Will Not Run
Phase 5.4.7.11 and post →	Test Will Run
Phase 6.5.1.01 and prior →	Test Will Not Run
Phase 6.5.2.0x and post →	Test Will Run

3.5 Celect Plus

3.5.1 INSITE Re-Con ECM Procedure

CAUTION: To calibrate this ECM, use the following steps:

1. Hook up battery power
2. Turn key switch ON for 10 seconds
3. Turn key switch OFF
4. Launch INSITE
5. Connect to ECM (while key is still in OFF position)
6. Click “OK” to ROM boot message
7. Select “Calibration Selection”
8. Select ECM
9. Choose the appropriate calibration code and transfer to ECM
10. Turn key switch ON when INSITE prompts

3.6 Celect

3.6.1 Phase 3 &4 (ECM P/N: 3619037)

Some modules may have existing hardware issue. If calibration download fails and module fails to reconnect after calibration failure, please contact Cummins Care Electronic Tools for further assistance.

3.6.2 Phase 5 (ECM P/N: 3084473)

Some modules may have existing hardware issue. If calibration download fails and module fails to reconnect after calibration failure on a seeded ReCon module, please contact Cummins Care Electronic Tools for further assistance.

3.6.3 Calibration Download Fails

If the ECM has an unlocked Master Password, the calibration download will fail and leave the module in a Rom Booted state. Recalibrating it will recover the ECM. Issue is under investigation.

Workaround: Disable the Master Password before calibrating and enable after calibration has completed.

3.7 QSK19/45/60 - CM500

3.7.1 Calibration Selection

When calibrating a QSK19/45/60-CM500, avoid using a connection with "Auto Detect" as the calibration download might fail.

Workaround: Use an INLINE 6, or INLINE 7 connection that specifies the J1708 protocol instead of Auto Detect.

3.8 QSM11

3.8.1 Calibration Selection

When calibrating QSM11 engines utilizing Multiple Unit Synchronization, J1708 protocol must be used. The calibration will not download to the ECM successfully if J1939 protocol is used. If both J1708 and J1939 protocols are available on the Datalink, the J1708 protocol must be specified instead of Auto Detect.

3.9 QST30 - CM552

3.9.1 ECM Connection

When connecting to QST30 - CM552, please ensure both modules are connected properly to successfully connect system with INSITE.

4 Datalink Adapters: INLINE 7

With INSITE 8.8.3, the latest INLINE 7 drivers and firmware MUST be installed. These can be downloaded from the INLINE website at https://www.cummins.com/parts-and-service/digital-products-and-services/inline.
Legacy adapters such as INLINE I, II, 4 and 6 are obsolete. INLINE 5 and INLINE 6 can be used with INSITE, however support for these adapters is no longer available.

5 Datalink Adapter Compatibility Matrix

5.1 Supported Protocols

Engine Program	ECM	J1708	J1939
480C-E	CM552	X	X
B5.9G	CM420	X	
C Gas Plus/B Gas Plus	CM556	X	X
C8.3G	CM420	X	
CELECT	ECM-B	X	
CELECT Plus	ECM-C	X	
CELECT Plus Industrial	ECM-C	X	
Centinel	CM400	X	
CENTRY	CM400	X	
Gas Compression GTA 3.9/5.9/8.3GC KTA19/38GC	CM556		X
	SSM558		
	CM2358		
ISB	CM550	X	X
ISB – CM850	CM850	X	X
ISB Daimler Chrysler	CM551		X
ISBe (4 and 6 Cylinder)	CM800	X	X
ISBe2/3 – CM850	CM850		X
ISBe4 (4 and 6 Cylinder)	CM850	X	X
ISC / Transit Bus ISL8.3 – CM850	CM850	X	X
ISC/ISL	CM554	X	X
ISL8.9 – CM850	CM850	X	X
ISLe4 (6 Cylinder)	CM850	X	X
ISM	CM570	X	X

ISM – CM870	CM870	X	X
ISM – CM875	CM875	X	X
ISM – Fuel Control Module – CM570	CM570	X	X
KTA19, G855 CM558 G	CM558		X
L Gas Plus	CM556		X
L10G	CM420	X	
PIM	CM550	X	
QSB5.9/44, 5.9/30, 4.5/30	CM550	X	X
QSC8.3/QSL9	CM554	X	X
QSK19/23/45/60/78	CM500	X	X
QSK19G/38G/60G QSV81/91 - CM700/SSM558/CM2358	CM500	X	
	CM700		X
	SSM558		X
	CM2358		X
QSM11	CM570	X	X
QST30	CM552		X
QST30 – Power Gen	CM552		X
QSX15	CM570	X	X
Signature/ISX	CM570	X	X
Signature/ISX – CM870	CM870	X	X

5.2 Datalink Adapter Issues

Do not substitute cables, except as indicated in the INLINE 6 or INLINE 7 Product Announcement Bulletin.

Incompatible cables may damage the INLINE 6 or INLINE 7 adapter or personal computer and will void any applicable warranty.

Incompatible cables may cause communication issues with INSITE.

INLINE 6 and INLINE 7 adapters may intermittently lose communication. If your Datalink adapter has communication problems, disconnect power from the adapter for 5 seconds and then reconnect. The INSITE program does not need to be shutdown.

There is a feature under Tools > Reset Datalink Adapter that may correct some software communication errors with the INLINE 6 and INLINE 7.

The main harness (backbone) has a maximum overall length of 40 meters.

A J1939 stub, which can be a connection point for ECM's and/or the INLINE 6 and INLINE 7 datalink adapters, cannot exceed a maximum length of 1 meter.

At each end of the backbone harness is a terminating resistor with a nominal resistance of 120 Ohms, it will measure 60 Ohms when you measure across the Datalink.

The INLINE 6 and INLINE 7 adapters should be connected to a continuous battery power supply. When making adjustments with INSITE, including calibration download, the operator will be asked to switch the key off. If the adapter is getting its power from a power source dependent on the key switch status, such as the lighter adapter inside the cab, the adapter will lose power, which will result in INSITE losing connection to the ECM. This will require the operator to reconnect to the ECM and the adjustments might not have been saved.

The INLINE Mini adapter is **not supported** by INSITE.

6 Special Issues

6.1 Power Savers

Turn off any power saver features when communicating with an ECM, especially when downloading a calibration to an ECM. These commands require the computer to communicate with the ECM, but do not require you to interact with the computer. As a result, the power saver does not recognize that a command is in progress and automatically turns off the computer. This may disable the COM/USB port, hard drive and other hardware required for the calibration download process.

6.2 INSITE Performance

If you are using a system with less than 4 GB of RAM, INSITE performance may be impacted depending on the number of background applications running.

7 Suggestions & Tips

Do not turn off the PC while INSITE is running. Exit INSITE before turning off the computer. Disk and database corruption can occur if you do not exit INSITE before turning off the computer. If the PC CMOS battery is not working, please make sure you reset the PC date and time and restart the computer before you attempt to open INSITE.