

INSITE 9.1.1 Release Notes

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1 Getting Started

1.1 Operating System Compatibility

Windows® 10 32-bit and 64-bit Version 20H2 (Build ID 19042)
Windows® 11 64-bit

NOTE: INSITE 9.1.1 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
Windows® 8.1 32-bit and 64-bit
Windows® 10 32-bit and 64-bit older than Version 20H2 (Build ID 19042)

Contact your local Cummins® Distributor to register INSITE 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 for Windows 7 has ended. 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 for Windows 8.1 has ended. Technical support for INSITE may no longer be fully available when using this operating system.

1.4 Supported Languages

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

1.5 System Requirements

1.5.1 Recommended

COMPONENT	REQUIREMENTS
Operating System:	Windows® 10 or Windows® 11 64-bit
Processor:	2.5 GHz or greater Quad Core (Intel or AMD)
RAM Memory:	16 GB
Hard Drive:	60 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 4.8.1 or later Adobe Acrobat Reader v23.006.20320 or later
Internet:	High-Speed Broadband
Available Ports:	2x USB 3.0

1.5.2 Minimum

COMPONENT	REQUIREMENT
Operating System:	Windows® 10 32-bit
Processor:	1.60 GHz or greater Dual-Core (Intel or AMD)
RAM Memory:	4 GB
Hard Drive:	6 GB available
Media Device:	DVD-ROM (for use with INCAL DVDs)
Display Resolution:	1024 x 768
Other Software:	Adobe Acrobat Reader v9.0 Microsoft .NET Framework 4.8.1
Internet:	High-Speed Broadband
Available Ports:	2x USB 2.0

1.6 Microsoft .NET Framework

1.6.1 General Information

INSITE requires a supported Microsoft .NET Framework version 4.8.1 or later to be installed. Microsoft .NET Framework 4.8.1 is supported on Windows 10 version 20H2 (Build ID 19042) and later.

Microsoft .NET Framework 4.7.1 and 4.8.0 are supported on Windows 10 and Windows 11

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

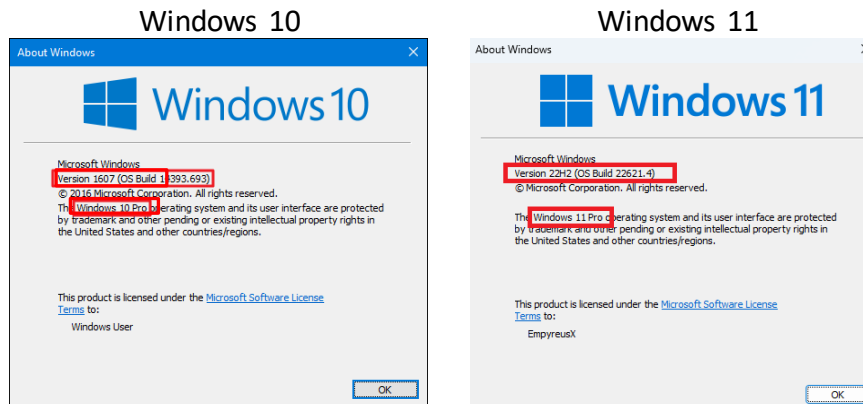
Microsoft .NET Framework 4.7.1 is **not supported** on Windows 7 and Windows 8.

Please 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 operating system's build details, please Press the Windows Key + R keys to open Run, type Winver, and click/tap **OK**. One of the dialog boxes below should appear to provide the operating system version and build details.



1.7 Installation

Refer to the table below for the hard drive space required to install INSITE 9.1.1. This is based on the assumption that the Operating System is installed on C:\

Hard Drive Space Requirements	
Upgrade (from 9.1.0)	2 GB

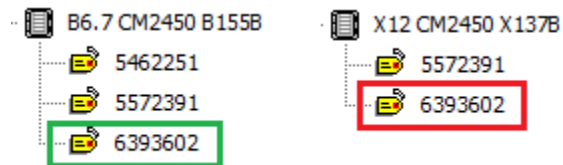
NOTE: It is highly recommended that you always reboot your PC after installing software.

1.8 Calibration Compliance

As of INSITE 9.1.0, calibration downloads will only be permitted with calibrations authorized for connected products. Fleet counts can continue to be used to change the ECM Code when applicable to connected products. Downloading calibrations for a different product will no longer be allowed, even if the ECM part number is compatible

with other products. This doesn't apply when performing a revision update to a connected product. Insite will display Error 27008 in this event.

Example: An ECM (Part# 6393602) is being used on B6.7 CM2450 B155B and would like to be swapped to X12 CM2450 X137B. In this scenario, Fleet Count can no longer perform this calibration download. Insite will display Error 27008 in this event.



2 Issues with INSITE 9.1.1

2.1 Connections

Error Messages for communication failures:

Error 5200: Indicates communication loss between the 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 between the datalink adapter and the ECM could be established.

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 URLs from the Help > About INSITE menu:

<https://www.cummins.com/support/digital-products-and-services-support>
<https://www.cummins.com>

2.2 Advanced ECM Data

If the display becomes distorted or cannot be viewed entirely, close and then reopen the Advanced ECM Data window. 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. If incorrect calibrations are used, permanent damage could occur. To access the latest calibrations, 8.8.0 or higher is required.

Automotive applications will default to "ON" for the Save and Restore option in the Calibration Download dialog.

Industrial applications will Default to "OFF" for the Save and Restore option in the Calibration Download dialog.

Some applications may gray out the "Save and Restore" option when performing a Calibration Download.

To decrease calibration download times, please ensure 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 the calibration transfer is completed.

When using the June 2019 or older INCAL DVDs, calibrations for ISM, Signature/ISX, and QST30 will not appear.

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 INSITE's ECM code search feature. If you need assistance, submit a ticket in QSOL to Module: Calibration Download or contact Cummins Care at 1-800-CUMMINS.

2.4 Display Graphics

Large Toolbar Buttons will not display all icons on the toolbar.

Work Around: Under Tools > Options > General, select Small Buttons in Display Options.

INSITE does not support Dual Monitors.

To turn off 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 viewed entirely, close and reopen the ECM Diagnostic Tests window. 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 the 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

Using print preview, use the toolbar magnifying glass to display the text in a larger view.

When no printers are available, the print options—including the Page Setup, Print, and Print Preview options—will be disabled.

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

2.8 Simulators

Values shown in the simulator do not reflect actual values 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 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 in 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, 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 must be backed up and copied/moved accordingly.

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

C:\Intelect\INSITE\WorkOrders

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

When using templates, it is recommended that the first template sent to the target vehicle be verified. 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 the 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 9.1.1 will only calibrate and monitor the ECM. The GCM cannot be calibrated, and no information will be shown in Features and Parameters or 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 simultaneously. When sent to the ECM, INSITE displays an error dialog stating, "The write to ECM failed for the requested parameters."

Engine Brake Control:

Suppose a phase 8 calibration is currently in the ECM. In that case, 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 9.1.1
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 the key switch ON for 10 seconds
3. Turn the key switch OFF
4. Launch INSITE
5. Connect to ECM (while the key is still in the OFF position)
6. Click "OK" to ROM boot message
7. Select "Calibration Selection"
8. Select ECM
9. Choose the appropriate calibration code and transfer it to ECM
10. Turn the 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 issues. If the calibration download fails and the module fails to reconnect after the calibration failure, please contact Cummins Care Electronic Tools for further assistance.

3.6.2 Phase 5 (ECM P/N: 3084473)

Some modules may have an existing hardware issue. If the calibration download fails and the module fails to reconnect after a 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, leaving the module in a Rom Booted state. Recalibrating it will recover the ECM. The issue is under investigation.

Workaround: Disable the Master Password before calibrating and enable it after completion of calibration.

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, the J1708 protocol must be used. The calibration will not download to the ECM successfully if the 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 connect the system with INSITE successfully.

4 Datalink Adapters: INLINE 7

With INSITE 9.1.1, 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 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 INLINE 6 and INLINE 7.

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

A J1939 stub, which can be a connection point for ECMs 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. When measured across the Datalink, it will measure 60 Ohms.

The INLINE 6 and INLINE 7 adapters should be connected to a continuous battery power supply. The operator will be asked to switch the key off when adjusting with INSITE, including calibration download. Suppose the adapter gets power from a power source dependent on the key switch status, such as the lighter adapter inside the cab. In that case, the adapter will lose power, resulting 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.

INSITE does not support the INLINE Mini adapter.

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 turn off the COM/USB port, hard drive, and other hardware required for the calibration download.

6.2 INSITE Performance

If you use 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. If you do not exit INSITE before turning off the computer, disk and database corruption can occur. If the PC CMOS battery is not working, please reset the PC date and time and restart the computer before you attempt to open INSITE.