

INSITE 8.1.1 Release Notes

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.

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1 Issues with INSITE 8.1.1

1.1 Opening INSITE

INSITE 8.1.1 takes longer to open if the computer has been restarted. Issue is currently under investigation.

1.2 Installation

INSITE 8.1.1 does not support Windows® XP or Windows® Vista. INSITE version 8.1.1 will only operate on PC's running either Windows® 7 or Windows® 8. INSITE version 8.1.1 is not yet supported on Windows® 10.

Refer to the table below for the hard drive space required for the installation of INSITE 8.1.1. This is based on the assumption that the Operating System is installed on C:\

Hard Drive Space Requirements	
Upgrade from 7.x	Fresh Install
210MB	260MB

If the PC does not already have Microsoft .Net Framework 4.5, this will be installed first and a reboot will be required before installation can be continued and completed.

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

1.3 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:

<http://www.cummins.com> or <http://insite.cummins.com>

1.4 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.

1.5 Calibrations

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.*

1.6 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.

1.7 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.

1.8 Fault Codes

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

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

1.9 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.

1.10 Simulators

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

1.11 INSITE Integrated Simulator – Single and 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.

1.12 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.

Work around: 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"
4. In step 3 of the wizard, click on "Finish"
5. Format columns as desired.

When upgrading to INSITE 8.1.1, the following file and folder need to be backed up:

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.).

2 Issues with ECM Applications

2.1 ISB

2.1.1 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.

2.2 Signature/ISX CM570

2.2.1 Features and 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.

Work around:

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.

2.3 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 8.1.1
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

2.4 Select Plus

INSITE ReCon 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
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

2.5 QSK19/45/60 – CM500

2.5.1 Calibration Selection

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

Work around: Use an INLINE 5 or 6 connection that specifies the J1708 protocol instead of Auto Detect.

2.6 QSM 11

2.6.1 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 Datalink Adapters INLINE 5 and 6

The INLINE, INLINE I, INLINE II, and INLINE 4 adapters are obsolete. They can be used with INSITE, however, support for these adapters is no longer available

With INSITE 8.1.1, the latest INLINE 6 drivers and firmware MUST be installed. They can be downloaded from the INLINE website at <http://cumminsengines.com/inline-downloads>.

Inline 6 “Long Cable Issue”

On newer PC's with a USB 3.0 port, it may become necessary to have a modification applied to the INLINE 6 adapter if connectivity issues are encountered. Please check the serial number on the back of the INLINE 6 datalink adapter. If the 6th digit (counting from left to right) is a 2, no further action is needed. If the 6th digit is a 0 or 1, the adapter should be returned so that the engineering modification can be applied. All necessary forms and instructions for return can be found at:

http://cumminsengines.com/uploads/docs/Inline/INLINE_Adapter_Repair_Form.pdf.

Please allow approximately 10 working days for turn around. If you do not wish to send your adapter in for modification, you can use a shorter USB cable (6' or less) in place of the 14' cable.

4 Datalink Adapter Compatibility Matrix

4.1 Supported Protocols

Engine Model Years 2007 and newer only support the J1939 protocol. Please refer to the following table for specific information:

Program	INSITE 8.1.1				
	INLINE 5/6 (RP1210A)		Program	INLINE 5/6 (RP1210A)	
	J1587 J1708	J1939		J1587 J1708	J1939
480 C-E	X	X	QSL9-CM850 PG		X
B5.9 Gas	X		QSM11-CM876 PG		X
L10G/C8.3G	X		QST30-CM850 PG		X
C Gas Plus / B Gas Plus	X	X	QSK19G/45G/60G QSV81/91	X	X
L Gas Plus	X	X	QSC8.3/QSL9	X	X
CELECT	X		QSK19/45/60/78	X	
CELECT Plus	X		QSM11	X	X
CELECT Plus Ind	X		QSX15	X	X
CENTINEL	X		QSK19/23-CM500	X	
CENTRY	X		QST30		X
Gas Compression GTA/KTA		X	QSK19/23/38/50 /60/78-CM850		X
Gas CENSE QSV81/91		X	QSK23/60/78 CM850 PG		X
ISB	X	X	QSB/C/L-CM850		X
ISB Chrysler		X	QSB5/7-CM850 PG		X
ISC/ISL	X	X	QSB	X	X
ISM	X	X	ISB/L CM850		X
PIM	X	X	ISBe/ISBe4 4 & 6 Cylinder	X	X

Note: The INLINE, INLINE I, INLINE II, and INLINE 4 adapters are obsolete. They can be used with INSITE, but technical support for these adapters is no longer available.

4.2 Datalink Adapter Issues

Do not substitute cables, except as indicated in the INLINE 5 or 6 Product Announcement Bulletin.

Incompatible cables may damage the INLINE 5 or 6 adapter or personal computer and will void warranty.

Incompatible cables may cause communication issues with INSITE.

INLINE 5 and 6 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 5 and 6.

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 5 and 6 Datalink adapter, 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 5 and 6 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.

5 Version Compatibility

5.1 INSITE Software and Operating System Compatibility

Windows® 7 32-bit and 64-bit
Windows® 8 32-bit and 64-bit
Windows® 8.1 32-bit and 64-bit

NOTE: INSITE 8.1 is **not** supported on the following Operating Systems:

Windows® 7 Starter Edition or Basic Edition
Windows® 8 RT Edition
Windows® 8.1 RT Edition

Windows® 10 32-bit and 64-bit (will be included in a future INSITE release)

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

To locate your regional distributor, please refer to the following [Distributor locator](#).

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.

7 Suggestions and 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.

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