

# INSIGHTqcx

## Version 2.0.27

### 1. Introduction

This is a software release note for **version 2.0.27** of **INSIGHTqcx** Cordless Controller. This document details the software versions, key new features, and upgrade instruction for this release.

### 2. Release Information

**NOTE:** Please upgrade both the tool and controller with the latest versions as outlined in this section.

The following software releases are launched as part of this release package:

Controller Software		
#	Description	Version
1	Application	<b>2.0.27</b>
2	Database	0.0.7
3	OS	0.0.1

Tool Software		
#	Description	Version
1	Tool Display	<b>100.2.1.16</b>
2	Tool MCE	<b>2.5.1.12</b>

#### Note:

- ❖ This latest release supports single step upgrade. Users can upgrade directly to this release without an intermediate upgrade step.
- ❖ Please follow the upgrade instruction for controller software as listed in Section 4.0.

### 3. New Features & Improvements, Known Issues

#### 3.1 Enhancements

3.1.1 Added a new parameter named *MAX NOK Count* to set the number of MAX NOK allowed for a batch operation. The default value for this parameter is 0 and its range is 1 to 99. This parameter will be disabled if *Max Attempts Enabled* is turned on. (#5031)



3.1.2 Enhanced the resolution for DIO/Fieldbus output timer to 0.01s. (#5227, #2043352)

3.1.3 Reconciliation of EOR data upon network disruption with the ToolsNet server. (#5082, #1975865)

3.1.4 Corrected offset for angle trace data when ToolsNet is enabled. (#5175)

3.1.5 Fixed an issue to manage PFOP Job Abort command if there is no job selected. (#5083, #1976512)

3.1.6 Enabled EOR data communication after a Toyota PI controller is replaced. (#5019, #1957550)

3.1.7 Modified the status of early trigger release to report low failure for multi-step when TOHO protocol is enabled. (#5312)

3.1.8 Fixed an issue related to the PSET edit screen closing by itself. (#5145)

3.1.9 Fixed an issue to stabilize multi-client PFOP connections to the controller; up to 5 PFOP clients can be connected to the controller. (#4732)

3.1.10 Corrected issues for *PRG* and *RST* tags when VW protocol is selected. (#5262)

3.1.11 Added *Protocol Version Information* section in the *About* screen.

## 4. Upgrade Instruction

### 4.1 Controller Firmware Upgrades

Follow the instruction outlined in the *How-To Update INSIGHTqcx Firmware* article (see link below) on our customer portal to update the firmware for the INSIGHTqcx controller. **Please note that the Controller may take up to 60s to reboot and multiple reboot may be required during the full firmware upgrade process.**

- <https://irtoolhelp.ingersollrand.com/hc/en-us/articles/360039603114-How-To-Update-INSIGHTqcx-Firmware>

### 4.2 Tool Firmware Upgrades

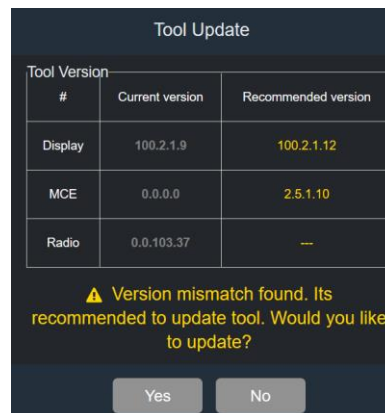
Tool firmware upgrades can be done directly using the INSIGHTqcx controller. The required latest firmware files are already included with the controller.

#### Prerequisite:

- To use the INSIGHTqcx to upgrade tool firmware, the display firmware version on the tool has to be 3.x.x or higher. For older tool display firmware (V1.x.x or 2.x.x) it is necessary to first update to version 3.x.x or higher using ICS.

#### Steps:

1. Connect the QX tool into the controller using a USB cable.
2. Once connected, an Update screen will appear to highlight the current vs recommended software versions (see sample screen shot below).



3. Follow the instruction on the screen to update the MCE and Display firmware. In some cases, the tool may need to be recycled power to complete the update process.
  - a. Some tool may require 2 update attempts to fully update both the Display and MCE firmware.
  - b. Please DO NOT hold the trigger during the MCE update; instead, please only pull and release the trigger.
4. After the tool is updated, please perform a Factory Reset on the tool using Tool Settings → Factory Reset. Please note that the tool may take up to 8s to fully perform the factory reset.

#### Notes:

- i. If screens are not refreshed correctly, user can try to use the “CTRL” + “F5” key combination to refresh the browser cache.

## 5. Appendix A – Language and OP MID

### 5.1 INSIGHTqcx supports the following languages

#	Language	Native name
1	Chinese (Simplified)	中文(简体)
2	Spanish	Español
3	French	Français
4	German	Deutsch
5	Italian	Italiana
6	English	English
7	Korean	한국어
8	Japanese	日本語
9	Russian	Русский
10	Polish	Polskie
11	Portuguese	Português
12	Czech	Čeština

### 5.2 List of supported Open Protocol MID

MID	Description	INSIGHTqcx 1.2.2	MID	Description	INSIGHTqcx 1.2.2
1	Communication start	●	51	Vehicle Id Number upload subscribe	●
2	Communication start acknowledge	●	52	Vehicle Id Number upload	●
3	Communication stop	●	53	Vehicle Id Number upload acknowledge	●
4	Command error	●	54	Vehicle Id Number upload unsubscribe	●
5	Command accepted	●	60	Last tightening result data subscribe	●
6	Spindle Connect Status	●	61	Last tightening result data upload	●
7	Spindle Connect Status Ack	●	62	Last tightening result data acknowledge	●
8	Spindle Connect Status Subscribe	●	63	Last tightening result data unsubscribe	●
9	Spindle Connect Status Unsubscribe	●	64	Old tightening result upload request	●
10	Parameter set numbers upload request	●	65	Old tightening result reply	●
11	Parameter set numbers upload reply	●	70	Alarm subscribe	●
12	Parameter set data upload request	●	71	Alarm Upload	●
13	Parameter set data upload reply	●	72	Alarm Upload acknowledge	●
14	Parameter set "selected" subscribe	●	73	Alarm Unsubscribe	●
15	Parameter set "selected"	●	74	Alarm Acknowledged on torque controller	●
16	Parameter set "selected" acknowledge	●	75	Alarm Acknowledged Ack	●
17	Parameter set "selected" unsubscribe	●	76	Alarm Status	●
18	Select Parameter set	●	77	Alarm Status acknowledge	●
19	Set Parameter set batch size	●	80	Read time upload request	●
20	Reset Parameter set batch size	●	81	Time upload reply	●
30	Job numbers upload request	●	82	Set Time in the Torque Controller	●
31	Job numbers upload reply	●	127	Abort job	●
32	Job data upload request	●	128	Job batch increment	●
33	Job data upload reply	●	129	Job batch decrement	●
34	Job "info" subscribe	●	130	Job Off	●
35	Job "info"	●	150	Identifier download request / reply	●
36	Job "info" acknowledge	●	250	Selector socket info subscribe	●
37	Job "info" unsubscribe	●	251	Selector socket info	●
38	Select Job	●	252	Selector socket info acknowledge	●
39	Job restart	●	253	Selector socket info unsubscribe	●
40	Tool data upload request	●	410	AutoDisable settings request	●
41	Tool data upload reply	●	411	AutoDisable settings reply	●
42	Disable tool	●	900	Trace	●
43	Enable tool	●	9,999	Keep alive message	●
50	Vehicle Id Number download request	●			

**6. Revision History****Revision History**

<b>Version</b>	<b>Date</b>	<b>Summary of Changes</b>	<b>Author</b>
0.1	3/8/2021	Initial draft for version 2.0.27	Eng-Hua Yap