



# CellAdvisor™

## CA5000 CellAdvisor 5G

### Release Notes for Version 5.020.029r

Welcome to release 5.020.029r for CA5000 CellAdvisor 5G. This document provides version numbers, a description of new features, and a list of unresolved issues associated with this release, unless otherwise specified.

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## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CA5000 CellAdvisor 5G.

### Hardware Configuration

VIAVI Hardware	Version(s) Compatible with this Release 5.020.029r	
	F001	F002
RF Module	1.0 / 1.0 / 4.0	1.0 / 1.0 / 1.0
DSP Module	1088 / 2133 / 3024 / 4022	1088 / 2133 / 3024 / 4022

### Recommended Application Software

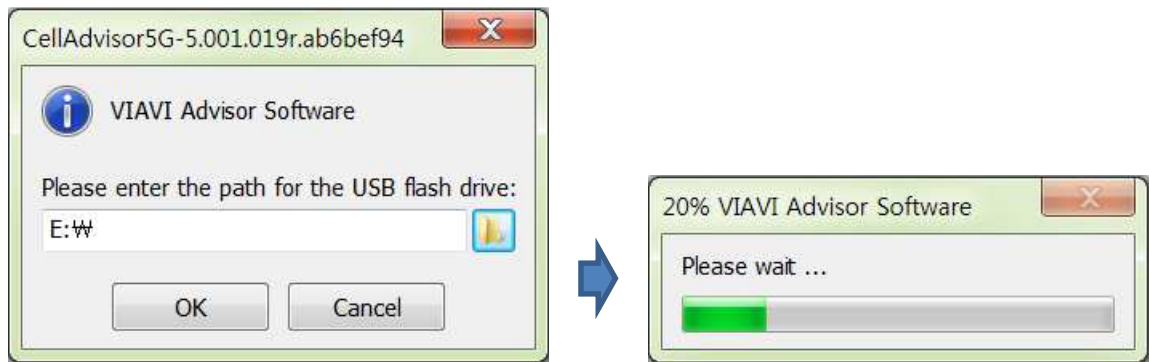
VIAVI Software	Version(s) Compatible with this Release 5.020.029r
JDMapCreator	1.8 and after

## What's New in Version 5.020.029r

- Supports Auto Select in Clock Source.
- Added Confirm button (play and stop button) and Undo function(only available when Plot Point switches to Position) at Route Map menu.
- Added Cellsite icon with Azimuth & it is activated when Cellsite information is imported at Route Map menu.
- Enhancement of 5G NR Signal Analyzer
  - Automatic calculation of the SCS offset
    - SSB GSCN Auto: New method to search 5G beams (SSB block) center frequency according to 3GPP global synchronization channel number (GSCN)
    - SSB Full Auto: New method to search 5G beams (SSB block) frequency down to sub-carrier spacing, e.g. 120KHz or 240KHz
  - Beam Power Accuracy: reference signal received power (RSRP) and signal to interference noise ratio (SINR) with revised calculated values
  - Added Triggered Spectrum Menu in 5G NR ACLR
  - P vs T symbol time span expansion
  - P vs T symbol UL/DL indicated by different colors
  - At Route Map menu, added SS-SINR, SS-RSRQ measurement items under Map conf / Plot Item

## Installation Instructions

1. Visit the linked website below to find the latest firmware and compare it with your version. If your version is older than the latest firmware, download the newest one available.  
<http://celladvisor.updatemyunit.net/>
2. Unzip the downloaded file and check that there are \*.exe file extracted



Upgrade File Name:

- CellAdvisor5G-5.XXX.xxxx.xxxxxxxx.exe

3. Installing upgrade file to USB memory stick and that at least 1 GBytes available, but its maximum capacity not greater than 32 GB for the FAT32 file system.
4. Plug in the USB memory stick to the USB Host port on the top side of your CellAdvisor 5G, which is powered via the AC-DC adapter.
5. Press the **SYSTEM** Touch key, and then select **Upgrade > USB**.
6. Display Upgrade Version, Installed Version and then press the **Start Upgrade** touch key.
7. Upgrade screen changes well and the progress bar continues. The upgrade time is 10 minutes to 20 minutes.

At the end of the process the test set will reboot itself to complete the upgrade.

For more information, refer to CellAdvisor 5G User`s Guide.

## Fixed Problems

- Resolved the issue to import sizeable maps on Route Map and the ability to set a single layer map
- Resolved the bug issue 'No GPS or No RSRP value in 5GNR Signal Analyzer & Route Map' for all regional settings.
- The 1<sup>st</sup> carrier center frequency set in 5GNR Carrier Scanner is now maintained in other modes.
- Fixed X,Y coordinate indication error for Position at Indoor Map in Route Map menu.
- Fixed Spectral Density calculation error in 5GNR Channel Power.
- Fixed the error of no GPS Point indication at single map file in Route Map menu

## Known Limitations

- For beam analyzer feature, Ericsson and Huawei BCH 3GPP NR standard (Release-15) following confirmed. Samsung and Nokia BCH not confirmed.

## Previous Version History

This section provides history of previous firmware versions.

### Release 5.011.008r

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CA5000 CellAdvisor 5G.

### Hardware Configuration

VIAVI Hardware	Version(s) Compatible with this Release 5.011.008r	
	F001	F002
RF Module	1.0 / 1.0 / 4.0	1.0 / 1.0 / 1.0
DSP Module	1087 / 2133 / 3024 / 4022	1087 / 2133 / 3024 / 4022

### Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 5.011.008r
JDMapCreator	1.8 and after

## What's New in Version 5.011.008r

- Added Time Alignment Error in 5G NR Signal Analyzer
  - Carrier Scanner
  - Constellation
  - Power vs Time (Frame)
- Added EVM in 5G NR Signal Analyzer
  - Constellation
  - Carrier Scanner

## Fixed Problems

- Fixed an issue where the RF spectrum signal disappears.
- Not properly working touch function when user is using the stylus pen or touching the screen by a finger.
- System hang up happened when user is entering NR measurement mode or changing the measurement mode after the system turns up.

## Known Limitations

- For beam analyzer feature, Ericsson and Huawei BCH 3GPP NR standard (Release-15) following confirmed. Samsung and Nokia BCH not confirmed.
- Not supportability Auto Select in Clock Source.

## Release 5.010.031r

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CA5000 CellAdvisor 5G.

### Hardware Configuration

VIAVI Hardware	Version(s) Compatible with this Release 5.010.031r	
	F001	F002
RF Module	1.0 / 1.0 / 4.0	1.0 / 1.0 / 1.0
DSP Module	1087 / 2133 / 3024 / 4022	1087 / 2133 / 3024 / 4022

### Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 5.010.031r
JDMapCreator	1.8

## What's New in Version 5.010.031r

- Added 5G NR Signal Analyzer
  - Trigger Spectrum
  - Channel Power
  - Occupied Bandwidth
  - Spectrum Emission Mask
  - ACLR

- Multi-ACLR
- Spurious Emissions
- Beam Analyzer
- Carrier Scanner
- Route Map
- Constellation
- Power vs Time (Symbol)
- Power vs Time (Frame)
- Enhanced Real-time Spectrum Analyzer
  - Support narrow span from 20MHz to 100MHz (1MHz Step)

## Fixed Problems

- Set the attenuation to 0 dB when the pre-amp is on.

## Known Limitations

- None

## Release 5.003.007r

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CA5000 CellAdvisor 5G.

### Hardware Configuration

VIAVI Hardware	Version(s) Compatible with this Release 5.003.007r	
	F001	F002
RF Module	1.0 / 1.0 / 4.0	1.0 / 1.0 / 1.0
DSP Module	1086 / 2127 / 3020	1086 / 2127 / 3020

### Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 5.003.007r
JDMapCreator	1.8

## What's New in Version 5.003.007r

- None

## Fixed Problems

- Fixed the global 30 days license issue
- Fixed the frequency, amplitude and spur issue when the language is set to other than English
- Fixed the frequency locking issue in Beam Analyzer
- Fixed the SCPI RF Control command issue

## Known Limitations

- The real time spectrum logging has time constraints, Internal memory is up to 4 GBytes and has limiting spectrum logging for maximum 48~50 min or so. For long time logging, use of external memory is recommended.

## Release 5.002.007r

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CA5000 CellAdvisor 5G.

### Hardware Configuration

VIAVI Hardware	Version(s) Compatible with this Release 5.002.007r	
	F001	F002
RF Module	1.0 / 1.0 / 4.0	1.0 / 1.0 / 1.0
DSP Module	1086 / 2127 / 3020	1086 / 2127 / 3020

### Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 5.002.007r
JDMapCreator	1.7

## What's New in Version 5.002.007r

- 5GTF:
  - Added BRS TX Period 20 ms and Auto
  - Added Ant and Sym parameters in Beam Index information in Beam Analyzer

- Route Map:
  - Added a feature for pausing when logging
  - Changed the color map by supporting 15 different color levels
  - Added to indicate the currently measuring PCI

## Fixed Problems

- The default for Plot Point menu is changed to GPS in Route Map mode.
- Fixed an error that DNC Preamp menu is not showing in 5GTF mode.
- The information tab is also saved when saving the result file in 5GTF Route Map mode.

## Known Limitations

- The real time spectrum logging has time constraints, Internal memory is up to 4 GBytes and has limiting spectrum logging for maximum 48~50 min or so. For long time logging, use of external memory is recommended.

## Release 5.001.022r

## Version Numbers

The following table lists the versions of related VIAVI hardware and/or software that can be used in conjunction with this release for CA5000 CellAdvisor 5G.

### Hardware Configuration

VIAVI Hardware	Version(s) Compatible with this Release 5.001.022r	
	F001	F002
RF Module	1.0 / 1.0 / 4.0	1.0 / 1.0 / 1.0
DSP Module	1086 / 2127 / 3018	1086 / 2127 / 3018

### Recommended Application Software

VIAVI Software	Version(s) Compatible with this Release 5.001.022r
JDMapCreator	1.7

## What's New in Version 5.001.022r

- Full flexibility to test multi-radio access technologies from 3G to 5G for macro-cell and small-cell site, DAS, and C-RAN.



- Small cell signal modulation quality assessment in 24 GHz and 40 GHz bands with channels up to 100 MHz.
- Real-time spectrum with persistence for effective interference analysis.
  - 50 MHz bandwidth Real-time spectrum analyzer
  - 100 MHz bandwidth Real-time spectrum analyzer
- Interference analyzer.
- Route map.
- Gated sweep.
- 5G TF Beamforming Analyzer.
- Scanner.
- RF Power Meter.
- GPS connectivity.
- Bluetooth connectivity.
- Wi-Fi connectivity.

## Fixed Problems

- None

## Known Limitations

- The real time spectrum logging has time constraints, Internal memory is up to 4 GBytes and has limiting spectrum logging for maximum 48~50 min or so. For long time logging, use of external memory is recommended.

## Technical Assistance

For assistance related to the use of your product, call or e-mail VIAMI Technical Assistance Center (TAC) in your region. For a current listing of TAC phone numbers and e-mail addresses, go to:

<http://www.viavisolutions.com/en/services-and-support/support/technical-assistance>

## Document History

Revision	Date	Reason for revision
22125691 rev 001	June 10, 2018	5.001.007r Firmware Release
22125691 rev 002	July 12, 2018	5.001.022r Firmware Release

22125691 rev 003	Aug 09, 2018	5.002.007r Firmware Release
22125691 rev 004	Sep 17, 2018	5.003.007r Firmware Release
22125691 rev 005	Nov 30, 2018	5.010.031r Firmware Release
22125691 rev 006	Dec 06, 2018	5.011.008r Firmware Release
22125691 rev 007	Mar 21, 2019	5.020.029r Firmware Release



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