



**CellAdvisor™**

**JD720C Cable and Antenna**

**Release Notes for Version 1.068.001**

**Document#: 22079588 rev 010**

Welcome to release 1.068.001 of JD720C Cable and Antenna Analyzer: JD723C, JD724C, JD725C, and JD726C. This document provides version numbers, a description of new features, and a list of unresolved issues associated with this release.

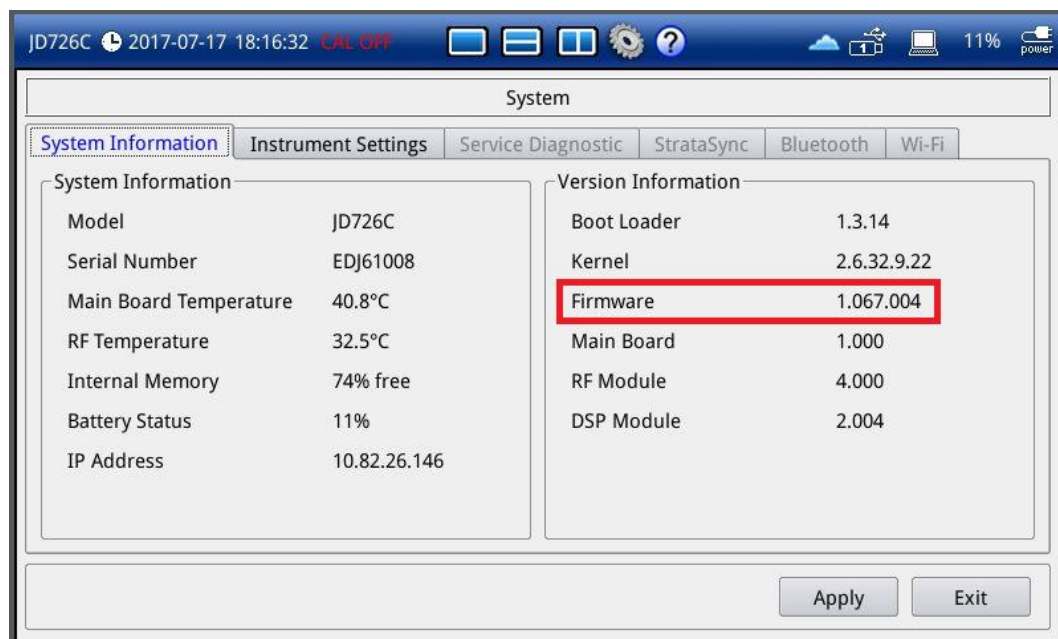
# Software Version Number

JD720C	KKC_FW_1.068.001.FW
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## Installation instructions

### To verify current version

1. Check the current firmware version of your instrument. Turn on the unit, press **Mode > System** key, and then check the firmware version number as shown in the picture below.



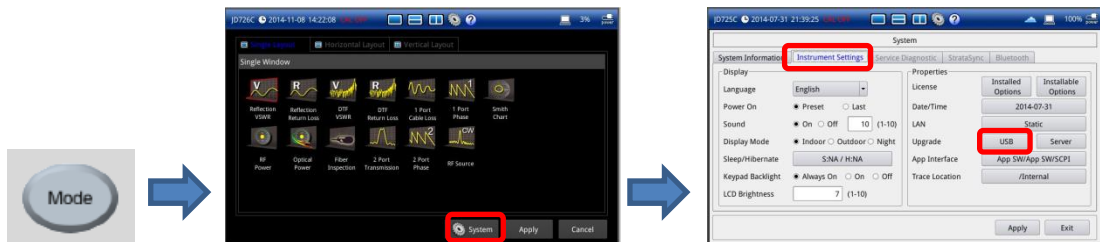
2. Visit the linked website below to find the latest firmware and compare it with your version. If your version is older than the latest firmware, download the newest version available.

<http://www.viavisolutions.com/en/services-and-support/support/software-downloads-and-updates#Group-C>

3. Unzip the downloaded firmware file and check if you can find the firmware file in .fw and the release notes in .pdf.
4. Prepare a USB memory stick with maximum 32 G Bytes or less, supporting FAT32 file system.

## To upgrade firmware

1. Connect AC power adapter to the instrument to prevent any power loss during firmware upgrade, which can cause severe problem or damage to your instrument, requiring a repair.
2. Format your USB memory stick to prevent any unexpected error during firmware upgrade.
3. Copy and paste the downloaded firmware file in the root directory of the USB memory.
4. Plug in the USB memory stick to the USB port placed on the top of your JD720C.
5. Press the **Mode** hard key.
6. Touch the **System** icon and then the **Apply** button.
7. Select the **Instrument Setting** tab and touch the **USB** button for **Upgrade**.  
The Update window appears.



8. Navigate to the firmware file "KKC\_FW\_1.067.004.FW".
9. Touch the **Upgrade** button.
10. Select **OK** to confirm.



**Note:** The instrument must be restarted in order to complete the installation of updates and performance improvement.

**Note:** For firmware version 1.022.001 or older, the latest firmware must be upgraded twice: once for firmware upgrade and the other for DSP.

## Revision History

### <<Version: 1.010.017>>

Date: January 10, 2012

First Release

### << Version: 1.020.008>>

**Date:** August 10, 2012

#### **New Features**

- Multilingual Support: English and Korean
- Improved to support 731B External Power Sensor

#### **Improvements and Bug Fixes**

- Improved thermal stability
- Enabled full operation with the rotary knob

### << Version: 1.021.004>>

**Date:** September 28, 2012

#### **New Features**

- Capability of supporting remote control

#### **Improvements and Bug Fixes**

- Improved graphic user interface by changing the typeface.

### << Version: 1.022.001>>

**Date:** November 21, 2012

#### **New Features**

- Capability of supporting Chinese

## Improvements and Bug Fixes

- Improved thermal stability

## Compatible Application Software

- JDViewer 4.5 or higher
- JDRemote 1.3 or higher

## << Version: 1.023.009 >>

**Date:** June 10, 2013

*This firmware is also applicable to DS9000.*

## New Features

- Capability of supporting Russian

## Improvements and Bug Fixes

- Multi-Segment Line (MSL) Related:
  - Fixed the error that the MSL was still enabled even after changing the frequency settings, giving the user incorrect MSL information and disabling moving the limit.
  - Fixed the error that displayed the incorrect limit values after saving a set limit as a file, which were different from actual information at the time of saving.
  - Fixed the error that the user could load a Cable Loss MSL file created in the JDViewer even if the measurement mode was different. MSL files for Cable Loss and VSWR should have been incompatible.
- Fixed the bug that the instrument disconnected the communication with JDViewer if there was no response from the application for a certain amount of time interval.
- Fixed the error that sub-folders did not appear when the Load menu was selected right after booting.
- Improved the save screen feature so as to capture current menus instead of the Marker menu.

## Known Issues

- Broken Characters  
Description: Right after changing the language in the language option to another one displays strange characters instead of Alt. Sweep.

## Compatible Application Software

- JDViewer 4.5 or higher
- JDRemote 1.3 or higher

## << Version: 1.025.011 >>

**Date:** August 10, 2013

### **New Features**

- Capability of supporting French
- Addition of New Limit Window functionality
- Addition of Display Mode and System Shortcut Icons at the Top of the Screen
- Change of Booting Image with CellAdvisor Logo

### **Improvements and Bug Fixes**

- Trace Math:
  - Fixed the bug that the instrument was hung up when the Mode hard key was pressed with the Trace Math window selected as the active window.
- Last Status:
  - Fixed the bug that the Amplitude setting values in the DTF mode were neither saved with Save > Status nor retrieved after rebooting with the Last Status power-on option.
- File Naming Error:
  - Fixed the bug that the files copied by using the HHST program were renamed with the filenames starting with 'capture' by default, losing their original filenames.
- Directory Deletion Error:
  - Fixed the bug that the Delete operation deleted files and subdirectories but not the selected directory (or folder) itself.

### **Known Issues**

- MP-80 Optical Sensor:
  - When the MP-80 Optical Sensor is plugged in, the instrument does not recognize or detect the connected sensor. This issue is under investigation for a solution.

### **Compatible Application Software**

- JDViewer 4.5 or higher
- JDRemote 1.3 or higher

## << Version: 1.026.002 >>

**Date:** August 22, 2013

### **New Features**

- RF Module Power-on:

- Functionality to control the RF module power by implementing an ECO for it. (Serial Number DDE31501 and after)
- Pre-work to add a Power Save mode into the next firmware release in order to improve the battery operation time.

## **Improvements and Bug Fixes**

- None

## **Known Issues**

- MP-80 Optical Sensor:
  - When the MP-80 Optical Sensor is plugged in, the instrument does not recognize or detect the connected sensor. This issue is under investigation for a solution.

## **Compatible Application Software**

- JDViewer 4.5 or higher
- JDRemote 1.3 or higher

## **<< Version: 1.030.040 >>**

**Date:** November 22, 2013

## **New Features**

- Supportability of Fiber Microscope P5000i
- Supportability of Japanese
- Enhancement of Append Keywords
- Addition of USB TMC Mode
- Addition of Help Feature
- Addition of Save on Event
- Addition of System logging
- Enhancement of Touch Screen
- Supportability of Cloud-based StrataSync
- New Hibernate Mode:  
When the instrument enters the Hibernate mode, it stops supplying power to the RF module to help save power and improve battery operation time.
- New Pulse Power and Reverse Power measurements with RF Power Meter function

## **Improvements and Bug Fixes**

- Improved Limit Line display when using the Auto Scale hard key:
  - The Auto Scale used to adjust the Y-axis scale based on the current trace only. After this improvement, if the Limit Line is enabled, it optimizes the scale in a way to display both of the entire trace and the limit line.

- MP-80 Optical Sensor:
  - Fixed the bug that the instrument did not recognize or detect the connected MP-80 power sensor.

### **Known Issues**

- None

### **Compatible Application Software**

- JDViewer 4.5 or higher
- JDRemote 1.3 or higher

## **<< Version: 1.040.009 >>**

**Date:** January 22, 2014

### **New Features**

- Supportability of global positioning information with an optional GPS Receiver
- Supportability of communication over Bluetooth (optional Bluetooth device package required; Kernel 2.6.32.9.18 required; JDRemote 1.6 or higher required)
- Generation of reports in PDF file type for all measurement modes

### **Improvements and Bug Fixes**

- Improved the supportability of StrataSync to allow uploading PDF files as well.
- Improved the Quick Save function
  - Both a trace and a screen can be saved simultaneously in two separate file types (\*.tra and \*.png).
  - In a dual display mode, both traces for each measurement display can be saved as two separate files simultaneously.

### **Known Issues**

- None

### **Compatible Application Software**

- JDViewer 4.5 or higher
- JDRemote 1.3 or higher

## **<< Version: 1.041.003 >>**

**Date:** January 27, 2014



## **New Features**

- None

## **Improvements and Bug Fixes**

- Improved to include pass/fail result in image files to be uploaded to StrataSync.
- Fixed the bug that caused an error in updating firmware from the ftp server or StrataSync.

## **Known Issues**

- None

## **Compatible Application Software**

- JDViewer 4.5 or higher
- JDRemote 1.3 or higher

## **<< Version: 1.042.027 >>**

**Date:** April 22, 2014

## **New Features**

- None

## **Improvements and Bug Fixes**

- Fixed the error that caused a USB memory stick failed to be recognized. The failure was resulted from the USB chipset change.
- Improved the Quick Save function:
  - Added "Report" to the file type options in Quick Save menu.
  - Changed to allow multiple selections.
- Improved the user interface and operation of the Keyword & Append Keywords.
- Added "AP6012J50" to the list of cables in DTF mode.
- Updated the graphic user interface in both Japanese and Russian.
- Fixed the bug that loading a report file (\*.pdf) caused the system hung if JDRemote was connected.
- Updated OpenSSL with the version 1.0.1g.

## **Known Issues**

- None

## **Compatible Application Software**

- JDViewer 5.3
- JDRemote 1.7

## << Version: 1.043.058 >>

**Date:** August 04, 2014

### **New Features**

- New user interface for Optical Power Meter
- New menu added to the report and fiber analysis report
- New option to link OPM readings with a fiber analysis report
- Supportability of new file formats (csv, xml, and html)

### **Improvements and Bug Fixes**

- Improved to display a progress bar when copying or deleting a file in the file manager.
- Created a system directory for StrataSync to upload files only from the folder "/Internal/StrataSync".
- Improved to have the new Bluetooth tab in the System and changed the display to make it easier to connect Bluetooth devices.
- Improved the look of the Instrument Settings tab.
- Improved to display the lastly saved file name in the Save menu when the Power On option is set to Last.
- Improved to load a saved setup file with the CAL status if the stored serial number matches to the one of the current instrument. If not, the instrument will exclude the CAL status from the settings to be loaded.
- Improved to display "Pass" or "Fail" in a big letter for the Limit results.
- Added more SCPI commands.

### **Known Issues**

- None

### **Compatible Application Software**

- JDViewer 5.3
- JDRemote 1.7

## << Version: 1.044.004 >>

**Date:** August 25, 2014

### **New Features**

- None

### **Improvements and Bug Fixes**

- Corrected the error that displayed the RF temperature incorrectly in the System Information.
- Fixed the bug that caused the system reset when a user attempted to load a status file (.sta) that was saved in the firmware version of 1.030 and later.

### **Known Issues**

- None

### **Compatible Application Software**

- JDViewer 5.3
- JDRemote 1.7

## **<< Version: 1.050.020 >>**

**Date:** November 07, 2014

### **New Features**

- Supportability of new 2-port hardware JD725C and JD726C with 2-port Transmission Measurement, High Power CW Signal Generator, and Bias Tee options
- Supportability of e-calibration using EZ-Cal
- Supportability of multi-language: German and Spanish
- Protection from high input power

### **Improvements and Bug Fixes**

- Resolved the "POODLE" vulnerability by upgrading the SSL 3.0 Protocol from OpenSSL 1.0.1.g to OpenSSL 1.0.1.j
- Fixed the error in Optical Power Measurement that the reference setting could not be controlled with pressing the physical reference button on the connected optical power meter
- Fixed the error in the DTF mode that a Delta Marker position on the Y scale was always at one (1)
- Fixed the bug that, when the start or stop frequency/distance setting was changed, the limit line kept the previous frequency/distance settings and was not automatically drawn to the far left or right on the chart area
- Fixed the bug in the File Manager that the progress bar stayed up on the screen even after completing Cut and Paste actions and hindered all the hard keys from functioning
- Fixed the bug on the Save tab that the file type "Setup" could not be selected
- Fixed the error that could not initialize JD72450551 and JD72450552 serial power

sensors

- Improved the peak and valley search for enabled zoom zones by adding more screen keys including Peak All Zones, Valley All Zones, and Peak and Valley All Zones, and Clear Markers All Zones
- Improved the user interface and usability of the Bluetooth connection
- Improved the save function to allow all traces displayed on the screen in the dual display or zoom zone mode saved individually as a trace file for each
- Changed the on-screen instructions for calibration
- Enhanced the interference rejection
- Added a CAL OFF alert

### **Known Issues**

- None

### **Known Limitations**

- Current version of JDViewer Release 5.3 is not fully compatible with JD725 and JD726C.

### **Compatible Application Software**

- JDViewer 5.3.04
- JDRemote 1.7

## **<< Version: 1.051.015 >>**

**Date:** February 4, 2015

### **New Features**

- None

### **Improvements and Bug Fixes**

- Fixed the error in loading a trace in XLM type
- Improved the marker readings in DTF mode to include delay time
- Improvement in Fiber Inspection mode:
  - Improved the report regeneration feature to enable users to include multiple fibers (up to 10) in a report
  - Improved the usability by removing the Quit menu and by moving Save Report and Save PNG menus into the Save action as new user-selective options
- Enhancement in Save function:
  - Improved the screen save feature (Save/Load or Quick Save) by providing users with options to save the current screen with the Marker menu bar and to save it with the current menu bar at the bottom of the screen
  - Improved to let users save not only the measurement screen but also any current

- screen
- Enhancement in Limit function:
  - Increased the maximum number of allowed segments for the Multi-Segment Line from 25 to 50
  - Improved the usability by splitting the combined Limit Line menu into Limit Line and MSL
  - Changed to maintain current limit line and to adjust the limit line accordingly to the change of frequency or distance setting
  - Changed to turn off the Limit automatically when the mode is moved from Reflection to DTF
- Updated UI texts and messages in German
- Improved to turn off the Always Peak in the Peak function automatically when the Peak Between (1) or Peak Between (2) in the Marker menu is selected
- Improved the usability by displaying the previous dual measurements back on the screen after changing it to single display and then returning to dual display

### **Known Issues**

- None

### **Known Limitations**

- None

### **Compatible Application Software**

- JDViewer 5.5
- JDRemote 1.8

## **<< Version: 1.053.009 >>**

**Date:** July 30, 2015

### **New Features**

- Supportability of Internet Protocol version 6 (IPv6) in LAN configuration
- Wi-Fi connectivity using a USB LAN card
- Web-based remote control

### **Improvements and Bug Fixes**

- Fixed the bug that caused the Pass/Fail error of optical power measurement on StrataSync
- Changed the mode name of "Alternate Sweep" to "Alt DTF Band"
- Improved the File Manager by

- Allowing users to select multiple files up to 300
- Increasing the number of traces to 5000 when requested by JDViewer
- Enhanced the Save function by
  - Increasing the number of stored favorites up to 36
  - Including limit and marker settings when saving a trace or setup
  - Allowing users to type in special characters added to the on-screen keyboard
  - Providing the XML file format option when saving a setup
- Improved the Limit function by
  - Adding settings for the warning on/off and limit value
  - Enabling user to set and display a single limit line in zoom zones
- Improved the UI messaging by adding the message "Calibration is complete. Remove your EZ-Cal kit" after an electronic calibration
- Improved to alert users with a message when the calibration status turns Cal Off because the frequency span got down to less than 2%
- Improved the operation of the Up/Down arrow keys
- Improved the operation of rotary knob and scroll bar in the Band List and Cable List
- Updated multi-language supportability with new UI texts and messages

### **Known Issues**

- When starting the instrument, users may experience a broken boot image occasionally.

### **Known Limitations**

- None

### **Compatible Application Software**

- JDViewer 5.7
- JDRemote 1.9

## **<< Version: 1.054.001 >>**

**Date:** August 7, 2015

### **New Features**

- None

### **Improvements and Bug Fixes**

- Fixed the error that caused the Bias-Tee turned off automatically when the output was set to between 16 V and 32 V.
- According to the change of the company name from JDSU to Viavi Solutions, the start-up image was changed to new Viavi image.

## Known Issues

- When starting the instrument, users may experience a broken boot image occasionally.

## Known Limitations

- None

## Compatible Application Software

- JDViewer 5.7
- JDRemote 1.9

## << Version: 1.060.024 >>

**Date:** January 18, 2016

## New Features

- Supportability of Test Wizard

## Improvements and Bug Fixes

- Improved the display of selected folder and file information in the File Manager window.
- Fixed the bug that did not allowed numeric and ESC key entries for Bias Tee setting.
- Fixed the bug in report generation that did not print special characters.
- Fixed the bug in a loaded report that did not function scroll bar, page up and page down properly.
- Fixed the error that failed to automatically detect a re-plugged Wi-Fi LAN adapter in System > Wi-Fi.
- Fixed the error that continued displaying the scan screen after removing a Wi-Fi LAN adapter.
- Fixed the bug that could not delete a folder or file that included a space or a special character in the name after factory reset.

## Known Issues

- There may be an abnormal display of system date and time.

## Known Limitations

- None

## Compatible Application Software

- JDViewer 5.8
- JDRemote 2.0

- Test Wizard Creator 1.0

## << Version: 1.061.004 >>

**Date:** February 2, 2016

### **Improvements and Bug Fixes**

- Changed the VSWR calculation formula
- Fixed the problem that the Bias-Tee did not work

### **Known Issues**

- There may be an abnormal display of system date and time.

### **Known Limitations**

- None

### **Compatible Application Software**

- JDViewer 5.8
- JDRemote 2.0
- Test Wizard Creator 1.0

## << Version: 1.062.010 >>

**Date:** May 25, 2016

### **Improvements and Bug Fixes**

- Fixed the bug that did not allow users to enter a comma (,) when setting a value for Velocity and Cable Loss
- Added the measurement result preview option and more action menus of Repeat, Save, and Quit in the Test Wizard mode for a user who has selected the "Measurement result preview" option in the Save task in the Test Wizard Creator 1.1
- Updated standard band list with LTE signal bands

### **Known Issues**

- There may be an abnormal display of system date and time.
- Users may experience sporadically that the root directory of the internal memory appears in the File Manager.

### **Known Limitations**



- None

### **Compatible Application Software**

- JDViewer 5.8
- JDRemote 2.0
- Test Wizard Creator 1.0 and later

## **<< Version: 1.064.005 >>**

**Date:** January 25, 2017

### **Improvements and Bug Fixes**

- Improved to upload the following files to the StrataSync server:
  - Test Wizard files (\*.wzd)
  - A folder including a space in the folder name
- Fixed an error in value accuracy when measured using a JD731B Power Sensor
- Fixed an incorrect UTC standard time for UK London
- Corrected the Start Frequency and Stop Frequency values of the 'LTE-FDD Band 20 (800) Full' band
- Improved the operation of Test Wizard

### **Known Issues**

- Unable to select a menu on a Prompt screen using the Enter key or the knob when running a Test Wizard file. It works with touch screen only.

### **Known Limitations**

- None

### **Compatible Application Software**

- JDViewer 5.8
- JDRemote 2.0
- Test Wizard Creator 1.0 and later

## **<< Version: 1.065.003 >>**

**Date:** February 15, 2017

### **Improvements and Bug Fixes**

- Fixed the following critical issues unable to change settings in 1 port model:
  - When you change the data point and/or other settings and touch the **Apply**

button, "Invalid Value {12 V <= Bias Tee <= 32 V}" prompts, and setting changes do not apply.

- When you change the frequency setting only and touch the **Apply** button, the setting change does not apply and the screen returns to the **General** tab.
- Fixed an issue of a slowdown of the instrument when operating the following specific tasks in the DTF mode:
  - When using the trace point 2001, hold, and favorite functions, the screen touch response becomes dramatically slow and the touchscreen does not work.

### Known Issues

- Unable to select a menu on a Prompt screen using the Enter key or the knob when running a Test Wizard file. It works with touch screen only.

### Known Limitations

- None

### Compatible Application Software

- JDViewer 5.8
- JDRemote 2.0
- Test Wizard Creator 1.0 and later

## << Version: 1.066.001 >>

**Date:** February 24, 2017

### Improvements and Bug Fixes

- Fixed to apply settings from the **SETUP** hard key when the Bias tee license is disabled.

### Known Issues

- Unable to select a menu on a Prompt screen using the Enter key or the knob when running a Test Wizard file. It works with touch screen only.

### Known Limitations

- None

### Compatible Application Software

- JDViewer 5.8
- JDRemote 2.0
- Test Wizard Creator 1.0 and later

## << Version: 1.067.004 >>

**Date:** July 20, 2017

### **Improvements and Bug Fixes**

- Supportability of Portuguese
- Fixed Bugs:
  - System freezing in DTF measurements with data point setting to 2001
  - Error in loading a cable list from JDViewer
  - Error in setting amplitude with Test Wizard after setting zoom zones on

### **Known Issues**

- None

### **Known Limitations**

- None

### **Compatible Application Software**

- JDViewer 5.8
- JDRemote 2.0
- Test Wizard Creator 1.0 and later

## << Version: 1.068.001 >>

**Date:** May 09, 2018

### **Improvements and Bug Fixes**

- Enhanced the support for StrataSync's Anti-Theft
- Assigned new descriptors for the Data Type within StrataSync (Trace, Screen, Report, and CSV)
- Added FXL-780 7/8' to the standard cable list
- Added new SCPI commands for GPS location setting
- Improved the confirmation message for the factory reset
- Fixed bugs
  - Bias-tee supply failure on JD725C/JD726C
  - Incorrect start and stop frequencies of a few LTE-FDD bands in the standard band list

### **Known Issues**

- None

## Known Limitations

- None

## Compatible Application Software

- JDViewer 5.8 and later
- JDRemote 2.0 and later
- Test Wizard Creator 1.0 and later

## Technical Assistance

For assistance related to the use of your product, call or e-mail VIAVI 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
22079588 rev 005	May 27, 2016	Release 1.062.010 of JD720C Cable and Antenna Analyzer
22079588 rev 006	Jan 25, 2017	Release 1.064.005 of JD720C Cable and Antenna Analyzer
22079588 rev 007	Feb 15, 2017	Release 1.065.003 of JD720C Cable and Antenna Analyzer
22079588 rev 008	Feb 24, 2017	Release 1.066.001 of JD720C Cable and Antenna Analyzer
22079588 rev 009	Jul 20, 2017	Release 1.067.004 of JD720C Cable and Antenna Analyzer
22079588 rev 010	May 09, 2017	Release 1.068.001 of JD720C Cable and Antenna Analyzer