



DSAM 4.5.4 Firmware Release Notes

Release Notes

DSAM v4.5.4 addresses one bug discovered in Home Certification mode when the mode is set to run Throughput testing and returns with an error stating “The CMTS did not return a range response”. It also increases the QAM Egress mode’s top frequency from 900MHz to 1000MHz.

The previous firmware 4.5.3 fixes a few customer scenarios discovered since the release of v4.5.1 firmware. These situations include low throughput results when a significant delay (lag) is present between the DSAM and throughput server and incorrect ISDB-T readings for those units equipped with ISDB-T hardware.

It is recommended to upgrade to v4.5.4 if any of the above mentioned scenarios are likely to occur or if the DSAM is at a firmware version earlier than v4.5.1.

Firmware v4.5.1 added new features to the complementary [SmartID Advanced Coax Probes](#) and enhancements to its existing suite of coaxial testing. This release also contains additional enhancements to the USB Fiber accessories [P5000i Fiber Inspection Scope](#) and [MP-60/-80 Miniature Power Meters](#). It also includes several improvements and bug fixes to other features and functions of the DSAM family.

Details of the DSAM 4.5.4 firmware release include the main features released in v4.5.1:

SmartID Enhancements¹ (requires SmartIDs with firmware v01.10.18 or higher)

- Configuration and existing SmartID test enhancements
 - Configurable SmartID auto-power off time (30 or 60 mins)
 - Support for all MoCA 1.x channels
 - SmartID Telemetry communication settings now configurable (5-1500 MHz)
 - Upstream and Downstream frequency ranges can now be configured through the full 5-1500MHz range
 - In Detail view
 - Splitters correctly change direction when Swap button is pressed
 - The word 'Fault' has been changed to 'Reflection'
- Sweep Mode
 - Perform a sweep at any frequency range from 5MHz to 1500MHz with two SmartIDs
 - Save and load sweep result and reference files
 - Two onscreen markers and delta information
- CW Mode
 - Use a SmartID to transmit a CW signal at any frequency between 5 MHz and 1500MHz
- FDR Mode
 - Measure cable length and find distance to cable faults with one SmartID

Fiber USB Accessories MP-60 / MP-80 optical power and P5000i Fiber Scope²

- All supported wavelengths are read from the MP-60/MP-80 device
- P5000i Automated test option support and available fiber tips are now read from the device

Other Firmware Enhancements / Fixes

- Auto-purge no longer deletes sweep reference files
- Contrast renamed to Display
- Equalizer Mode Enhancements
 - Distance calculation now reflects one-way distance, not roundtrip distance
 - Measurements can now be saved, loaded, and synced to StrataSync³
- Improved modulator (MOD) stress indicator
- USB port power selection (auto or always ON)
- DQI: DOCSIS channel info now shows properly in Hungarian language
- Packet loss ratio now displays as a percentage
- Fixed issue on 85 MHz units in loopback mode
- Fixed issue where wireless USB dongle stopped after a wireless sync
- Updated to latest StrataSync client library

DOCSIS communication adjustments

- Fixed an issue during RCC installation which lead to stale data being presented
- Fixed an upstream throughput issue with incorrect source and destination addresses
- Fixed downstream bonding limitations with CMTSs that incorrectly examine the advertised tuner capabilities of the modem
- Fixed a MAC Domain Resolution issue for DOCSIS 3.0 DSAMs
- Modified the TOD timing to accommodate a delayed response from the TOD server

NOTE:

¹ SmartIDs sold separately from DSAM – SmartID firmware and update instructions can be found on the SmartID's product page: <http://www.viavisolutions.com/en-us/products/network-test-and-certification/hfc-test-instruments-and/smartid-advanced-coax-probes>

² P5000i Fiber Scopes and MP-60/MP-80 optical power meters sold separately from DSAM

³ Future StrataSync release required for viewing test results

Test Productivity Pack (TPP) Upgrade Instructions Attention DSAM users and Test Productivity Pack (TPP) administrators:

Note: This upgrade is only applicable to units with XT hardware. If you have a non-XT DSAM, please refer to version 3.8 upgrade instructions on [this page](#) instead. If your DSAM is an XT version, there will be an "XT" superscripted by "DSAM" on the brow label above the display screen (see circled portion of label shown below).



Important:



- DSAM firmware release V4.5.4 is for DSAM^{XT} only. For latest firmware support for non-XT DSAM meters, follow instructions on this page
- TPP V4.8 will not allow latest Home Certification features to be configured within the TPP thick client, this will require TPP V5.0

TPP Administrators: please pay attention to the DSAM upgrade instructions below.

TPP Upgrade Instructions

Before upgrading your DSAM^{XT} be sure to upgrade your TPP server to TPP V4.8 or V5.0 first. Please visit the [TechComplete™ Test Productivity Pack \(TPP\) Software Upgrade](#) website for TPP upgrade information.

DSAM 4.5.4 (and future/later versions): for XT meters only

- Deployable by TPP 4.8 and later.
- TPP v4.8 and later will not list (or allow selection) of any non-XT meters for deployment.
- This protects the customer from damaging their meter with the wrong firmware.
- Only exists as a ZIP file (no separate XML file).

To maximize upgrade reliability, please upgrade your DSAM on networks that have reliable connections, minimal network congestion, and no restricting firewalls. In the case where you feel the IP or RF networks have intermittent reliability or you have experienced upgrade failures, we recommend that a direct laptop connection or Ethernet connection be used.

Please read the following instructions and follow them step-by-step.

1. Connect your DSAM to the charger to provide a consistent power supply during the upgrade.
2. Synchronize each DSAM for upgrade to TPP via the Ethernet port to verify proper configuration and communications. Firmware upgrades require connection to the DSAM through the Ethernet port.
3. Avoid upgrading more than 10 meters at a time per TPP server. If your server connection is less than 10 Mbps, for example to a cable modem with a 384k upstream, you should limit your DSAM upgrades/synchronizations to 4 at a time.
4. Download the file below. Save the file by right clicking on it and Select "Save Target as..." or "Save Link as.."
 - [dsam4.5.4.zip](#)
5. Important: Starting from DSAM v4.0 firmware, the license file (.xml) is no longer required.
6. Launch TPP 4.8 thick client or log in TPP 5.0 web client and go to "manage meter assets" page.



7. Ensure the DSAM(s) you are upgrading appear in the Meter Assets list, specified by serial number. If they are not on the list, you must add the DSAM(s) and synchronize them before you proceed to the next step.
8. In the "meter management tasks" sidebar on the left of the manage meter assets page, click on "upgrade meters".
9. On the upgrade meters page, click "browse" and select the downloaded firmware file from the location you saved it to, in step 4 of this list. Then click "open".
10. The list of upgradeable meter(s) should now be displayed on this page. If there is no list, please review the previous steps or contact Technical Assistance Center (TAC) at the number below for further assistance. Ensure that only the meter(s) that you wish to upgrade are checked. Deselect those meters you do not wish to upgrade.
11. Click the "done" button in the bottom right corner.
12. Synchronize the DSAM(s) with TPP.
13. After the meter has rebooted, verify the upgrade is successful. Check the "manage meter assets" page, sync "Status" column, and ensure the most recent sync is OK, and check the "FW Version" to see that it is V4.5.4.
14. If the meter reboots to a screen that says "Upgrade was not completed, press soft key 1 to retry the upgrade" you should repeat steps 7 to 10 and re-deploy the upgrade BEFORE pressing the key to re-synchronize.
15. If you have any issues after re-trying to synchronize, please contact TAC at the number below.
16. Congratulations! The latest DSAM firmware has now been installed!

For user interface languages other than English, Spanish, French and German, after you update your firmware according to the process described above, you may choose to update your meter by repeating the process described above with the appropriate

- [Chinese: dsamv4_5_3_cn.zip](#)
- [Hungarian: dsamv4_5_3_hu.zip](#)
- [Japanese: dsamv4_5_3_ja.zip](#)
- [Korean: dsamv4_5_3_kr.zip](#)
- [Polish: dsamv4_5_3_pl.zip](#)
- [Portuguese: samv4_5_3_pt.zip](#)

For DSAM users wishing to use Euro PacketCable™ with the DSAM:

The DSAM is capable of operating on Euro PacketCable VoIP networks; however, the DSAM must be configured with the appropriate PacketCable build and may be configured via a TPP



update. The update completes in around 5 to 6 minutes and does require the meter to be setup like a firmware upgrade with TPP and the meter must synchronize over Ethernet and remain plugged into the charger. Upgrade the DSAM to the v4.5.3 Euro file when the **Euro PacketCable standard** is required.

Again moving forward only the .zip file is required for the upgrade between PacketCable standards to complete correctly:

- [Firmware file: dsamv4_5_3_euro.zip](#)

StrataSync Upgrade Instructions

Attention DSAM users and StrataSync administrators: Before you proceed, please ensure that you know which type of DSAM is to be upgraded. This v4.5.3 firmware upgrade is for DSAM with XT hardware only. If you have a non-XT DSAM, please refer to version 3.8.4 upgrade instructions instead. If your DSAM is an XT version, there will be an "XT" superscripted by "DSAM" on the brow label above the display screen (see circled portion of label shown above).

Important:

- **The DSAM firmware must be v4.3 or higher prior to being able to communicate with StrataSync.** If the DSAM firmware is prior to v4.3 (for DSAM's with XT hardware) use TPP V4.8 or V5.0 to upgrade the DSAM. If TPP is not available please contact TAC below.
- **DSAM firmware release v4.5.4 is for DSAM^{XT} only.** For latest firmware support for non-XT DSAM meters, follow instructions on [this page](#).

To maximize upgrade reliability, please upgrade your DSAM on networks that have reliable connections, minimal network congestion, and no restricting firewalls. In the case where you feel the IP networks have intermittent reliability or you have experienced upgrade failures, we recommend that a direct internet connection be used.

Please read the following instructions and follow them step-by-step.

1. Connect your DSAM to the charger to provide a consistent power supply during the upgrade.
2. Synchronize each DSAM for upgrade to StrataSync via the Ethernet port to verify proper configuration and communications. Firmware upgrades require connection to the DSAM through the Ethernet port.
3. Avoid upgrading more than 10 meters at a time if your internet connection is less than 10 Mbps. For example to a cable modem with a 384k upstream, you should limit your DSAM upgrades/synchronizations to 4 at a time.
4. Find the upgrade file in the "ASSETS" tab in the "Actions" column under "Firmware update"
5. Ensure the "Select an update method" has "Online updates" selected and press Next
6. Select the 4.5.4 Package and press Next
7. Select the DSAM's units you wish to upgrade then press Next



8. The list of upgradeable meter(s) should now be displayed on this page. If there is no list, please review the previous steps or contact Technical Assistance Center (TAC) at the number below for further assistance. Ensure that only the meter(s) that you wish to upgrade are checked.
9. Press "Update" to set StrataSync to perform the upgrade
10. Synchronize the DSAM(s) with StrataSync.
11. After the meter has rebooted, verify the upgrade is successful. Check the "ASSETS" tab to check the "SW Version" to see that it is 4.5.4.
12. If the meter reboots to a screen that says "Upgrade was not completed" retry the sync to StrataSync
13. If you have any issues after re-trying to synchronize, please contact TAC at the number below.
14. Congratulations! The latest DSAM firmware has now been installed!

If you have any questions about when or why you would use this upgrade or for technical assistance please contact the Viavi Solutions Technical Assistance Center (TAC) at:

- **+1-844 GO VIAVI (+1-844-468-4284)**
- **E-mail CATV TAC at catvsupport@viavisolutions.com**

If you have any order related questions, please contact the JDSU Customer Service Center at:

- **+1-844 GO VIAVI (+1-844-468-4284)**
- **E-mail the Customer Service Center at custserv@viavisolutions.com**