# TX300M Firmware/Software Updates

*Notes:*      *The TX300M test set constantly evolves to keep up with newer technologies and advanced capabilities. Please refer to the software update procedure at the end of this document to keep it up-to-date.*

## Software version 02.01-03-00                       Oct 24, 2014

**Release Scope:**

Major Release. General availability.

**New Transport features and improvements:**

1.  Added OTU1e, OTU2e, ODU0 and ODUflex testing options.

2.  Added PRBS→ODU0→ODU1→ODU2→OTU2 OTN Map/Mux test structure to the ODU0/ODUflex test application

3.  Improved descriptive overhead decoding labels for OTU (SM) BEI/BIAE, BDI & IAE; ODU (PM) BEI, BDI & STAT; TCMi BEIi/BIAEi, BDIi & STATi, and fixed TX ODUk PM STAT (byte 3, bits 6-8) default setting to 001 [1676]

4.  Fixed the 2 MHz External Clock status label to reflect the presence of correct clock signal in the SMA port [1622]

5.  Improved 2.5G jitter output performance

**New Packet features and improvements:**

6.  Added XLoop control mode for compatibility - Sends remote Loop Up/Down with layer 2/3 and Layer 2 with VLAN tag to third-party test sets.TX300M also responds to Layer 2/3 loop requests from those remote test sets.

7.  New 10Gbit/s Wander Measurements for 10GE (SyncE)

8.  New Random Frame Size Generation for 10GE

9.  New RFC2544 P2P testing.

10.  Added Packet Capture capability when tests are running (e.g. Throughput, BERT, RFC2544,...)

11.  Added Net Wiz in 1G Ethernet testing

12.  Added support for tunable XFP (Finisar, Menara, OPLINK, Cisco and XGIG)

13.  Added G.729 codec support to VoIP testing

14.  Layer 4+ applications in 1GE testing: Line rate HTTP (V-Test), line rate FTP (V-FTP), and line rate TCP (V-PERF). All three features require software options.

15.  1GE and 10GE PBB in Ethernet testing. Requires software options.

16.  IPG based multiple stream service disruption test (SDT) measurement for 1GE and 10GE.

17.  Added Multiple IP session support in Throughput/Multiple stream.

18.  Resolved V-SAM limitations for testing multiple services [1870,1871]

19.  Fixed a Default/User Defined MAC bug in the IP menu. The user defined MAC configured in the Home/IP menu was not always used in the IP session

**General improvements:**

20.  Added support for Huawei E180 WCDMA HSDPA cellular data card. Works with 900/2100MHz HSPA/UMTS and 850/900/1800/1900MHz EDGE/GPRS/GSM (Requires Z77-00-015G USB cellular modem and 499-05-157 USB Data Card Support option. SIM not included)

21.  Added support for dual-band Wi-Fi dongle (2.4 & 5 GHz)

22. Improved screen capture stability

23. New welcome screen to guide new users and help transition existing TX300 users into the multi-test GUI

**Known issues or limitations:**

a.  Note: CPRI and OBSAI features are not currently available for the TX300M


## Software version 01.02-02-00                                              Jan 10, 2014

**Release Scope:**

Initial Release. General availability.

**New Transport features and improvements:**

1.  PDH (E1, E3, E4), DSn (T1, T3), SDH (STM1-STM64), SONET (STS1-OC192), and OTN (OTU1, OTU2) testing

2.  Updated OTN Overhead Analysis and Generation GUI to add the Delay Measurement (DM) byte.

**New Packet features and improvements:**

3.  10/100/1000BASE-T, 100BASE-FX, 1000BASE-X, 10GBASE-X Ethernet testing.

4.  SyncE and 1588v2 PTP testing

5.  1/2/4/8/10G Fibre Channel Testing (8G hardware support is optional)

**General improvements:**

6.  Dual test capability (excludes OTN/SDH/SONET/PDH/DSn test modes)

7.  Dedicated Sync Clock input and output ports with BNC connectors

**Known issues or limitations:**

a.  ~~OTU1e, OTU2e, ODU0 and ODUflex will be added in subsequent releases.~~

b.  ~~The Screen Capture function is still a beta version and not fully functional. Please refrain from using this feature as it could temporarily or completely freeze the test set, requiring a power cycle to recover.~~

## References                                                     TX300M

### Upgrading the TX300M software

Once you have downloaded and unzipped the software upgrade file, to obtain the **tx300m-veex-arm.tar.gz** package, the software upgrade process (also known as firmware upgrade) can be performed in two ways:

1. **Via USB Drive**: Copy the **tx300m-veex-arm.tar.gz** file to the root of a FAT32 USB memory stick and then plug it to the TX300M. Turn the power OFF. Press the 🗁 and **App** buttons simultaneously, while powering the unit ON. The three buttons can be released once the confirmation tone (beep) is heard. Wait for the upgrade process to finish.

2. You could also use **ReVeal TX300M** PC application to connect to the TX300M and use the **Upgrade** function offered in the application's **Home** menu. Follow the instructions offered by the application.

TX300M must be connected to AC/DC charger at all times during the whole upgrade process. DO NOT turn it off at any time; the upgrade process will take several minutes and the TX300M will reboot itself at the end.

To verify the current software version number installed in the unit, open the **Utilities** section, select **Settings**, and open **About**.

*Note:   If installed in your PC, some file compression agents (applications) may show the resulting* **tx300m-veex-arm.tar.gz** *as a compressed file, but there is no need to expand the file any more. Keep it as is.*


### Test Profiles and Test Results Backup Procedure

The TX300M File Management system offers backup [To USB] and restore [From USB] functions. They can be found in the **Files** tab, on the left side of the screen, under **Saved**. To enable the [To USB] and [From USB] functions, insert the USB Drive, tap on the folder icon on the top of the screen, and press "Install USB Drive". When all files have been copied to the USB, press the folder icon again and press "Remove USB Drive" to make sure all cached data is transferred to the USB drive.

It is highly recommended to select all important test profiles and results, and make a backup copy to a USB drive, before upgrading the unit's software. The software upgrade process cleans up all the data stored in the unit. After the unit has been updated, use the [From USB] function to restore the data back to the test set.


### ReVeal TXM (PC software)

Offers Remote Access, download screen capture, results, profiles and wander files, create reports, etc. Download it from **www.veexinc.com**


### ReVeal Wander Analysis (PC software)

Wander and absolute phase analysis and reporting. MTIE and TDEV analysis and standard pass/fail masks Download it from **www.veexinc.com**