



MX120+ Firmware/Software Updates

Software version 5.1.3-3

Feb 21, 2014

Release Scope:

General availability.

Must use ReVeal MTX 1.5.9 or newer with this release.

New features and improvements:

1. Added support for Huawei E1803G Data card supporting HSDPA/UMTS 900/2100MHz, GSM/GPRS/EDGE 850/900/1800/1900MHz, requires unlocked SIM.
2. Added support for Edimax dual band 5G Wifi a/b/g/n adapter

Known issues or limitations:

None

Software version 5.1.3-2

Jan 28, 2014

Release Scope:

General availability.

Must use ReVeal MTX 1.5.9 or newer with this release.

New features and improvements:

3. V-SAM Test (ITU-T Y.1564) now supports EMIX traffic generation and CBS/EBS buffer tests
4. The V-SAM test CBS and EBS parameters configuration has been extended to 1000 kB.
5. The V-SAM test now includes a Policing tolerance parameter. This parameter is used to compensate for the effects of large CBS/EBS values in the policing test pass criteria.

Known issues or limitations:

None



Software version 5.1.2-0

October 4, 2013

Release Scope:

General availability.

Must use ReVeal MTX 1.5.6 or newer with this release.

New features and improvements:

1. New threshold configuration option has been added for RFC2544. The Pass/Fail threshold for the throughput test can now be configured as a % of Max Throughput rate or as a % of Line rate.
2. The RFC2544 throughput test now supports a frame loss limit parameter. This parameter defines the frame loss tolerance in the throughput rate binary search algorithm.
3. Packet capture function now supports VLAN tagged traffic.
4. Added Wifi Wiz support for WPA and WPA2 encryption
5. Added Throughput Test Round Trip Delay threshold configuration and threshold crossing event generation in log.
6. Changed the User Interface formatting to hold nine digits for total frames RX/TX in BERT/Throughput test.
7. Enhancements to the VoIP MOS measurements, added capability to change the number of calls and the dial style without unregistering first, and simplified the connection process for peer to peer calls.
8. VoIP Expert Client/Server function enhancements to the VoIP MOS measurements. Requires VX1000 server Software to be upgraded to version 1.3.3-0 or newer for interoperability.
9. Added sorting for the profile list.
10. Help files have been updated to reflect the latest software features.

Known issues or limitations:

1. VLAN scan is not supported on the 1000BaseX port
2. VoIP Expert Client/Server Saved test results show erroneous measurements in the upstream direction
3. VoIP Call Expert Saved Call Trace is not shown in the list of saved test results; however it can be downloaded using ReVeal.

Software version 5.1.1-2

December 26, 2012

Release Scope:

General availability.

Must use ReVeal MTX 1.4.7 or newer with this release.

New features and improvements:

1. The unit can now shut down in Fiber Channel mode.
2. The Signal and Frames LEDs now properly reflect link status.
3. Layer 1 unframed test stability has been improved, previously the receive direction was occasionally not showing received traffic.
4. Traffic switching between uniform frame size and ramp mode traffic caused the unit to reset. This



- has been addressed.
5. Enhanced the display of graphics in RFC2544 and addressed text overlap issues.
 6. Traffic switching between Ipv4 and Ipv6 in RFC2544 previously caused the unit to reset. This has been addressed.
 7. The Throughput test configured with uniform frame size from 68 to 1518 bytes can now be set at 12.00% bandwidth.
 8. The stability of RFC2544 Asymmetric test has been improved.
 9. PPPoE auto DNS is now supported on the test port.
 10. Extended display accuracy for RTD and FDV measurements.
 11. Added display for Ethernet real frame size, including VLAN and MPLS tags
 12. Added support for results transfer and profiles creation with VeEX R-Server.
 13. Added support for Link Level Ethernet OAM 802.3ah option.
 14. Added support for Service Level Ethernet OAM 802.1ag and Y.1731 options.
 15. Improved FDV measurement accuracy in Y.1564 V-SAM test.
 16. Added Auto Saving mode and timed test Auto Saving.
 17. Added BERT and Throughput test Auto-test scheduling.
 18. Added support for color mode testing in Y.1564 V-SAM test. Color mode uses the DEI flag in the VLAN tag.
 19. Addressed issue with Reveal Remote control occasional timeout.

Known issues or limitations:

1. Packet capture function does not support VLAN tagged traffic.

Software version 5.1.0-14

January 20, 2012

Release Scope:

General availability.



New features and improvements:

1. IPTV: added VLAN support in the probe function
2. IPTV: Fixed a video/audio CC bug
3. IPTV: Fixed an average bandwidth calculation issue.
4. IPTV: blocked IPTV in PPPoE mode when a VLAN is configured.
5. Fixed a web browser and FTP profile. When the profile was loaded it caused the function to not work properly.
6. Fixed a ping report status issue.
7. Added the all 1's and all 0's test patterns and user defined test patterns to the Throughput function.
8. Fixed a Frame per Second graphic bug, in BERT and Throughput. It would not display zero values properly.

Known issues or limitations:

1. IPv6 cannot be tested in a routed environment at this time.

Software version 5.1.0-12

Nov 8, 2011

Release Scope:

General availability.

New features and improvements:

2. Introduces V-SAM, the Y.1564 Service Activation Methodology feature
3. Improvements to the VoIP function including the following fixes:
 - a. VoIP expert mode is now fully functional against and MX300 or TX300 server. This test was triggering unit reboot in previous releases
 - b. The MOS ON key is now properly displayed when placing multiple calls
 - c. The 2 to 3 seconds delay on voice when making calls with the headset has been removed
 - d. The IP phone jitter delay can now be properly configured in fixed or auto mode
 - e. Calls can now be placed without registration in a back to back mode
 - f. The Outbound SIP field is now fully functional
 - g. The VoIP check minimum and maximum test durations are now correctly enforced
 - h. The VoIP check minimum and maximum jitter buffer parameters are now correctly enforced
 - i. The number of lost and discarded packets has been added to the VoIP measurements
 - j. IPTV function now supports VLAN tagging with restrictions (refer to known limitations section)

Known issues or limitations:

1. Limited functionality of IPv6 features in routed environments. The source and destination IPv6 addresses must be in the same network.



1. PPPoE registration with VLAN tag is not supported. An error message has been added to prevent this configuration.
2. The Trace Route function does not work from the management port, when a unit with a fixed IP address is rebooted. The work around is to disconnect and reconnect the IP configuration.
3. The Ping and trace route functions do not work from the management port, when a unit with a fixed IP address and a VLAN tag is rebooted. The work around is to disconnect and reconnect the IP configuration.
4. The packet capture function does not work on VLAN tagged traffic.
5. The IPTV probe function does not work with VLAN tag and if the probe function is started all subsequent IPTV measurements and viewer are not functional. The work around is to disconnect and reconnect the IP configuration. The probe function should be avoided when VLAN tagging is used.
6. The following are limitations in the V-SAM function:
 - a. V-SAM results can't be exported using the USB transfer function
 - b. During the performance test, the service availability criterion is properly evaluated, however it is not highlighted in red in the results screen when failing
 - c. A mix of IPv4 and IPv6 streams cannot be generated. All the streams generated have an IPv4 or IPv6 header.

Software version 5.1.0

March 23, 2011

Release Scope:

This version is released for general availability to all customers.

This version is compatible with ReVeal MTX PC software version 1.2.1 or later.

New features and Improvements:

1. Support for scanning double tagged VLAN traffic has been added to this release in the VLAN Scan function.
2. The unit now displays the delay measurements dynamically in the Results/Delay tab, with automatic change from microseconds, to milliseconds, to seconds correspondingly.
3. The ability to automatically copy the header information from one application (RFC2544/BERT/Throughput) to another has been added in this release.
4. The RFC2544 Latency measurement now is measured as an average RTD on all frames.
5. In VoIP measurements, the BURST R factor score has been added to the results, it measures the R factor during Burst periods. A Burst period is defined as a period of high packet loss or packet discard density (>5%)
6. The VoIP Expert option has been improved, in client or server mode, the Upstream results have been added for the packet metrics, previously only Downstream results were displayed.
7. The capability to delete VoIP phone profiles created by the user has been added in this release.



8. Occasionally the ARP request would not be sent out, when pressing the ARP/ARP GW button in the Header/MAC menu. This issue has been addressed.
9. The VoIP Data reliability field has been removed from the user interface, this parameter was not being measured by the unit.
10. VoIP profiles created with ReVeal MTX are now fully functional on the unit; previously a profile created with ReVeal and uploaded to the units would not allow successful registration.
11. VoIP Phone mode results are now stored with all the measurements, previously only MOS and R factors were being stored.

Known Limitations:

There are no known limitations in this release.

Software version 5.0.29-19

December 28th, 2010

Bug fix: ARP and ARP Gateway button was intermittently working. It is now fixed.

Fix MOS score bugs and enhanced the SIP protocol

Fixed an averaging FPS bug: the average was more than the MAX value. This is now fixed.

IPv6 bug fix: the first time that IP tools was used, the IP tools function will not work after the first time. This is now fixed.

Added double VLAN tagging in IP Tools.

Software version 5.0.29-15

December 2, 2010

1. NetWiz bug fixed: the network discovery feature was intermittently working, not discovering all available devices on the LAN. Fixed.
2. Added limitation of the number of steps in Traffic/Ramp mode when milliseconds are selected. The limitation is 64 steps.
3. IPv6 feature is released for IP Tools.
4. Added dynamic display of bandwidth (rate value); switches to Kbs, Mbps, automatically.
5. Supports results storage while the measurements are running.
6. Fixed a uniform frame size distribution bug: when uniform was configured the TX will not transmit at the rate specified. Fixed.
7. Auto-negotiation is added to the management port.
8. Added a larger display view in IPTV.
9. Improved the stability of the RFC2544 asymmetric test.



Software version 5.0.29-10**October 20, 2010**

1. Fixed a RFC2544 bug where 64 bytes could not be tested.
2. Fixed a UI crash when the user would change to a different language.
3. Added a round trip delay enable/disable option to the Throughput application.
4. Added IPv6 to the Throughput/RFC2544/BERT applications.
5. Fixed a round trip delay bug where the value kept on increasing over time.
6. Removed the CLI Server button from the Setup/Measurement menu.
7. Added RFC2544 Asymmetric test compatibility with the MX/TX300/
8. Fixed a CRC error bug when the copper test port was set to Auto-neg ON and linked up to 100T with BW configured to 10%.

Software version 5.0.29-5**July 20, 2010**

1. Fixed a PPPoE bug when VLAN was enabled. The PPPoE would not connect properly.
2. Fixed a user defined MAC address bug in IP Tools: the MAC address would not be retained after the IP connection.

Software version 5.0.29-3**June 21, 2010**

1. Fixed a WiFi feature bug where the channel displayed was always channel 66.

Fixed a port settings bug where port 2 would always be reset to the default configuration when port 1 was configured with auto-negotiation.

Fix a bit and CRC (intermittent) error detection bug in passthrough monitor mode.

Software version 5.0.29**May 7, 2010**

1. Changed Layer 3 Throughput test minimum frame size to 68 bytes.
2. Fixed asymmetric RFC2544 issue.
3. Fixed RFC2544 frame loss issue, reset Summary display to 0 before Frame Loss test starts.
4. Fixed fail to measure optical signal level problem.
5. Added Peer-to-Peer Throughput message box after a test is stopped.
6. Fixed Web test problem and Web/FTP profile issue.
7. Fixed Monitor mode issue when receiving rate and threshold are same at 100% but Status shows Failed.