ATC-5000NG Software Version 26.02.1201 Now Available

3/12/2026

New Features & Improvements

1. Corrected issue with DME Echo power at +5 dBm at some frequencies.
2. Added remote command for current DME range.
3. Added compensation between Gen A and Gen C for DME echo power.
4. Added compensation for Transponder power deviation below -10 dB.
5. Corrected issue where some units were not receiving UAT messages.
6. Reestablished measuring temperature when ATC5000NG not in a transmission mode.
7. Corrected the DSP command interpreter priority to solve issues at high PRFs in the Transponder Menu.
8. Corrected issue on UAT In decode.
9. Corrected DME Settings Menu power level adjustment.
10. Corrected issue that in DME menu after ":atc:reset", the DME frequency was being set to 978 MHz not the frequency in the menu.
11. Corrected issue with UAT lateral axis encoding.
12. Corrected issue that occasionally the ATC5000NG was not provide the status byte on the GPIB that data is available in the output buffer.
13. Corrected Transponder reply delay calculation to eliminate acquisition squitters.
14. Enhanced the GPIB service routine in the Kernel to provide Status Byte information faster.
15. Corrected issue with multiple payloads on UAT dynamic intruders.
16. Corrected issue with Receiver update with Mode S Address.
17. Corrected issue with Transponder measurement not working after remote command ":ATC:RCV:RECORD ON".
18. Corrected issue with DME frequency measurement when switch from lower part of the band to upper part the band.
19. Corrected issue with ATCRBS reply on the datalog query.
20. Corrected issue with Transponder frequency measurement.
21. Corrected issue with DME frequency measurement at upper limit of frequency band.
22. Corrected issue with Call Sign/Flight Plan ID in accordance with Cal Sign Identification flag.
23. Corrected in Transponder Menu during double interrogations that receiver information was not displayed on the bottom of the menu.
24. Added remote commands for DO-260C and DO-282C.
25. Corrected issue with Transponder Percent Reply.
26. Corrected issue with Transponder Percent Reply.
27. Corrected issue of latitude and longitude when saving a Tx Block in Multi-Receiver.
28. Release of DO-282C.
29. Corrected issue with Mode A setting in DO-260C squitters.
30. Corrected issue with occasional not setting "Buffer not empty" in GPIB status byte.
31. Modified frequency measurement algorithm to set the Receiver LO to the closest 100 KHz to the signal frequency being measured.
32. Update DO-260C software capabilities.
33. Added an AGC algorithm in the Receiver DSP for frequency measurement.
34. Corrected issue with Load and Save on the UAT scenario.
35. The Multi-Receiver menu has been modified to allow selection of DO-260C.

36. Tx Block and DO-260 menus allow selection DO-260C squitters if the DO-260C key is enabled.
37. Airborne Position squitter has been modified for DO-260C requirements.
38. Surface Position squitter has been modified for DO-260C requirements.
39. Identification Squitter has been modified for DO-260C requirements.
40. Velocity squitter has been modified for DO-260C requirements.
41. Target State squitter has been modified for DO-260C requirements.
42. Operational Status squitter has been modified for DO-260C requirements.
43. Emergency Status squitter has been modified for DO-260C requirements.
44. High Velocity squitter (Position squitter for rockets and high velocity aircraft) was completed for static intruders in the Multi-Receiver menus.
45. Type Code 23, 24, 26, and 27 have been developed for Receiver decode and TX Block\DO-260 menus.
46. Corrected issue in the Transponder screen that the Mode A code and Mode C altitude was being requested from the DSP at high rate.
47. Corrected GPIB routine in the Kernel Software.
48. Separated into 2 threads the % reply and reply delay routines in the Transponder screen.
49. Corrected issue on the I/O Controller FPGA that would stop providing ATC5000NG Mode S interrogations reports on the Receiver Menu.
50. Corrected GPIB issue were occasionally because 2 threads were requesting the GPIB status, the NI GPIB driver receive routine would provide an erroneous data string.
51. Corrected issue of occasional TCP/IP lock up with the scope samples.
52. Corrected issue of occasional TCP/IP lock up between Kernel/Touchscreen and DSP.
53. Updated the GPIB receive/transmit functions to remove occasional missing character.
54. Stop frequency measurement when leaving the measurement screen.
55. Corrected issue of bottom antenna frequency measurement not the same as top antenna.
56. Corrected issue with bottom antenna frequency measurement being ~ 40 KHz higher than top antenna.
57. Corrected issue with GPIB status byte.
58. Corrected issue with GPIB occasionally missing character.
59. Corrected issue of Touchscreen software adding erroneous message in fault log during a “:ATC:RESET” command.
60. Allow the remote command “:ATC:RESET” to finish all tasks before performing another external command.
61. Allow the remote command “:INST:MODES” (SDX2000 Command) to finish all tasks before performing another external command.
62. Allow the remote command “:ATC:SET:FACT XPDR” to finish all tasks before performing another external command.
63. Added code to wait for scope capability to stop when exiting Transponder, DME, and MultiReceiver menus.
64. Corrected issue of DME power output.
65. Added code to wait for scope capability to stop when exiting Measurement Screen.
66. Corrected issue of DME lockup.
67. Added cleanup code on a GPIB write timeout.
68. Corrected issue of GPIB driver adding additional character.
69. Corrected issue of lockup on decode of GPIB message.
70. Corrected issue of DSP lockup occasionally on scope channel solicitation.
71. Added the mechanism in the transponder to limit the SQL storage of messages to the last 200000 messages. This limit does not affect any transponder capability.
72. Corrected issue with the NI GPIB driver that was causing some GPIB messages to either miss the first character or the message after the first character.
73. Corrected issue in the Transponder screen that when leaving the Transponder menu to the Transponder settings menu via commands that the measurement/scope stop functioning.

74. Adding the capability that on the Touch Align and Display Settings menu buttons on the Touchscreen, the Touchscreen software will check first if the Desktop has a shortcut named TouchAlign or DisplaySettings. If the shortcut exists, then the Touchscreen will execute the shortcut. If it does not exist, the Touchscreen will execute the previous code.
75. Corrected issue of I/O Receiver DSP Ethernet connection locking up after multiple test runs.
76. Turned off auto negotiation on DSP. Set to Full duplex and 100MBs.
77. Corrected GPIB receiving algorithm that was missing front portion of GPIB command.
78. Enabled DSP auto negotiation of speed and duplex.
79. Corrected issue with SDX command ":MEASURE:REPLY:DF?" and ":MEASURE:REPLY:DATA?" that replied with 0 if UF interrogations were seen but replies had not been received yet.
80. Corrected issue of DSP TCP connection to Kernel being dropped due to simultaneous replies from the DSP.
81. Corrected issue with pulse power measurement of DF pulses.
82. Corrected issue with remote command response to position of DF pulses.
83. Corrected issue with remote command response for data log of an ATCRBS interrogation.
84. Reset Settings Menu according to selection of Multi-Receiver or DO-260 Menu.

Software Installation Instructions

1. Power up the unit and let it initialize.
2. Connect the USB drive with the wanted software to the USB port on the unit.
3. Touch the Windows Explorer File Folder at the bottom of the screen to open up File Manager.
4. Locate the ATC-5000NG software executable on the USB drive and double-click on it.
5. The unit will then proceed to shut down the ATC-5000NG application to start the installation process. As the new software installs, its progress can be followed on the Software Update screen.
6. Once installation is complete, the unit will reboot to the normal ATC-5000NG screen.

Download Instructions

The installation package can be downloaded here:

https://www.viavisolutions.com/en-us/software-download/atc-5000ng-software

Contact Information

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ATC-5000 Software Version 22.01.2401 Now Available

7/21/2022

New Features & Improvements

1. Added capability of displaying Mode S Address in Transponder and Receiver screens in hexadecimal or octal.
2. Added remote command ":ATC5000NG:FMSADDR {H|HEX|O|OCTAL}" for modifying the Mode S address format.
3. Added shortkey ALT+F to toggle the Mode S address format.

Software Installation Instructions

7. Power up the unit and let it initialize.
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10. Locate the ATC-5000NG software executable on the USB drive and double-click on it.
11. The unit will then proceed to shut down the ATC-5000NG application to start the installation process. As the new software installs, its progress can be followed on the Software Update screen.
12. Once installation is complete, the unit will reboot to the normal ATC-5000NG screen.

ATC-5000 Software Version 20.04.0101 Now Available

5/5/2022

New Features & Improvements

- Corrected an issue with Receiver DSP in attenuation correction calibration.
- Fixed an issue with top generator A pulse power difference in Transponder mode.
- Corrected an issue at powerup that the transmitter modules are not initialized after reading the silicon IDs of the FPGA programming parts.
- In transponder mode desensitize Receiver during the ATC5000NG interrogations.

ATC-5000 Software Version 19.09.1101 Now Available

2/26/2020

New Features & Improvements

- Added capability and associated remote commands to measure the following received pulses:
  - ATCRBS X Pulse
  - DME X P1
  - DME X P2
  - DME Y P1
  - DME Y P2