Amplitude Solution version 2.0 FAQs

Frequently asked questions (FAQs) on the Thermo Fisher Scientific™ Amplitude™ Solution version 2.0

Q: What is the Amplitude Solution version 2.0?

A: The Amplitude Solution version 2.0 is the new major release of the Amplitude system, containing both software and hardware improvements. Benefits of version 2.0 include added flexibility of sample batching, improved system uptime, cybersecurity improvements, and support for an additional specimen type.

Q: What are the differences between Amplitude Solution versions 1.1 and 2.0?

A: Differences are summarized as follows:

Feature	Version 1.1	Version 2.0
Sample batch requirement	4 plates (376 samples)	1–4 plates (94, 188, 282, 376 samples)
Sample types	Nasopharyngeal and nasal swabs	Nasopharyngeal and nasal swabs, saliva
Hardware	Version 2.0 includes new hardware for improved usability and uptime	
Software version	1.x	2.1
Consumables	Version 2.0 includes new consumables for operational improvement	
Upgrade time	~2 days	5–7 days
S gene dropout detection tool	Available	Available
Cybersecurity level	Medium	High
Electromagnetic compatibility	Medium	High
Network connectivity	Medium	High
Amplitude Plate Viewer Software	Not available	Available

Q: Is version 2.0 a required upgrade?

A: Yes, version 2.0 is a required upgrade, as it includes electromagnetic compatibility and cybersecurity improvements.

Q: How can I schedule the upgrade?

A: Please contact your Thermo Fisher service representative to schedule the upgrade for your system(s).

Q: Is there a cost associated with the upgrade?

A: The software upgrade, along with the additional hardware accessories, is available at no cost to existing customers.

Q: How long does it take to complete the upgrade?

A: The upgrade followed by a system performance check requires 5–7 days, depending on the current software version of the system. The system will not be accessible or operational during the upgrade.

Q: Will existing run data and results be secure and accessible after the upgrade?

A: Yes, existing data generated by the system on all PCs will stay intact or get backed up and restored after the upgrade. Please reach out to your Thermo Fisher service and support representative if you have any questions or concerns.

Q: What tests or assay kits will be available to run after the upgrade?

A: The following assay kit is available to run after the version 2.0 upgrade: Applied Biosystems™ TaqPath™ COVID-19 High Throughput Combo Kit.

Q: What is flexible sample batching, and what are its benefits?

A: Flexible sample batching, introduced in Amplitude Solution version 2.0, allows running one, two, three, or four 96 deep-well plates (i.e., 94, 188, 282, or 376 samples) in a run while minimizing reagent waste and improving turnaround time for lower throughput. Amplitude Solution versions 1.1 and lower strictly require 4 plates (376 samples) per run. With flexible sample batching:

- Users can specify the number of plates (1–4) at the beginning of the run

- The system accurately measures consumables onboard and prompts users to add more when required

- Users can achieve shorter turnaround times with reduced sample batch requirement

Q: What specimen types will be supported on the Amplitude Solution after the upgrade?

A: In addition to already supported nasopharyngeal and nasal swab samples, version 2.0, with EUA regulatory status, now optionally supports preserved saliva as a specimen. Please contact your Thermo Fisher service and support representative to find out more about how to enable and use this option.

Q: What new consumables are needed for running saliva samples?

A: Customers must purchase the Spectrum Solutions™ SDNA-1000 Saliva Collection Device for EUA as a "material required but not supplied". Please contact your service representative for more information.

Q: Are there any changes to the output CSV format as a result of the upgrade?

A: There are no changes to the output CSV format in version 2.0 as compared to versions 1.1 and lower.

Q: Is it possible to get the software upgrade without additional hardware?

A: No. Software and hardware are both necessary components of the version 2.0 upgrade.

Q: What is the Gene Filter Tool?

A: The Gene Filter Tool is a macro in Microsoft™ Excel™ Software that can help detect samples with S gene dropout (Figure 1). The tool takes the results in CSV file(s) from the Amplitude Solution as input and uses a customizable C_t filter (you can set the threshold) to determine if one of the gene targets (N, S, or *orf1ab*) is not detected. The tool and its results are for research use and information only, and do not call or characterize SARS-CoV-2 variants.

Figure 1. User interface of the Gene Filter Tool.

Q: Where can I access the Gene Filter Tool and associated documentation?

A: [Click here.](#)

Q: Is the Gene Filter Tool part of the Amplitude Software?

A: No, the Gene Filter Tool is a stand-alone tool that is compatible with the output of the Amplitude Solution. Reminder: This tool is strictly for research use only and does not call or characterize SARS-CoV-2 variants.

Q: What is the Amplitude Plate Viewer?

A: The Amplitude Plate Viewer is an optional, stand-alone software tool used to visualize results data and amplification curves in either qPCR plate or extraction plate format (Figure 2).
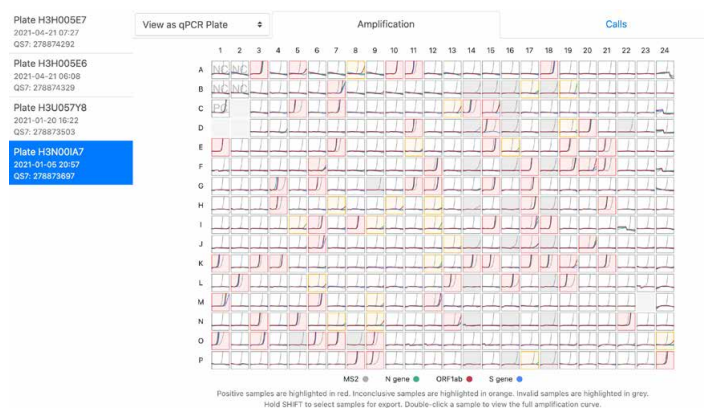

Figure 2. Amplification curves visualized with the Amplitude Plate Viewer.

Q: Where can I access the Amplitude Plate Viewer and associated documentation?

A: Go to **thermofisher.com/amplitudeplateviewer**

Q: Are there any changes to the IT or network settings?

A: Yes, Amplitude Solution version 2.0 introduces improvements in connectivity and serviceability. Your service representative will provide necessary information ahead of the scheduled upgrade.

Learn more at **thermofisher.com/amplitude**