

Product Release Notes

Product:	Ponemah Physiology Platform
Model:	Ponemah Analysis Modules
Version:	5.31
Build:	012590-001
Date:	October, 2018

Product Release Notes for the Ponemah Version 5.31 indicate revisions made to the Analysis Modules since version 5.30. For information regarding changes to the software from previous versions, please refer to the Release Notes folder located on the Ponemah v5.31 install key. Product release notes indicate only revisions to application contents that are part of a specific build or version.

Notice for organizations that must comply with FDA's Good Laboratory Practices (GLP) and 21 CFR Part 11 Electronic Records; Electronic Signatures: Ponemah Versions may contain **Preview Features**. These **Preview Features** are listed in the Product Release Notes table under the column, "Type of Change". A **Preview Feature** indicates that enhancements have been made to Ponemah, but have not been validated. Instead, Data Sciences International (DSI) has opted to delay complete validation until receiving comments from customers regarding use of these features. Further validation of these features will be performed in later releases of Ponemah. There may be additional **Preview Features** that had been documented in previously released versions that are not documented here. These features are not available unless manually enabled by the user. If documentation is needed regarding these features, please contact the Technical Support Group at DSI.

Reference #	Type of Change	Previously Fixed	Description
Key: N = New Feature; E = Enhancement; F = Fix			
General			
42131	N/A	5.30	When no High Pass filter is used, there may be a rounding difference on some sample points when compared with values from 5.20-SP11. The magnitude of the change is very small affecting only the last 2 digits of a sample's floating point value. Further, the only analysis modules affected are BP, RAW, and URP. The difference is due to a change in code structure.
42072	E	5.30	Analysis Module versions have been updated to 10.00 to differentiate compatibility between Ponemah v5.30, Ponemah 5.20 and Ponemah v6.x.
Electrocardiogram (ECG)			
<p>Note: The following details revisions made to the v5.3x ECG Module since the release of v5.30. ECG v5.34 is now available any researcher who is licensed for ECG Analysis. A license file update is required to use ECG Module v5.34 if upgrading from ECG v5.20. Contact DSI Technical Support to obtain an updated license file.</p>			
Blood Pressure (BP)			
41917	F	5.30	Fix added for issue where all of the ECG channels were listed for the Q-A Trigger Channel, rather than just those ECG channels associated with the group.
Blood Pressure Respiration (BPR)			
Cystometry (CYS)			
Left Ventricular Pressure (LVP)			
Pulmonary Air Flow (PAF)			
Pulmonary Volume (PVO)			
Pulmonary Compliance Resistance (PCR)			
42816	F	N/A	Correction added for floating point error in cycle times. The incorrect cycle time was a few nanoseconds off the expected value.
Unrestrained Plethysmography (URP)			

Reference #	Type of Change	Previously Fixed	Key: N = New Feature; E = Enhancement; F = Fix Description
42814	F	N/A	Fix added for issue where selecting Max Variation in the attribute dialog caused a system crash.
Raw Electrical Mean (RAW, TEMP, BARO, ACT)			

Additionally, this document identifies the individual software components and versions for the analysis modules used in the Ponemah Analysis Modules release. Since the build may contain many individual software components, each having their own version number, the build itself carries a version number that refers to a manufacturing build version. Please refer to the table below for an itemized list of the software contained within the enclosed build.

Contents of Build #012590-001: Ponemah Version 5.31

Model	Description	Version
PNM-BP100W	Blood Pressure Analysis Module	V10.00
PNM-BPR100W	Blood Pressure Respiration Analysis Module	V10.00
PNM-CVOL100W	Cardiac Volume Analysis Module	V10.00
PNM-CBF-100W	Coronary Blood Flow Analysis Module	V10.00
PNM-CYS100W	Cystometry Analysis Module	V10.00
PNM-dEMG100W	Diaphragmatic EMG Analysis Module	V10.00
PNM-ECG100W-V530	Updated Electrocardiogram Analysis Module* *NOTE: <ul style="list-style-type: none"> • The Analysis Module install for Ponemah v5.30 contains PNM-ECG100W-V530 (ECG Module V10.00), which is available to anyone licensed for ECG analysis. • A license file update is required to use ECG Module V10.00 if upgrading from ECG v5.33 or earlier. Contact DSI Technical Support to obtain an updated license file. • Multiple Lead and ECGRO are embedded in the PNM-ECG100W-V530 Analysis Module. 	V10.00
PNM-EMG100W	Electromyogram Analysis Module	V10.00
PNM-LVP100W	Left Ventricular Pressure Analysis Module	V10.00
PNM-MAP100W	Monophasic Action Potential Analysis Module	V10.00
PNM-PAF/AWR100W	Pulmonary Air Flow / *Airway Resistance Analysis Modules *NOTE: This option is embedded in the PNM-PAF100W analysis module	V10.00
PNM-PCR/PCRP100W	Pulmonary Compliance & Resistance Analysis Module / Pulmonary Compliance & Resistance Pressure Analysis Module	V10.01/ V10.00
PNM-PT100W	Pulsatile Tissue & Gut Motility Analysis Module	V10.00
PNM-PVO100W	Pulmonary Volume Analysis Module	V10.00
PNM-SBF100W	Systemic Blood Flow Analysis Module	V10.00
PNM-URP100W	Unrestrained Plethysmography Analysis Module	V10.01
	Raw Electrical Mean (TEMP, BARO, ACT)	V10.00