



**PHILIPS**

Ultrasound

Q-Station software

Streamlined **workflow**  
solutions

Philips Q-Station ultrasound  
workspace software

# Managing your **off-cart workflow**

Everyone is being asked to do more with fewer resources – it's especially the situation in today's healthcare community. Workflow is constantly changing as departments adapt to new requirements and work within limited budgets. Whether in the echo, vascular, women's healthcare, or general imaging ultrasound lab, workflow must be efficient from the first exam through the last analysis every day.







Philips Q-Station workflow software allows you to streamline workflow for ultrasound data management, while performing advanced analysis and quantification of patient's image data. Q-Station combines a suite of capabilities for a full range of off-cart functions, allowing you to design workflow around your needs – keep your ultrasound systems busy scanning patients, enhance schedule and staff efficiencies.

Q-Station is the ideal data management and analysis tool for private practices, clinics, and small hospitals. It's a very affordable solution that uses your PC equipment and supports what you need, from basic abilities such as echo and stress echo viewing and reporting and 2D image analysis, to advanced 3D quantification and visualization. Q-Station allows you to connect to your existing PACS to save and share your data and 3D manipulations.

### Enhanced workflow and productivity

Q-Station offers a suite of tools for patient-based study organization and workflow, facilitating complete review and analysis of exam data. You can pull DICOM data directly from your ultrasound systems or from your PACS, perform your analysis, report findings and comments, and save results to connected devices. You can export your results in DICOM

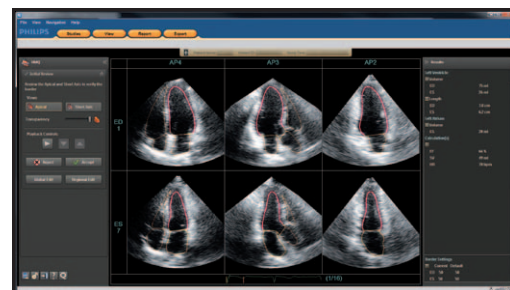
or PC formats, easily anonymize patient information using robust DICOM and image masking tools, and include Ultrasound DICOM viewer software for easy sharing. Q-Station frees your ultrasound systems to keep patient exams on schedule, while enhancing your department's productivity.

The integrated Q-Assistant tool makes it easy to configure your options, media, connections and backup functions. It helps you quickly and easily adapt to your lab's workflow when you add new capabilities.

### Connecting your resources

Q-Station is the axis of your workflow. You can manage patient studies, series, images and reports. Retrieve data from your local databases, CD/DVD/USB drives, and your PACS. Copy and move studies between locations, merge studies, and email draft reports. The results: streamlined workflow designed around your needs.

With Q-Station, you can receive DICOM studies directly from ultrasound systems, and perform analysis on data from a range of Philips systems – EPIQ, iE33, iU22, Affiniti, CX50, HD15 – with QLAB Q-Apps. This keeps your ultrasound systems scanning, enhancing patient throughput every day.



The available HeartModel<sup>A1</sup> Q-App offers automated 2D views and reproducible quantification with one-button simplicity.



Obtaining objective, consistent speckle tracking results is easy with aCMQ<sup>AI</sup> on Q-Station.

# Cardiology applications

Cardiology users can review echo and stress echo studies, analyze 2D and 3D images using QLAB Q-Apps, perform wall motion scoring using the 17-segment model, review measurements made on the cart, edit them, and perform additional measurements.

## Advanced visualization and quantification

Q-Station provides basic viewing, exam management, and uses the same measurement packages for adult echo, pediatric echo and vascular as EPIQ and Affiniti. These capabilities can be extended with available embedded Q-Apps that provide powerful tools to further examine and quantify complex cardiac 2D images and 3D volumes. Many of these cardiac Q-Apps include Anatomical Intelligence to enhance existing tracking technologies and automate key tasks for greater workflow efficiencies, giving clinicians the tools they need to provide robust and reproducible analysis.

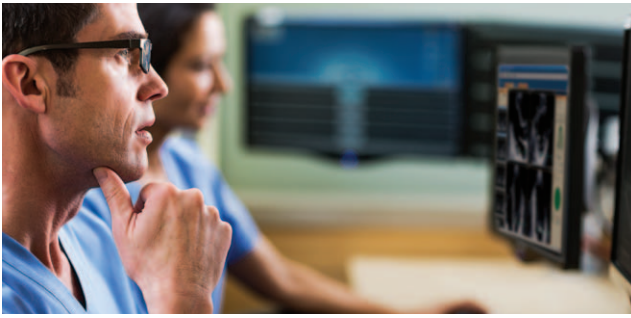
## Dedicated stress quantification

Q-Station provides the first fully dedicated stress quantification with QLAB's CMQ Stress Q-App, along with the latest Philips 2D speckle tracking technology. In stress

protocols, the wall motion scoring tool is linked automatically with the stages and anatomical views – just one click will change both view and stage so you're always looking at synchronized data. Q-Station's step-by-step user interface and controls adapt to your acquisition protocol and provide you with an experience similar to Philips ultrasound systems. It's quick to learn and easy to integrate into your workflow.

## Easy stress echo viewer

Q-Station's integrated stress viewer is easy to use. It automatically shuffles the stages and views according to your preference. The stress viewer also saves your preference of sub-loops from the EPIQ and iE33 system, providing an enhanced level of workflow designed around stress echo studies, and enhancing productivity.



## Comprehensive quantification

Echo quantification on Q-Station is powered by QLAB Q-Apps, allowing you to customize your capabilities and expand at any time. Obtain ejection fractions in less than a minute, objectively assess left ventricular global function, extensively analyze 2D images, view unlimited perspectives and planes from 3D data sets, assess mitral valve anatomy and quantify function, and extract data for reports.

# QLAB Q-Apps define your Q-Station cardiovascular analysis and quantification capabilities

The <sup>A.I.</sup> designation means the Q-App uses Philips Anatomical Intelligence to automate certain workflows for easier, more reproducible results.

Q-App	Full name	Description
aCMQ <sup>A.I.</sup>	Automated Cardiac Motion Quantification <sup>A.I.</sup>	Robust and objective assessment of left ventricle global function and regional wall motion, deformation and timing using our latest 2D speckle tracking technology.
a2DQ <sup>A.I.</sup>	Automated 2D Cardiac Quantification <sup>A.I.</sup>	Fast, reproducible analysis of 2D LV volumes and ejection fractions provides objective assessment of global function.
CMQ Stress	CMQ Stress Cardiac Motion/Mechanics Stress Quantification	Completes the CMQ Q-App and helps objectify stress echo review. CMQ Stress offers the unique combination of Philips 2D PureWave images, next-generation 2D speckle tracking, and a user interface designed specifically around stress echo users. The user interface auto adapts to stress acquisition protocols facilitating navigation and workflow. The comprehensive summary page report includes side-by-side display of LV 17-segment bull's-eye format from each stress stage.
MVN <sup>A.I.</sup>	Mitral Valve Navigator <sup>A.I.</sup>	Easy-to-use guided tool to provide a comprehensive list of MV and its supporting anatomical measurements and calculations <ul style="list-style-type: none"> <li>• Requires a volume from Live 3D TEE</li> </ul>
HM <sup>A.I.</sup>	HeartModel <sup>A.I.</sup>	Fast, easy, reproducible analysis automatically detects and segments the heart chambers within a 3D volume, and generates the routine 2D apical and short axis views in end-diastole and end-systole for adult hearts. The HeartModel <sup>A.I.</sup> measures the left ventricular and left atrial global volume data at ED and ES and calculates the LV EF.
3DQA	Advanced 3D Quantification	Provides a complete suite of tools for manipulation, measurement, quantification, display, and assessment of 3D data sets, including LV endocardial volumes, stroke volumes, true 3D ejection fractions, and global and regional LV volumes based on ACC 17-segment model.
3DQ	Cardiac 3D Quantification	Use of all 3D manipulation tools and vision controls to perform advanced measurements on Live 3D Echo data sets, such as biplane LV mass and ejection fraction.
IMT	Intima Media Thickness	Enables automated measurement of intima media thickness in carotids and other superficial vessels.
ROI	Region of Interest	For contrast echo imaging, tissue analysis, and color Doppler.
PQ	Parametric Quantification	Advanced review and analysis of contrast intensities within the heart, providing color-coded representation of contrast intensity and replenishment rate based on log or linear scaling using tissue Doppler images.
SQ	Strain Quantification	Quantitative capabilities to help assess regional myocardial function plus assessment of synchronicity and guidance during bi-ventricular pacing procedures using tissue Doppler images.

# Shared service applications

QLAB Q-Apps define your Q-Station analysis and quantification capabilities

Q-App	Full name	Description
VPQ	Vascular Plaque Quantification	Uses 3D technology to visualize and quantify the overall volume of atherosclerotic plaque in the carotid artery. VPQ automatically measures Plaque Burden, or how much plaque is present throughout the captured volume. VPQ also measures the percent area of vessel reduction and other characteristics of plaque composition.
IMT	Intima Media Thickness	Provides easy and consistent measurement of intima media thickness, which helps assess predictors of cardiovascular events such as stroke and myocardial infarction.
GI 3DQ	GI 3D Quantification	Supports the opening, viewing, and quantification of 3D data sets from Philips ultrasound systems. GI 3DQ allows users to view, crop, rotate, access, and use all vision controls, and perform everyday measurements on 3D ultrasound data sets, such as volume measurements for obstetrical studies. iSlice multi-slice (4, 9, 16, or 25 images) display provides quick review of volumetric data obtained from freehand, mechanical, and electronic volume acquisition. iSlice is particularly helpful when reviewing volumetric data of the uterus and ovarian cysts. The volume data containing color Doppler provides the necessary tools in the assessment of ovarian vascularity. Curved iSlice is useful for presenting fetal spines, and in creating stunning rendered baby faces.
FHN	Fetal Heart Navigator	Provides a semi-automated protocol to evaluate the fetal heart. FHN guides the user in obtaining views recommended in the ISUOG Fetal Cardiac Screening Guidelines; 4-Chamber, LVOT, and RVOT.
EQ	Elastography Quantification	Provides strain elastography quantification analysis of relative tissue deformation based on an elastogram.
MVI	MicroVascular Imaging	Maps contrast agent progression and enhances vessel conspicuity in breast imaging.
GI PQ	General Imaging Parametric Quantification	Aids in the review and analysis of contrast wash in/wash out intensities, expressing that data in an easy-to-interpret, color-coded format.
ROI	2D and color Region of Interest quantification	2D and color ROI quantification with motion compensation increases the consistency and reliability of acoustic measurements while reducing the effort required to successfully carry out ROI analysis.





### Seamless analysis on or off-cart

Q-Station offers a suite of tools for patient-based study organization and workflow, facilitating complete review and analysis of exam data. The simple user interface allows easy access to patient studies. Q-Station adapts to your workflow needs by allowing you to view basic measurements made on the ultrasound cart, edit them, and perform additional measurements and calculations using the same tools available on-cart. This allows you to perform measurements on the cart during the exam, or later while reviewing the exam after the study was acquired. You can easily visualize ultrasound volume data using embedded QLAB Q-Apps, and save rendered images back to your PACS

or print selected image views to connected printers. As an option, you can view other non-ultrasound DICOM exams like CT and MR to further enhance your viewing capabilities.

QLAB shared service applications on Q-Station allow you to perform analysis on 2D and 3D exam data. Easy and consistent quantification of vascular, abdominal, and gynecological structures, analysis of contrast data, evaluation of tissue in the breast, semi-automated fetal heart tool – these are just a few of the capabilities you can build into your Q-Station workspace for comprehensive analysis and quantification.

## Services – performance and uptime

Increasing the performance and uptime of your system is imperative to delivering high quality patient care. With Philips Remote Services\*, your systems are securely connected to our global Customer Care Centers. Philips Remote Services use remote desktop sharing technologies to efficiently provide helpful guidance for application and configuration questions. This assures that your systems operate at peak performance so that you can focus on delivering excellent patient care.



\* Not all services available in all geographies; contact your Philips representative for more information. May require a service contract.

