

Medis[®] Suite MR 3.2

An Efficient, comprehensive and validated solution for CMR post-processing



Product Specification Sheet

M-MSP: MEDIS SUITE PLATFORM (VIEWER, CONNECTIVITY, REPORTING)

- Support for Cardiac MR studies of all major MR vendors
- Access to Cardiac MR studies across the network
- Import of cardiac MR studies from local storage media (hard disk, USB, and CD/DVD)
- DICOM connectivity, receiving cases, query and retrieve, pushing results to PACS
- Centralized database, thick client solution possible with multiple clients
- JPEG2000 and enhanced MR support
- AutoQ for preprocessing data
- Review series side by side, drag 'n drop series into the viewer, cross referencing tools, fast paging through series, simple caliper measurements
- Enhanced workflow, run multiple apps in parallel
- Loading of prior exams in parallel
- Enhanced clinical report, combining all measurements in a single report, snapshots, add comments, save as PDF, view in text format. Clinical XML and JSON output.
- User log in
- **NEW:** DICOM SR output for results of Clinical applications
- **NEW:** Role Based Access Control
- **NEW:** User interface and User manual available in multiple language for the Clinical applications

M-MGM: QMASS GLOBAL FUNCTION MODULE (MR)

- **NEW:** Enhanced Guided workflow
- LV and RV function analysis
- Global function analysis (Simpson's method) on short axis or transversal stack of cines
- Quantification of custom volumes, such as atrial volumes
- Area-length and Bi-plane volumetric analysis methods for long axis cines
- **NEW:** Enhanced LV + RV contour detection based on deep learning
- Semi-automatic contour detection for RV endocardium
- "LiveContour" algorithm to quickly detect endocardial contours
- "Time-Continuous" contour detection
- Automatic exclusion of images in short axis based on information in long axis
- Auto-detection of papillary muscles and trabeculae with "MassK mode"
- Quantification of EDV, ESV, SV, %EF, CO, CI, indexed values (BSA and height), (time to) peak filling and ejection rate
- Various BSA calculation methods for indexed results
- Various normal ranges possible, calculation of z-scores

M-MRM: QMASS REGIONAL FUNCTION MODULE (MR)

- Analysis of regional parameters, such as wall motion, wall thickness, wall thickening and wall thickness changes over time

M-DCE: QMASS DELAYED SIGNAL INTENSITY (DSI) MODULE (INFARCT SIZE, T2W ANALYSIS, COMBINED DSI-T2W ANALYSIS)

- Guided workflow for automatic infarct tissue quantification
- Transfer contours from short axis cine stack
- Various automated threshold calculation methods
- Automatic infarct detection
- Quantification of infarct size (% and mass), infarct transmurality
- Quantifying regions of hyper-, intermediate and hypo-intense signal intensities
- Threshold per slice or per sequence of slices
- T2-weighted analysis, combined DSI-T2-weighted analysis
- T2-ratio

M-MSU: QMASS TIME SIGNAL INTENSITY (TSI) MODULE

- Enhanced Contour registration to correct for breathing motion
- Baseline correction methods
- Automatic calculation of relative upslope
- Upslope curves per myocardial segment and user defined ROI's
- Set transmural range for measurement of subendocardial and subepicardial perfusion curves

M-TTM: QMASS T2/T2STAR ANALYSIS MODULE

- Fast quantification of T2* decay time and decay rate
- Color overlay
- Correct for breathing motion

M-TOM: QMASS T1 ANALYSIS MODULE

- Calculation of T1 relaxation time in MOLLI and Look Locker sequences
- Calculation of residual maps
- Color overlay
- Correction for breathing motion

M-FLX: QFLOW APP

- Phase-contrast MR blood flow analysis
- Automatic contour detection
- Copy of contours in forward and backward direction
- Various background correction methods to correct for flow-induced artifacts, "Stationary Flow Fit" and "Phantom Correction"
- Phase unwrapping to correct for aliasing
- Color-coding to visualize velocities
- Calculation of velocities and volumetric blood flow in up to 4 ROI's
- Automatic calculation of regurgitant fraction and volumes
- Display of min and max velocity pixels
- Calculation of maximum pressure and mean systolic pressure gradient
- Quantification of CSF flow

M-4DV: QFLOW 4D APP

- Simple MPR tool (multi planar reformatting)
- Single click noise removal
- Single click Background offset correction (1st, 2nd & 3rd order)
- Color overlay displaying the speed
- Allow launching of QFlow quantification of volumes, regurgitant fraction and peak flow velocity (see M-FLX QFlow app, separate license)
- Streamlines and vectors **NEW: Visualization of 3D Streamlines**
- Review flow as overlay on Cine SSFPs in 2D
- **NEW: Single click phase unwrap functionality**

M-MRA: 3DVIEW APP

- Viewing 3D MR and CT Angiography series, double oblique viewing, MPR, MIP, slabbed MIP, VR
- CPR (Curved Planar Reformatting)
- Efficient caliper measurements, including double distance measurement
- Sculpting (isolating custom volume of interest)
- Create reformats
- Add temporal resolution

M-CCT: QMASS GLOBAL FUNCTION MODULE, CT ADD-ON

- Enables Global and Regional analysis for CT

MS-ECV: QMAP ECV, FOR RESEARCH USE ONLY

- Create parametric maps for T1-ECV
- Quantification of delta T1 (pre and post adenosine stress exams)
- Supports LL, MOLLI, SR, console generated maps
- Correction factor
- Offset, scaling, fit residual error
- Display of relaxation graphs
- Flexible manual motion correction
- Flexible co-registration of T1 native (pre-contrast) and T1 post-contrast maps
- Comprehensive results for myocardial segments and up to 4 ROI's and segments
- AHA 16 segment model results and bull's eyes
- Save maps as DICOM
- Save results to MS-Excel



MS-REL: QMAP T1&T2 RELAXOMETRY, FOR RESEARCH USE ONLY

- Create parametric maps for T1, T1*, T2 and T2*
- Supports LL, MOLLI, SR, T2 prep and console generated maps
- Correction factor
- Offset, scaling, fit residual error
- Display of relaxation graphs
- Flexible manual motion correction
- Flexible co-registration of T1 native (pre-contrast) and T1 post-contrast maps
- Comprehensive results for myocardial segments and up to 4 ROI's and segments
- AHA 16 segment model results and bull's eyes
- Save maps as DICOM
- Save results to MS-Excel

M-SMR: QSTRAIN MR, FOR RESEARCH USE ONLY

- Quantify strain in RV 4 Chamber, Atrial 2 Chamber, LV long and short axis orientations based on feature tracking in SSFP images
- Quantification of Global strain parameters: GLS, GCS, GRS and Fractional Area change
- Quantification of delta rotation
- Quantification of 16 segment AHA strain parameters: Strain, Strain Rate, velocity
- Quantification of RV segmental (septum and free wall) strain parameters: Strain, Strain Rate, velocity
- Generate results for endo, mid and epicardial wall
- Generate detailed results and export to MS-Excel
- Ability to re-use contours from QMass for strain quantification

M-SCT: QSTRAIN CT ADD-ON, FOR RESEARCH USE ONLY

- Enables strain analysis for CT and includes all features as listed under M-SMR



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MODULES		PACKAGES					
		ESSENTIALS	ADVANCED EDITION	PREMIUM EDITION	DEDICATED STRAIN	DEDICATED MAPPING	DEDICATED FLOW
Clinical	3D View	✓	✓	✓			
	Function Global	✓	✓	✓	✓		
	Function Regional		✓	✓			
	DSI		✓	✓			
	TSI		✓	✓			
	T1		✓	✓			
	T2/T2*		✓	✓			
	2D Flow	✓	✓	✓			✓
	4D Flow						✓
Research	T1			✓		✓	
	T2/T2*			✓		✓	
	ECV			✓		✓	
	Strain LV			✓	✓		
	Strain RV and Atrium			✓	✓		



Legal Statements

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