

medDream MEDDREAM VIDEO STATION 4.6.6 SPECIFICATION

Function	Description	v4.6.6
	Main features	<u> </u>
Video Recording	Certified medical-grade video recording software.	+
Still Image Capture	Possibility to take high-quality snapshots.	+
DICOM	Medical video recording into DICOM format by using MPEG2 and MPEG-4 AVC/H.264 compression. Still, images are saved in DICOM.	+
Live Stream	Live stream video by RTSP protocol during the procedure.	+
Real-time processing	Record, stream, play video, and take snapshots at the same time.	+
Modality Worklist	Possibility to select patient data from the DICOM modality worklist (query DICOM modality worklist from worklist server).	+
Patient/Study Management	Flexible patient data assignment: selecting already an existing patient, manually entering the patient details, or selecting from the hospital DICOM worklist server.	+
Send to PACS	Recorded studies are dicomized and can be stored locally or sent to the PACS (medical image archive or VNA).	+
Review	Review recorded medical images/videos during the surgery or other procedures.	+
Video editing	Possibility to trim selected video records.	+
Export	Possibility to export recorded data to the storage device.	+
DICOM Viewer	View historical patient studies with an integrated DICOM Viewer.	+
Multiple video sources	Record video/take images from multiple connected devices (special video card needed).	+
Video types	Cameras, scopes (endoscopes, arthroscopes, etc.), microscopes, and others.	+
Auto purge	Auto-delete (optional) old studies to make free recording space available.	+
Touchscreen control	Software adapted to use by touch screen monitors. The on-screen keyboard is available.	+
	Supported Hardware	
All-In-One Solution	Bundle: Medical Panel PC + VideoStation software. Panel PC 21"-27", touchscreen, fanless.	+
Mini PC solution	Bundle: Medical Mini PC + VideoStation software. Monitor 10", touchscreen, fanless.	+
PC	A usual PC with the recommended graphic card can be used.	+
OEM	The solution can be adopted and integrated into custom hardware.	+
Foot Pedal	Additional foot pedal support.	+
	Selectable Video Inputs (specific capture board required)	•
SDI	HD-SDI or SD-SDI Video connection.	+
HDMI	HDVI video connection.	+
DVI	DVI video connection.	+
S-Video	Mini-DIN analog S-Video connection.	+
Composite (CVBS)	BNC analog Composite (CVBS) connection.	+

	Selectable Audio Inputs	
EMBEDDED	EMBEDDED audio input.	+
LINE_IN	LINE_IN audio input.	+
MICROPHONE	SOUNDCARD MICROPHONE audio input.	+
SOUNDCARD	SOUNDCARD LINE_IN audio input.	+
	Video Recording Formats	-
4K	4K up to 3840×2160@60/50.	+
HD	HD up to 1920×1080@60/50.	+
Analog	PAL or NTSC.	+
	Modality Worklist	
Modality worklist search	Modality worklist query parameters: Accession Number, Patient's Name, Patient ID, Modality, Scheduled Station AE Title, Scheduled Procedure Step Start Date, Requested Procedure ID.	+
Modality worklist results	Full modality worklist result that includes: Referenced, Study, Patient, Requested, and Scheduled procedure information.	+
	Configuration Features	
Support character sets	ISO_IR 192 - Unicode in UTF-8, ISO_IR 100 - Latin alphabet No. 1, ISO_IR 144 - Cyrillic.	+
Video profile	Possibility to create and apply profile for the video source device. Selectable: transfer syntax, encoding, audio/video quality, resolution, frame rate per second (fps), aspect ratio.	+
Video length	Possibility to specify video interval length to automatically split videos during recording.	+
Adjust video	Possibility to adjust video settings control: contrast, brightness, hue, sharpness, saturation.	+
Encoding	Possibility to select encoding type: software or intel media SDK.	+
Recording quality	Possibility to choose recording quality.	+
Streaming profile	Possibility to create and apply Profile for video streaming. Selectable: encoding, audio/video, resolution, frame rate per second (fps), audio quality.	+
Streaming quality	Possibility to choose streaming quality.	+
Multilanguage support	Supported languages: English, Lithuanian. Possibility to support more languages by request.	+
	Image Transfer syntaxes for still images	
JPEG Baseline (Process 1)	Images can be stored in JPEG Baseline (Process 1) (Transfer Syntax UID: 1.2.840.10008.1.2.4.50).	+
	Video Transfer syntaxes for Video Recording	
MPEG2 Main Level	Video can be stored in MPEG2 Main Profile Main Level Transfer Syntax (Transfer Syntax UID: 1.2.840.10008.1.2.4.100).	+
MPEG2 High Level	Video can be stored in MPEG2 Main Profile @ High-Level Transfer Syntax (Transfer Syntax UID: 1.2.840.10008.1.2.4.101).	+
MPEG-4 High Profile	Video can be stored in MPEG-4 AVC/H.264 High Profile / Level 4.1 Transfer Syntax (Transfer Syntax UID: 1.2.840.10008.1.2.4.102).	+
MPEG-4 BD- compatible High	Video can be stored in MPEG-4 AVC/H.264 BD-compatible High Profile / Level 4.1 (Transfer Syntax UID: 1.2.840.10008.1.2.4.103).	+

Supporter SOP classes for video and still images		
Secondary Capture Image Storage	SOP Class for Image/Video Storage Services (SOP UID: 1.2.840.10008.5.1.4.1.1.7).	+
Video recording and still image capture modalities		
ОТ	Recommended to use this modality for video recording and still images.	+
OP	Possibility to specify other modalities such as Ophthalmic Photography (DICOM will be stored using Secondary Capture SOP class).	+
ES	Possibility to specify other modalities such as Endoscopy modality (DICOM will be stored using Secondary Capture SOP class).	+
ХС	Possibility to specify other modalities such as External-camera Photography modality (DICOM will be stored using Secondary Capture SOP class.).	+
Integrated DICOM Viewer features		

This specification file contains only a description of MedDream VideoStation product functionalities. MedDream VideoStation product contains also integrated MedDream WEB DICOM Viewer functionalities. Please read the Specification document for a full list of MedDream DICOM Viewer specifications Where MedDream viewing functionalities are described, such as:

Pan, Zoom, Scroll, etc.	+
Line, Angle, Polyline, etc.	+
Ellipse ROI propagation, Copy image to the clipboard, Quick save KO and PR, etc.	+
Thumbnail position, Multi-image, Hanging Protocols, etc.	+
Simultaneous scrolling, Sync Windowing, Crosshair, etc.	+
The report, Study forward, Export, etc.	+
Live Share support, PET-CT Fusion, Color channels, etc.	+
Measurement (mV, s), QT points (RR, QT, QTc), HR, etc.	+
VTI (Velocity Time Integral), etc.	+
Orthogonal MPR, Axial MPR, Coronal MPR, Sagittal MPR, etc.	+
MPR Oblique, 3D rendering, MPR/MIP comparison, etc.	+
The theme, Thumbnail view, Language support, etc.	+
All viewing functionalities are described in the MedDream DICOM Viewer Specification document.	+
Supported modalities in integrated DICOM Viewer	
Computed Radiography modality.	+
Computer Tomography modality.	+
Digital Radiography modality.	+
Electrocardiography modality.	+
Cardiac Electrophysiology modality for diagnostic use.	+
	Line, Angle, Polyline, etc. Ellipse ROI propagation, Copy image to the clipboard, Quick save KO and PR, etc. Thumbnail position, Multi-image, Hanging Protocols, etc. Simultaneous scrolling, Sync Windowing, Crosshair, etc. The report, Study forward, Export, etc. Live Share support, PET-CT Fusion, Color channels, etc. Measurement (mV, s), QT points (RR, QT, QTc), HR, etc. VTI (Velocity Time Integral), etc. Orthogonal MPR, Axial MPR, Coronal MPR, Sagittal MPR, etc. MPR Oblique, 3D rendering, MPR/MIP comparison, etc. The theme, Thumbnail view, Language support, etc. All viewing functionalities are described in the MedDream DICOM Viewer Specification document. Supported modalities in integrated DICOM Viewer Computed Radiography modality. Digital Radiography modality. Electrocardiography modality.

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ES	Endoscopy modality.	+
Ю	Intra-Oral Radiography modality.	+
IVUS	Intravascular Ultrasound modality for diagnostic use.	+
MG	Mammography modality.	+
MR	Magnetic Resonance modality.	+
NM	Nuclear Medicine modality.	+
ОСТ	Optical Coherence Tomography (non-Ophthalmic) modality for diagnostic use.	+
ОРТ	Ophthalmic Tomography modality for diagnostic use.	+
OP	Ophthalmic Photography modality.	+
ОТ	Other modalities.	+
PT	Positron Emission Tomography (PET) modality.	+
PX	Panoramic X-Ray modality.	+
RF	Radio Fluoroscopy modality.	+
RG	Radiographic imaging modality.	+
SC	Secondary Capture modality.	+
SR	Support for SR documents.	+
US	Ultrasound modality.	+
XA	X-Ray Angiography modality.	+
ХС	External-camera Photography modality.	+
All viewing functionalities	and a full list of MedDream DICOM Viewer specifications are described in the Specification doc	ument.
Int	egration into PACS/VNA, Medical Information systems, or applications	
PACS	Store recorded data in the PACS server. Possibility to review patient historical DICOM data.	+
VNA	Store recorded data in the VNA server. Possibility to review patient historical DICOM data.	+
DICOM Archive	Store recorded data in the DICOM archive. Possibility to review patient historical DICOM data.	+
	Integration into OEM application	
OEM application	Integration into medical applications, video recording solutions, or surgery applications. Application control API can be provided (on commercial request).	+
	Licensing	
Station Licensing	Station licensing per installed instance (per user workstation or PC).	+
	Operating System support	l
Windows	It is a Windows desktop application, that can be installed on Windows 7/8/10/11 (64-bit).	+
	Regulatory	
USA FDA	K222320, 510 (k) cleared for diagnostic use including mammographic images as a	+
	Class II medical device.	_ T

Europe CE	Certified as a Class IIb device according to MDR.	+
United Kingdom MHRA	Registered as radiology picture archiving and communication system workstation.	+
Switzerland Registration	Registered as IIB class radiology picture archiving and communication system workstation.	+
Thailand FDA	Received approval for distribution.	+
Singapore Registration	Registered as a Class B medical device.	+
Malaysia Registration	Registered as an IIB class medical device.	+
Russia Registration	Registered as a Class 2b medical device.	+