MEDDREAM VIDEOSTATION 4.6.9
PRODUCT SPECIFICATION

Function	Description	v4.6.9
Main features		
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		
OT	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).	+
XC	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:		
General Features	Pan, Zoom, Scroll, etc.	+
Measurements	Line, Angle, Polyline, etc.	+
Viewport features	Ellipse ROI propagation, Copy image to the clipboard, Quick save KO and PR, etc.	+
Layout features	Thumbnail position, Multi-image, Hanging Protocols, etc.	+
Manipulation features	Simultaneous scrolling, Sync Windowing, Crosshair, etc.	+
Supporting functions	The report, Study forward, Export, etc.	+
Specific features	Live Share support, PET-CT Fusion, Color channels, etc.	+
ECG	Measurement (mV, s), QT points (RR, QT, QTc), HR, etc.	+
Ultrasound	VTI (Velocity Time Integral), etc.	+
MPR	Orthogonal MPR, Axial MPR, Coronal MPR, Sagittal MPR, etc.	+
Optional advanced MPR features	MPR Oblique, 3D rendering, MPR/MIP comparison, etc.	+
Customization features	The theme, Thumbnail view, Language support, etc.	+
Other viewing functionalities	All viewing functionalities are described in the MedDream DICOM Viewer **Specification document.**	+
Supported modalities in integrated DICOM Viewer		
CR	Computed Radiography modality.	+
CT	Computer Tomography modality.	+
DX	Digital Radiography modality.	+
ECG	Electrocardiography modality.	+
EPS	Cardiac Electrophysiology modality for diagnostic use.	+

ES	Endoscopy modality.	+
IO	Intra-Oral Radiography modality.	+
IVUS	Intravascular Ultrasound modality for diagnostic use.	+
MG	Mammography modality.	+
MR	Magnetic Resonance modality.	+
NM	Nuclear Medicine modality.	+
OCT	Optical Coherence Tomography (non-Ophthalmic) modality for diagnostic use.	+
OPT	Ophthalmic Tomography modality for diagnostic use.	+
OP	Ophthalmic Photography modality.	+
OT	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.	+
XC	External-camera Photography modality.	+
All viewing functionalities and a full list of MedDream DICOM Viewer specifications are described in the **Specification document.**		
Integration 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		
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.	+
Europe CE	Certified as a Class IIb device according to MDR.	+
Canada Registration	Registered as a Class 2 medical device.	+
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.	+
France Registration	Registered as an IIB class medical system.	+
Singapore Registration	Registered as a Class B medical device.	+
Malaysia Registration	Registered as an IIB class medical device.	+
Morocco Registration	Registered as a IIB class medical device.	+
Russia Registration	Registered as a Class 2b medical device.	+