MEDDREAM PACS SERVER
PREMIUM 7.3.7.880 & LITE 1.12.10.880
PRODUCT SPECIFICATION

Function	Description	PREMIUM 7.3.7.880	LITE 1.12.10.880
Certifications			
Certified PACS	MedDream PACS Premium functionality is certified as part of MedDream product. MedDream PACS Lite includes open source PACS, which is not a part of MedDream product and is not certified. More details in section**: Regulatory for PACS functionality**.	+	-
Certified Viewer	MedDream DICOM Viewer functionality is certified as a part of the MedDream product. For a full list of Viewer's certifications: Specification document.	+	+
PACS features			
DICOM compatibility	Supported DICOM 3.0 protocol.	+	+
DICOM Storage service	PACS server is DICOM image archive. PACS server can store images from external DICOM sources by DICOM by using the C-Store method.	+	+
DICOM Retrieve service	The external system (DICOM SCU) can search and retrieve images from the PACS server using DICOM C-FIND, C-MOVE, and C-GET services.	+	+
DICOM Modality worklist	Possibility to import, store and send DICOM modality worklist records to the configured medical devices. ***PACS Lite:** The worklist plugin should be installed.	+	+*
Auto Route	Automated DICOM study transfer by configurable, flexible rules. ***PACS Lite**: one-liner script should be installed.	+	+*
Export	Possibility to export images stored in PACS Server database to the specified directory (including configured DICOMDIR Viewer).	+	+
Import	Possibility to import external DICOM formatted directory and/or raw image files into PACS Server.	+	+
Forward	Possibility to forward images stored in PACS to a remote DICOM SCP.	+	+
Integration options	Possibility to integrate PACS to HIS/RIS/EHR/PHR medical workflows using defined integration interfaces defined by DICOM, HL7, and FHIR standards as well as use custom integrations.	+	+
Automatic Study Aging	Possibility to set date and time schedule for Automatic Study Aging from short-term to long-term archive.	+	-
Automatic Purge	Possibility to set aging Period for Purging old worklist records. Possibility to set an aging Period for Purging old DICOM studies.	+	-
Auto Scan	Possible to set Auto-Scan directory for auto importing DICOM Images.	+	-
Patient Reconciliation	Flexible Patient reconciliation rules. Possibility to check duplicate Patient IDs. Possibility to edit Study Patient data manually or semi-automatically.	+	-
Users' activities logging	All user activities are automatically logged into the System Journal Log.	+	-
Live Monitor	Possible to display information about live connections.	+	-
PACS administration			
WEB based administration	The web-based user interface for PACS administration, configuration, managing users, and managing data. ***PACS Lite**: managing data only.	+	+*
User management	Possibility to create and manage users and user groups. **PACS Lite**: create and manage users only.	+	+*
User access control	Possibility to define privileges for the users or user groups managing patient/study actions: View, Modify, Forward, Query, Move, Download, Export, Import, Print, Upload, Monitor, System administration, Monitor, Monitor, Mark study	+	-

Study View, manage	Possibility to view and manage patients/studies. The list of studies includes detailed info: Patient ID, Patient Name, Patient Sex, Date of Birth, Institution name, Study ID, Study Date, Study Time, Accessions Number, Referring Physician, Name, and Description. ***For PACS Premium only:** Privacy, Age, Received On, Reading Physician's Name, Read By, Requesting Physician's Name, Source AE, Total Number of Instances.	+	+*
Patient Search	Possibility to search patients by selected criteria: Patient ID, Patient Name, Date of Birth, Institution Name, and Study Date.	+	+
Study Search	Possibility to search study by selected criteria: Patient ID, Patient Name, Study Date, Accession Number. ***For PACS Premium only:** Study Unique ID (UID), Study ID, Referring Physician's Name, Reading Physician's Name, Source AE.	+	+*
Series Search	Possibility to search series by selected criteria: Series Unique ID (UID), Series Date (set dates from to), Modality, Series Description.	+	-
Image Search	Possibility to search images by selected criteria: Image Unique ID (UID), Photometric Interpretation (MONOCHROME1, RGB, etc.), Image date (set dates from to).	+	-
System Monitoring	Possibility to view system services, system, and user activities, system logs, etc.	+	-
DICOM Modality Worklist			
Modality Worklist records	Possibility to enter the following information for worklist data: Patient ID, Patient Name, Patient's Sex, Date of Birth (DD-MM-YYY), Additional Patient History, Institution Name, Accession Number, Admitting Diagnoses Description, Referring Physician's Name, Requesting Physician's Name, Requested Procedure ID, Requested Procedure Description, Requested Procedure Priority, Scheduled AE Station, Modality, Scheduled Start Date (DD-MM-YYYY), Scheduled Start Time (HH:mm:ss), Performing Physician, Scheduled Procedure ID, Scheduled Procedure Description, Scheduled Procedure Location, Procedure Code Value, Procedure Code Meaning, Procedure Code Scheme Designator, Procedure Code Scheme Version, Protocol Code Value, Protocol Code Meaning, Protocol Code Scheme Designator, Protocol Code Scheme Version. ***PACS Lite:** The worklist plugin should be installed.	+	+*
Customization features			
Multilanguage support	Supported languages: English, Lithuanian, Russian. Possibility to support more languages by request.	+	-
Viewer features			
This specification file contains only a description of MedDream PACS Server product functionalities. MedDream PACS product package also contains MedDream WEB DICOM Viewer functionalities. **For a full list of MedDream DICOM Viewer specifications please read the Specification document.** 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.	+	+

Advanced MPR features	MPR Oblique MIST, 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			
CR	Computed Radiography modality for diagnostic use.	+	+
CT	Computer Tomography modality for diagnostic use.	+	+
DX	Digital Radiography modality for diagnostic use.	+	+
ECG	Electrocardiography modality for diagnostic use.	+	+
EPS	Cardiac Electrophysiology modality for diagnostic use.	+	+
ES	Endoscopy modality for diagnostic use.	+	+
IO	Intra-Oral Radiography modality for diagnostic use.	+	+
IVUS	Intravascular Ultrasound modality for diagnostic use.	+	+
MG	Mammography modality for diagnostic use.	+	+
MR	Magnetic Resonance modality for diagnostic use	+	+
NM	Nuclear Medicine modality for diagnostic use.	+	+
OCT	Optical Coherence Tomography (non-Ophthalmic) modality for diagnostic use.	+	+
OPT	Ophthalmic Tomography modality for diagnostic use.	+	+
OP	Ophthalmic Photography modality for diagnostic use.	+	+
OT	Other modalities for diagnostic use.	+	+
PT	Positron Emission Tomography (PET) modality for diagnostic use.	+	+
PX	Panoramic X-Ray modality for diagnostic use.	+	+
RF	Radio Fluoroscopy modality for diagnostic use.	+	+
RG	Radiographic imaging modality for diagnostic use.	+	+
SC	Secondary Capture modality for diagnostic use.	+	+
SR	Support for SR documents.	+	+
XA	X-Ray Angiography modality for diagnostic use.	+	+
US	Ultrasound modality for diagnostic use.	+	+
XC	External-camera Photography modality for diagnostic use.	+	+
Integration into medical information systems			
HIS	Flexible and open integration interface into Hospital information systems.	+	+
RIS	Flexible and open integration interface into Radiology information systems.	+	+

EHR	Flexible and open integration interface into Electronic health records.	+	+
EMR	Flexible and open integration interface into Electronic medical records.	+	+
PHR	Flexible and open integration interface into Personal health records.	+	+
Patient Portal	Flexible and open integration interface into Patient Portals.	+	+
eHealth	Flexible and open integration interface into eHealth, national or regional eHealth systems.	+	+
Teleradiology	Flexible and open integration interface into Teleradiology and Telemedicine systems.	+	+
Cloud	Flexible and open integration interface into Cloud healthcare systems.	+	+
Any medical application	Flexible and open integration interface into any other medical applications.	+	+
Licensing			
Limited License	License limited on connected modalities (AE Titles).	+	-
Unlimited License	An unlimited License is available upon request.	+	+
Virtualization environments support			
VMWare	VMWare virtualization. Read more.	+	+
Docker	Docker container. Read more.	-	+
Kubernetes	Kubernetes deployment support. Read more.	-	+
Hyper-V	Hyper-V virtualization. Read more.	+	+
Cloud deployment support			
Amazon AWS	Amazon Cloud deployment. Read more about Amazon Web Services.	+	+
Google	Google Cloud deployment. Read more about Google Cloud Healthcare.	+	+
Azure	Microsoft Azure Cloud deployment. Read more about Microsoft Azure Cloud.	+	+
Alibaba	Alibaba Cloud deployment. Read more about Alibaba Cloud.	+	+
DB Engines support			
MySQL	MySQL database support. Read more.	+	+
PostgreSQL	PostgreSQL database support. Read more.	-	+
MSSQL	MSSQL database support. Read more about Microsoft SQL Server.	-	+
MariaDB	MariaDB database support. Read more.	+	+
Operating Systems on server-side support			
Windows Server	Windows Server 2008/2012/2012R2/2016/2019 (64-bit).	+	+
Windows	Windows 7/810/11 (64-bit).	+	+
Linux	Linux (64 bit, with glibc version >= 2.15): Debian, Ubuntu, CentOS, Fedora.	+	+

Operating Systems on client-side support			
Windows	Windows 7/8/10/11 (32/64 bit).	+	+
Apple macOS X	v10.9 or later.	+	+
Web browsers support PACS web administration			
Microsoft Edge	85 or later.	+	+
Mozilla Firefox	74 or later.	+	+
Google Chrome	74 or later.	+	+
Safari	10 or later.	+	+
Mobile devices (tablets and smartphones) support			
IOS	Safari browser, Chrome browser.	+	+
Android	Chrome browser.	+	+
Regulatory for PACS functionality			
USA FDA	K222320, 510 (k) cleared for diagnostic use including mammographic images as a class II medical device.	+	-
Europe CE	Certified as a CE 0197 Class IIb device according to MDR.	+	-
Canada Registration	Registered as a Class 2 medical device.	+	-
Brazil ANVISA Registration	Registered as II class medical device by ANVISA.	+	-
Colombia Registration	Registered as Class IIa medical device.	+	-
Australia TGA Registration	Registered as IIb class radiology picture archiving and communication system application software by TGA.	+	-
United Kingdom MHRA Registration	Registered as radiology picture archiving and communication system workstation.	+	-
France Registration	Registered as an IIB class medical system.	+	-
Serbia Registration	Registered as a Class IIB medical device.	+	-
Switzerland Registration	Registered as IIB class radiology picture archiving and communication system workstation.	+	-
Singapore Registration	Registered as a Class B medical device.	+	-
Malaysia Registration	Registered as an IIB class medical device.	+	-
Thailand FDA	Registered as a class 3 medical device.	+	-
Morocco Registration	Registered as a IIB class medical device.	+	-