

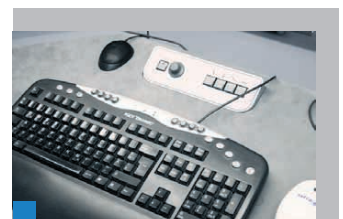
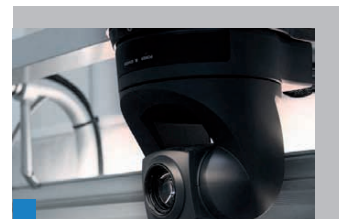
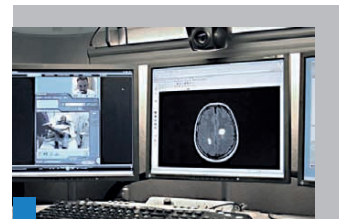
A workstation for the interpretation of a patient's medical data

VIMED® DOC is a static computer based workstation incorporating three monitors for telemedical and other hospital applications.

■ The design and functionality of the system lends itself to a focused, fatigue-free and effective interaction suitable for high volumes of medical data processing.

The VIMED® DOC telemedicine system has been developed in collaboration with hospital physicians and specialists who operate in the fields of teleradiology, teleneurology and teleoncology to help enhance their multi-disciplinary team meetings.

The ergonomic arrangement of the VIMED® DOC's input and output interfaces allows the delivery of simultaneous audio-visual and relevant medical information to help enable clinical experts to jointly discuss and agree effective care packages.



VIMED® DOC operates effectively between peripheral or rural hospitals and other local medical institutions as well as across large distances when part of a national and international framework.

Innovative solutions for fatigue-free work

■ VIMED® DOC incorporates a number of innovative solutions to help create a fatigue-free work solution, including the electromotive adjustability of table height and tabletop inclination. Furthermore, the combination of an ergonomic tabletop contour and a curved integral screen ensures a focused workstation. This incorporates an automatic adaptation for indirect illumination, dependent on monitor brightness with an electric emergency switch return, which creates high occupational health safety levels.

■ Essential elements of the VIMED® DOC, are a silent computer with integrated security mechanisms, a



solution for medical video communication and three video monitors arranged in line.

One of the video monitors allows the reading of wet x-ray images as well as processing and inspecting all kinds of radiological images.

A second video monitor ensures communication with one or more remote stations through the use of a high-quality camera and audio equipment.

■ High quality audio-visual medical communication is maintained between a specialist working on a VIMED® DOC and the remote patient, allowing real-time medical assessment and interaction, including the ability to seek a second



opinion. Clear speech is delivered via a head-set or an integrated patent protected audio system.

The third video monitor is utilised to record the clinical outcomes following a diagnosis of the patient, allowing the physician to update the medical record including any radiological images.

Findings can be stored locally or on a central server site (subject to local hospital's data security policy). The findings are sent automatically to the telemedicine partner.

The practical use of VIMED® DOC offers a wide variety of possibilities for telemedicine.

Technical Data

Processor	Intel® Core 2 Duo
Memory	2048 MByte (max. 4 GB)
Graphic card	Matrox PCI-E Parhelia 128DDR KX-20 (4xDVI)
Hard disk(s)	2 x 160 GB S-ATA II (Raid 1, Reflection)
Optical drive	DVD+/-RW Recorder
Drives	3,5" Floppy (1.44MB)
Network	Onboard 10/100/1000 MBit/s (RJ-45); Optional: Galvanic network separation for medical electrical devices and systems according to DIN EN 60601-1-1
Case (PC)	ATX Midi-Tower PC607 (W 181 x H 436 x D 430 mm zzgl. Kabel/Stecker) und VIMED® COMBOX 2 (Aufsatz PC) (B 195 x H (130 bis 160) x T 450 mm mm incl. columns)
Power supply	400W „MPG“ / fulfills the standards: EN 60950, EN 55022, EN 55082-1, EN 55011, CE EMV DIN EN 60601-1-2 Power supply DIN EN 60601-1-1
Input devices	Universal keyboard and optical mouse
Medical Features	PC is EMV examined according to DIN EN 60601-1-2
Software equipment	Microsoft Windows XP Professional OEM Microsoft Office 2003 Professional OEM Nero 7 Essentials Vista OEM Suite eTrust Antivirus v7.1 VIMED® COMM DOC

Video specifications

Bandwidth	H.323: 64 Kbp/s – 4 Mbp/s
Video standards	H.261, H.263, H.263+ / ++, H.264 (bis 512 Kbp/s outgoing)
Live Video Resolution	Interlaced CIF, CIF, SIF, QCIF, QVGA, VGA, 720p (incoming)
Data	Support for H.239 and Tandberg DuoVideo
Network specifications	ITU-T: H323 v4.2 / H.281 Annex Q (FECC) / H.323 QoS Feature Coded conferences after H.235 (AES) possible / LDAP-Support
Camera	
Sensor size	1/4"
Resolution	752 x 582
Norm	PAL
Frames per Second	25
Shutter	1s - 1/10.000s
Video S/N	50 dB
min. photosensitivity	0,7 Lux at f=1,4
Lens	f = 4,1...73,8 mm / AF 2 16 x Zoom (18 x optical)
Camera control	Pan & Tilt function
Monitor (3x) 1x Medical and 2x Standard	
Size and Type	48 cm (19") TFT LCD
Resolution	1,3 Mega pixel, Color
Active Display Size (W x H)	376 mm x 301 mm
Viewable Image Size	481 mm
Native Resolution	1280 x 1024 Pixel
Display Colors	16,7 Million
Luminance konstance measurement	Yes (Medical TFT)
Features	Auto Brightness Stabilization, On- Screen Display, PowerManager by VESA DPMS, Plug & Play after VESA DDC2B, Power supply integrated, 10-Bit-Look-Up-Table or precise color control (Medical TFT), prepare for individual calibration of white point and tone value characteristic (Medical TFT)
Adjustment Functions	Clock, Phase, Position, Brightness, Smoothing (5 stages), Range Adjustment (RGB), Gamma, Temperature, Saturation, Hue, Gain, Reset, Signal Settings, VGA selection, Input Priority, Product Information (product name, serial number, resolution, operating time), OSD Menu Settings, Adjustment Lock, Languages (English, French, German, Italian, Japanese, Spanish, Swedish), Reset
Resolutions	1280 x 1024 Full screen 1:1, 1024 x 768, 800 x 600, 720 x 400, 640 x 480, sized to full screen
Input Signals	RGB Analog (Standard), DVI (Medical)
Certifications and Standards	CE, TÜV GS, TÜV Ergonomic examined, ISO 13406-2
USB-Ports	1 Up-/2 Down-Stream, Rev 2.0 (Medical TFT)

Audio specifications

Audio standards	G.711, G.722, G.722.1, G.723.1, G.728, G.729, AAC-LD
Audio features	Full duplex echo cancellation Automatic noise suppression (ANS) Voice Activity Detection (VAD)
Audio Input/-Output	VIMED® VOICE Sound system (integrated)

DICOM specifications

Key Features	Flexible Screen-Layout / Versatile Toolbar Advanced "Cine" function Burning of Patient-CD's / Scalable
Additional Functions (characteristics)	Multiplanare Rekonstruktion (MPR) Digitale Substraktions-Angiografie (DSA) create AVI-Files (export AVI's) DICOM Print 3D-Cursor function CE- Certification
DICOM Compatibility	DICOM 3.0 supports Storage und Query/Retrieve classes as Service Class User (SCU) and Service Class Provider (SCP)

Desktop specifications

Elevation adjustment harness	76 – 126 cm (Work surface starting from soil), for working in sitting and standing
Working surface	divided work surface; Angle of inclination of the chief work surface: manually 8° or motorizes 0-15°
Security Features	build-in squeezing and clamping protection for all motorized parts, emergency power-off switch
Lighting	Sensor-steered or manually adaptable
Measurement	High: 152-202cm (inclusive rear wall) Width: 170 cm Depth: 127 cm
Weight	ca. 170 kg

VIMED® DOC is a telemedicine system from the MEYTEC GmbH Informationssysteme and a part of the VIMED® 2000 system family
Last Change: 06 January 2010. All data without guarantee. Changes and mistakes reserve.

Competence for telemedicine and eHealth

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