



AG-MDR25EJ & AG-MDC20GJ - featuring high-definition 4K image acquisition

POVCAM

The POVCAM medical recording camera system includes the AG-MDR25 portable compact recorder and the AG-MDC20GJ 4K camera head

Key Features

Compact, Lightweight & with Versatile Interfaces

Reliability for Medical Applications (complies with IEC 60601-1)

High-quality Image Acquisition and Video Recording

Network operation for IP Control and IP Streaming

Double SD Memory Card Slots (SDXC Memory Card)



POVCAM

<https://eu.connect.panasonic.com/n/en/products/industrial-medical-vision/povcam>

General	
Power	Head: DC 7.28 V (with battery), DC 12 V (with AC adaptor) CCU: DC 9 V (supplied from the AG-UMR20)
Power Consumption	In standalone condition: 1.1 A (with battery), 0.7 A (with AC adaptor) With the optional AG-MDC20GJ Camera Head: 2.2 A (with battery), 1.4 A (with AC adaptor)
Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Operating Humidity	10 % to 80 % (no condensation)
Weight	Head Approx. 590 g (1.3 lbs) CCU Body: approx. 325 g (0.717 lbs) Shooting: approx. 333 g (0.734 lbs) (including Protector)
Dimensions (W x H x D)	100 mm x 53.5 mm x 104 mm (excluding protrusion) (3-15/16 inches x 2-3/32 inches x 5-1/2 inches) Body: 64 mm x 72 mm x 131 mm (excluding protrusion) (2-17/32 inches x 2-27/32 inches x 5-5/32 inches) Shooting: 64 mm x 72 mm x 134.5 mm (including protrusion) (2-17/32 inches x 2-27/32 inches x 5-9/32 inches)
Memory Card Recorder	
Recording Media	SDHC memory card (4 GB to 32 GB), SDXC memory card (48 GB to 128 GB) MP4: more than Class10, AVCHD: more than Class4
Recording Slot	2 Slots
System Format	59.94 Hz / 50.00 Hz
Motion Recording	Recording system: MP4, AVCHD Recording mode/Recording time: Please see page 3 for the "Recording Format" table
Still Picture Recording	Recording system: JPEG (DCF/Exif2.2)
Digital Video/Digital Audio	
Output Video Signal	8 bit 4:2:2
Recording Video Signal	8 bit 4:2:0
Video Compression	MP4: MPEG-4, AVCHD: AVC/H.264 High Profile
Recording Audio Signal	48 kHz/16 bit 2 CH
Audio Compression	MP4: LPCM, AVCHD: Dolby Audio
Headroom	12 dB
Video Input/Output	
SDI In	BNC x 1, 0.8 V [p-p], 75 Ω, 3 G/1.5 G HD SDI supported Input format: 1080/59.94p LEVEL-A/LEVEL-B, 1080/50p LEVEL-A/LEVEL-B, 1080/29.97PsF/25PsF/23.98PsF, 1080/59.94i/50i, 720/59.94p/50p
SDI Out	BNC x 1, 0.8 V [p-p], 75 Ω, 3 G/1.5 G HD SDI supported Output format: same as input format
HDMI Out	Type A connector x 1, VIERA Link not supported Output format: 2160/29.97p/25p/23.98p, 1080/59.94p/50p/ 29.97p/25p/23.98p/59.94i/50i, 720/59.94p/50p, 480/59.94p, 576/50p
Audio Input/Output	
MIC/Line Input	3.5 mm diameter, stereo mini jack (MIC IN and LINE IN) MIC: -60 dBV (sensitivity -40 dB equivalent, 0 dB=1 V/Pa 1 kHz), plug in power supported LINE: -10 dBV
SDI Out (Audio)	2 CH (LPCM), switchable gain: 0 dB/-6 dB/-12 dB
HDMI Out (Audio)	2 CH (LPCM)
Headphone	3.5 mm diameter, stereo mini jack x 1
Speaker	20 mm diameter, round x 1
External Terminal	

Camera	20 pin dedicated interface
LAN	IP control LAN connector (RJ-45) Straight/cross cable auto-detect function
Remote	2.5 mm diameter stereo mini jack x 1 (ZOOM, S/S) 3.5 mm diameter mini jack x 1 (FOCUS, IRIS)
USB 2.0	Type Mini-B connector, mass storage (read/write)
DC In 12V	DC 12 V (11.4 V to 12.6 V) EIAJ Type4
Monitor	
LCD Monitor	3.5-type LCD monitor, approx. 1,150,000 dots
Network	
Video Compression (Network)	MP4:MPEG-4, AVCHD:AVC/H.264 High Profile
Audio Compression (Network)	AAC-LC (48kHz, 16 bit, 2 CH, 128 kbps)
Transfer Mode (JPEG)	Resolution 640 x 360: Frame rate (59.94 Hz): 30 fps, 15 fps, 5 fps Frame rate (50.00 Hz): 25 fps, 12.5 fps, 5 fps
Transfer Mode (H.264)	Resolution 3840 x 2160/640 x 360: Frame rate (59.94 Hz): 30 fps, 15 fps, 5 fps Frame rate (50.00 Hz): 25 fps, 12.5 fps, 5 fps Resolution 1920 x 1080/1280 x 720: Frame rate (59.94 Hz): 60 fps, 30 fps, 15 fps, 5 fps Frame rate (50.00 Hz): 50 fps, 25 fps, 12.5 fps, 5 fps *By the conditions, the frame rate is lower than setting.
Supported Protocol	TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, DHCP, DNS, NTP, IGMP, UPnP, ICMP, ARP, RTSPoverTCP, RTSPoverHTTP, SSL (TLS), MultiCast/UniCast
IP Connector Cable	LAN cable* (more than category 5) max. 100 m *STP (Shielded Twisted Pair) recommend
Supported OS	
Windows	Microsoft(R) Windows 10 (32 bit/64 bit), Internet Explorer 11 Microsoft(R) Windows 7 (32 bit/64 bit) SP1, Internet Explorer 11
Mac	MacOS v10.12 Safari10, OS X v10.11 Safari10
Supported Browser	
iOS Device	iPhone/iPad/iPod touch, iOS 10, standard browser
Android	Android OS 4.4, standard browser
Supported Controller	
Controller	AW-RP50, AW-RP120G, AK-HRP200G *Depending on a model, upgrade is required.
AC Adapter	
Rated Input Voltage	AC 100 V ? 240 V, 50 Hz/60 Hz, 1.2 A
Input Capacitance	79 VA (AC 100 V), 99 VA (AC 240 V)
Rated Output	DC 12 V, 3.0 A
Operating Temperature (AC Adaptor)	0 °C to 40 °C (32 °F to 104 °F)
Operating Humidity (AC Adaptor)	10 % to 90 % (no condensation)
Weight (AC Adapter)	Approx. 225 g (0.496 lbs)
Connector	20 pin dedicated interface (to the AG-MDR25)
Dimensions	115 mm (W) x 37 mm (H) x 57 mm (D) (excluding DC code) (4-1/2 inches x 1-7/16 inches x 2-1/4 inches)
Audio In	Built-in microphone (2 CH stereo)
Minimum Illumination	0.2 lx (slow shutter: 1/2 sec., gain: +36 dB)
Synchro Scan	59.94i/59.94p mode: 1/60.0 sec. to 1/285.6 sec. 29.97p mode: 1/30.0 sec. to 1/206.5 sec. 23.98p mode: 1/24.0 sec. to 1/280.1 sec. 50i/50p mode: 1/50.0 sec. to 1/209.2 sec. 25p mode: 1/25.0 sec. to 1/224.3 sec.
Horizontal Resolution (Typ, Center)	1,300 TV (HDMI output 2160/29.97p, when 25.00p playback) 1,000 TV (HDMI output 1080/59.94p, when 50.00p playback)
Slow Shutter	59.94i/59.94p mode: 1/2 sec., 1/4 sec., 1/8 sec., 1/15 sec., 1/30 sec. 29.97p mode: 1/2 sec., 1/4 sec., 1/8 sec., 1/15 sec. 23.98p mode: 1/2 sec., 1/3 sec., 1/6 sec., 1/12 sec. 50i/50p mode: 1/2 sec., 1/3 sec., 1/6 sec., 1/12 sec., 1/25 sec., 25.00p mode: 1/2 sec., 1/3 sec., 1/6 sec., 1/12 sec.

Shutter Speed	<p>59.94i/59.94p mode: 1/60 sec., 1/100 sec., 1/120 sec., 1/180 sec., 1/250 sec., 1/350 sec., 1/500 sec., 1/750 sec., 1/1000 sec., 1/1500 sec., 1/2000 sec., 1/3000 sec., 1/4000 sec., 1/8000 sec.</p> <p>29.97p mode: 1/30 sec., 1/50 sec., 1/60 sec., 1/100 sec., 1/120 sec., 1/180 sec. to 1/8000 sec. (same as above)</p> <p>23.98p mode: 1/24 sec., 1/48 sec., 1/50 sec., 1/60 sec., 1/100 sec., 1/120 sec., 1/180 sec. to 1/8000 sec. (same as above)</p> <p>50i/50p mode: 1/50 sec., 1/60 sec., 1/100 sec., 1/125 sec., 1/180 sec. to 1/8000 sec. (same as above)</p> <p>25.00p mode: 1/25 sec., 1/50 sec., 1/60 sec., 1/100 sec., 1/125 sec., 1/180 sec. to 1/8000 sec. (same as above)</p>
White Balance	<p>ATW, ATW LOCK, AWB A, AWB B, P3200K, P5600K, VAR (2000 K to 15000 K)</p>
Gain Setting	<p>Automatic, manual 0 dB to 30 dB(1 dB step), Super Gain 33 dB, 36 dB</p> <p>*At auto mode, 3 dB to 30 dB (3 dB steps) can be selected with AGC limit setting.</p>
Image Stabilizer	<p>Optical image stabilizer (HD/4K)</p> <p>5-Axis hybrid image stabilizer (HD)</p>
Lens	<p>Zoom: optical 20x motorized zoom</p> <p>Fvalue: F1.8 to F3.6, Focal length: f= 4.08 mm to 81.6 mm</p> <p>35 mm conversion: 29.5 mm to 612.0 mm (Hybrid O.I.S mode "OFF")</p> <p>Filter diameter: 49 mm, ND filter: CLEAR, 1/4, 1/16, 1/64 (built-in)</p> <p>Shortest shooting distance: 1.5 m (4.9 ft) at zoom range, 3 cm (0.1 ft) at wide angle</p> <p>IR cut filter : incorporates the ON/OFF control function</p>
Zoom	<p>i. Zoom: x30 (HD), x22 (4K)</p> <p>Digital zoom: x1.4, x2, x4, x6, x8</p>
Pickup Devices	<p>1/2.3-type MOS solid state image sensor (Total pixels: approx. 12.76 megapixels)</p>