



THE NEXT GENERATION OF HIGH QUALITY IMAGES

THE 4K RECORDING SYSTEM

The memory card portable recorder AG-MDR25EJ
The compact camera head AG-MDC20GJ

- » High-Definition 4K Image Acquisition
- » IP Streaming / IP Control (LAN Terminal)
- » Hybrid 5-axis image stabilizer
- » Recording on SDXC cards (double SD slots)
- » Touch-Panel LCD Monitor
- » Compliance with Medical Safety Standards (IEC60601)





SURGICAL VIDEO RECORDING SYSTEM

SYSTEM FEATURES AG-MDR25EJ AND AG-MDC20GJ



Compact & Lightweight

- » Compact camera head for flexible installation
- » Lightweight battery-drive recorder
- » Touch-Panel LCD monitor



Touch Panel LCD (User Button Setting Example)

High-Resolution Images for Surgical Recording

- » High-resolution 4K (UHD) /FHD & Progressive Image Recording
- » Adjustable Image Quality under surgical light
- » 29.5mm wide-angle optical 20x zoom



Example: Angle of view for 20x optical zoom

- » Stable Images with a Five-Axis Hybrid Image Stabilizer



Five-Axis Hybrid Image Stabilizer Diagram

Double SD Memory Card Slots and Relay Recording

- » Double SD Memory Card Slots (SDXC memory Card)
- » Versatile Recording / Playback Functions

Recording Format

Rec. Mode	Image Size	Bit Rate	Frame Rate		Audio	Recording Time (approx.)
			59.94 Hz	50.00 Hz		
MP4*	4K (UHD) 3840x2160	50 Mbps (VBR)	29.97p 23.98p	25p	LPCM 1.5Mbps	5 hour 20 minutes
PS		25 Mbps (VBR)	59.94p	50p	Doiby Audio 384kbps	11 hours
PH	1920x1080	21 Mbps (VBR)	59.94i 23.98p	50i		12 hour 30 minutes
HA		17 Mbps (VBR)	59.94i	50i	Doiby Audio 256kbps	17 hours
HE	1440x1080	5 Mbps (VBR)	59.94i	50i		56 hours
PH	1280x720	21 Mbps (VBR)	59.94p	50p	Doiby Audio 384kbps	12 hour 30 minutes
PM		8 Mbps (VBR)	59.94p	50p	Doiby Audio 256kbps	35 hours

*When using the AG-MDC20GJ. Size of the memory card:128GB SDXC memory card

Versatile Interface: IP Streaming and IP Control

- » LAN Terminal for IP Streaming and IP Control



IP Control (Tablet Screen Example)

IP Control (Web Browser Screen Example)

- » SDI Input and SDI/HDMI Outputs
- » Diverse Interfaces (remote terminal, audio input, USB 2.0)

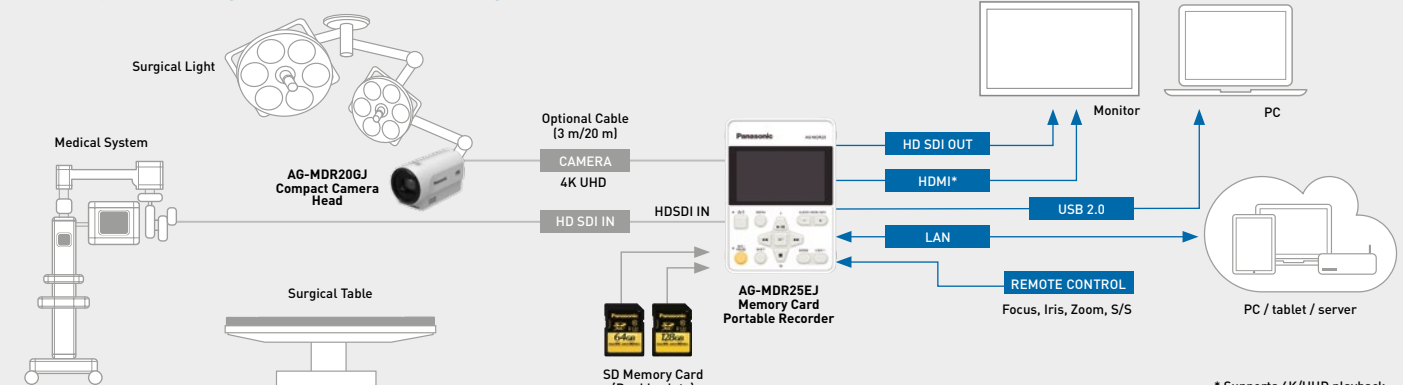
Reliability for Medical Applications

- » Compliance with Medical Standards (IEC60601)
- » Control Section Membrane Sheet (easy disinfection)
- » Lens Protector



Lens Protector (Standard Equipment)

Example of Surgical Video Recording System



* Supports 4K/UHD playback

SPECIFICATION

AG-MDR25EJ

General	
Power	DC 7.28 V (with battery), DC 12 V (with AC adaptor)
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	Approx. 590 g (1.3 lbs)
Dimensions (W x H x D)	100 mm x 53.5 mm x 104 mm (excl. protrusion)
Memory Card Recorder	
Recording media	SDHC memory card (4 GB to 32 GB) , SDXC memory card (48 GB to 128 GB)
Recording slot	2 Slots
System format	59.94 Hz / 50.00 Hz
Motion recording	MP4, AVCHD
Still picture recording	JPEG (DCF/Exif2.2)
Video Input/ Output	SDI IN, SDI OUT, HDMI OUT
Audio Input/ Output	MIC/ LINE IN, SDI OUT, HDMI OUT, Headphone, Speaker
Monitor	
LCD monitor	3.5-type LCD monitor, approx. 1,150,000 dots
AC Adapter	
Rated input voltage	AC 100 V – 240 V, 50 Hz/60 Hz, 1.2 A
Rated output	DC 12V, 3.0A
Weight	Approx. 225 g (0.496 lbs)
Dimensions	115 mm (W) x 37 mm (H) x 57 mm (D) (excl. DC card)

AG-MDC20GJ

General	
Power	DC 9 V (supplied from the AG-UMR20)
Power consumption	0.6 A
Operating temperature	0 °C to 40 °C (32 °F to 104 °F)
Operating humidity	10 % to 80 % (no condensation)
Weight	Body: approx. 325 g (0.717 lbs) Shooting: approx. 333 g (0.734 lbs) (incl. protector)
Dimensions (W x H x D)	Body: 64 mm x 72 mm x 131 mm (excl. protrusion)
Camera	
Pickup device	1/2.3-type MOS solid state image sensor (Total pixels: approx. 12.76 megapixels)
Lens	Zoom: optical 20x motorized zoom Fvalue: F1.8 to F3.6, Focal length: f= 4.08 mm to 81.6 mm
Zoom	i. Zoom: x30 (HD), x22 (4K) Digital zoom: x1.4, x2, x4, x6, x8
Image stabilizer	Optical image stabilizer (HD/4K) 5-Axis hybrid image stabilizer (HD)
Minimum illumination	0.2 lx (slow shutter: 1/2 sec., gain: +36 dB)
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)
Input/Output	
AUDIO IN	Built-in microphone (2 CH stereo)
Connector	20 pin dedicated interface (to the AG-MDR25EJ)

* 4K acquisition is possible only when connected to the AG-MDC20 Compact Camera Head. 4K refers to 3840 x 2160 resolution. The maximum resolution in 4K shooting mode via HDMI/SDI output is FHD (1920 x 1080) 59.94i/50i. AVCHD Progressive and the AVCHD Progressive logo are registered trademarks of Sony Corporation and Panasonic Corporation. HDMI and the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC. SDXC Logo is a trademark of SD-3C, LLC. Dolby, Dolby Audio, and the double-D symbol are trademarks of Dolby Laboratories. Specifications are subject to change without notice.

System Components



AG-MDR25EJ

- » High-Definition 4K Image Acquisition
- » IP Streaming / IP Control (LAN Terminal)
- » LCD Touch Panel
- » Recording on SDXC cards (double SD slots)



AG-MDC20GJ

- » High-Definition 4K Image Acquisition
- » IP Remote Control 16 Axis color correction
- » Hybrid 5-axis image stabilizer

Options



- » **AG-C20003G** 3 m (9.84 ft)
- » **AG-C20020G** 20 m (65.62 ft)
- » Camera Head Option Cable



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