# SONY



The PMW-10MD Full HD Medical Grade camera system combines outstanding image quality with the convenience of a built-in HD recorder. Its compact size and remote head design allow for simple integration into a wide variety of medical and scientific applications.

The camera is equipped with 3 one half-inch (1920 x 1080) Exmor™ CMOS sensors, each delivering over 2 million pixels. Although small in size, the PMW-10MD delivers a superb video image, excellent sensitivity of F10, and a remarkable signal to noise ratio of 54 dB. Combine these specifications with a high horizontal resolution of 1,000 TV lines and a wide dynamic range of 450%, the PMW-10MD stands out as one of the best camera systems available for medical applications.

- Compact camera head measures approximately 1.4" x 1.77" x 1.96"
- Designed for mounting above the OR table or on a surgical microscope using optional lenses and optical adapters
- DVI-D Output support 1080/59.94P and 1080/50P
- Built-in recorder features two modes HQ 1920 x 1080 @ 35Mbs or SP 1440 x 1080 @ 25Mb/s

## **Specifications**

General	
Power Requirements	AC 100 to 240 V, 50/60 Hz
Power Consumption	20W Approx.
Operating Temperature	+32 to +104° F (0 to +40° C)
Dimensions (W x H x D)	Camera Head Unit: 35 x 45 x 50mm Approx.
, ,	Camera Control Unit: 200 x 88 x 240mm Approx.
Weight	Camera Head Unit: 100g Approx.
3	Camera Control Unit: 2.5kg Approx.
Camera	
	LO abla 170 ta ab bar a Farrage Full LID OMOS
Pickup Device	3-chip 1/2-inch type Exmor Full HD CMOS
Effective Picture Elements	1920 x 1080
Lens Mount	C mount
Optical System	F2.2 prism system
Sensitivity (2000 lx, 89.9% reflectance)	F10 (typical) (1920 x 1080/59.94i mode)
Minimum Illumination	0.14 lx (typical) (1920 x 1080/59.94i mode, F2.2, +21 dB gain, with 64-frame accumulation)
S/N Ratio	54 dB (Y) (typical)
Horizontal Resolution	1000 TV Lines
Gain	0 to 21dB
Recording	
Recording Format	1
Video	MPEG-2 Long GOP
	HQ mode: VBR. maximum bit rate: 35 Mb/s, MPEG-2 MP@HL
	SP mode: CBR, 25 Mb/s, MPEG-2 MP@H14
Audio	Linear PCM (2ch, 16-bit, 48kHz)
Recording Frame Rate	Elifodi i Giri (2011, 10 bil, 40kil2)
NTSC Setting	HQ mode: 1920 x 1080/59.94i
Wide delining	SP mode: 1440 x 1080/59.94i
PAL Setting	HQ mode: 1920 x 1080/50i
	SP mode: 1440 x 1080/50i
Recording/Playback Time	1 110dc. 1440 x 1000/001
HQ Mode	Approx.100 min. with SBP-32 (32 GB) memory card
SP Mode	Approx. 50 min. with SBP-16 (16 GB) memory card
	Approx. 25 min. with SBP-8 (8 GB) memory card
	Approx. 140 min. with SBP-32 (32 GB) memory card
	Approx. 70 min. with SBP-16 (16 GB) memory card
	Approx. 35 min. with SBP-8 (8 GB) memory card
	Applox. 33 Hills. Will 36F-6 (6 96) Memory Cala
Still Image Recording	
Recording Format	JPEG 1920 X 1080
Signal Input/Output	
MIC Input	Stereo mini-jack (x 1)
Composite Output	BNC (x1)
S-Video Output	mini DIN 4-pin (x 1)
Component Output	D-Sub 15-pin (x 1)
DVI-D Output	DVI connector 19-pin (x 1)
HD SDI Output	BNC (x2)
EXT SYNC Input	BNC (x 1)
FS,TRIG IO	Stereo mini-jack (x 1)
Remote	D-sub 15-pin (x1)
Media Slot	
Туре	ExpressCard/34 (x 2)
Interface	ExpressCard™ compatible
Accessory	
Camera Cable	I CCMC-T05, T10, T15, T20 (One cable is required for system operation.)
Carriera Cable	1 Control 100, 110, 110, 120 (One cable is required for system operation).)

©2009 Sony Corporation. All rights reserved. Reproduction in whole or in part without written permission is prohibited. Features and specifications are subject to change without notice. All non-metric weights and measures are approximate. Sony, Exmor, SxS are trademarks of Sony. ExpressCard is a trademark of PCMCIA.

#### Caution: Federal (USA) law restricts this device to sale by or on the order of a physician or other appropriately licensed medical professional. Caution: See product labeling for indications, contraindications, warnings, cautions and directions for use. ME-PMW-10MD

### **Optional Accessories**

- SBP-32/16/8 SxS™ Pro **Memory Cards**
- CCMC-T20/15/10/05 Camera Cables
- Kowa-LMZ 856MD Short distance HDTV Lens
- SBAC-US10 SxS Memory Card **USB Reader/Writer**



Camera Cables: CCMC-T05, CCMC-T10, CCMC-T15, CCMC-T20



Kowa Lens: LMZ-856MD



PMW-10MD Front Panel



PMW-10MD Rear Panel

### SONY

Sony Electronics Inc. 1 Sony Drive Park Ridge, NJ 07656

www.sony.com/medical