

IMAGE SENSOR	MS-500
Sensor	1" SPAD Sensor
Total Pixels	3.2M
Effective Pixels	2.1M
Maximum Resolution	1920x1080
Minimal Subject Illumination	.001 lux (Color (Night Mode), no light accumulation, f/1.4 equivalent, shutter speed 1/30, 50IRE, maximum gain 84 dB, Custom Picture [CrispImg2])
LENS SYSTEM	
Lens Mount	Bayonet lens mount based on BTA S-1005B standards
TERMINALS	
Output Format	3G/HD-SDI (4:2:2 10-bit)
Remote Camera Control	NU Protocol (Canon proprietary, Serial), Pelco-D (RS-232C/RS-422/RS-485)
Lens Terminal	Circular 12-pin Jack x1
GenLock Terminal	BNC jack (input only) x 1, 1.0 Vp-p/75
3G/HD-SDI Terminal	BNC jack (output only) x 1, 0.8 Vp-p/75, unbalanced 3G-SDI: SMPTE 424, SMPTE 425, SMPTE ST 299-2 HD-SDI: SMPTE 292, SMPTE ST 299-1 Time code (VITC/LTC)
LAN Terminal	RJ-45 for IP Video Streaming and Control
Ext. Device I/O Terminal	Input x2, Output x2 (for future expansion)
Memory Card	microSD card slot x1 (not recordable, for future expansion)
IMAGE CONTROL	
Focus Control	Manual, One-shot AF AF frame: Large, small AF frame position: Center, specified area
Resolution/Frame Rate	Frame Frequency 59.94P: 1920 x 1080: 59.94P*, 59.94i (4:2:2 10 bit) 1280 x 720: 59.94P (4:2:2 10 bit) * 3G-SDI mapping Level A/B supported Frame Frequency 29.97P: • 1920 x 1080: 29.97P, 29.97PsF (4:2:2 10-bit) Frame Frequency 50.00P: • 1920 x 1080: 50.00P***, 50.00i (4:2:2 10-bit) • 1280 x 720: 50.00P (4:2:2 10 bit) ***3G-SDI mapping Level A/B supported Frame Frequency 25.00P: • 1920 x 1080: 25.00P, 25.00PsF (4:2:2 10-bit)
Shutter Speed	1/4000s to 1/4s [59.94P], 1/4000s to 1/4s [29.97P], 1/4000s to 1/3s [50.00P], 1/4000s to 1/3s [25.00P]
Optical Filters	ND filter: motor operated insertion-extraction (manual/automatic), 1 density level (approx. 1/64) IR cut filter: motor operated insertion-extraction (manual/automatic)
Exposure	Auto, Tv, Av, AGC, Manual/AE Shift
Metering Mode	Standard, Spotlight, Backlight, AF Frame Monitoring
White Balance	Manual (MWB), AWB, White Balance Set A (WB-A), White Balance Set B (WB-B), Daylight (DyIt), Tungsten (Tung), Color Temperature (Kelv) – Preset setting/color temperature setting: available
Auto Black Balance	Available
Iris	Manual
Gain	0.0-84.0 dB (3.0 – 84.0 dB if gamma is BT.709 Standard, 12.0 – 84.0 dB if Canon 709)
AGC Upper/Lower Limit	Available
Custom Picture	CrispImg2, BT.709 Standard, Canon 709
Day/Night Switch	Auto/Day Mode/Night Mode

Color Bars	SMPTE, ARIB, EBU
Smart Shade Control (SSC)	Available
Haze Compensation	Available
Diffraction Correction	Available (excluding certain non-supported lenses)
Chromatic Aberration Correction	Available (excluding certain non-supported lenses)
Digital Zoom	Available 10x (Max.)
On-Screen Display	Available (English/Japanese)
IP VIDEO OUTPUT AND CONTROL	
Video Compression	JPEG, MPEG-4 AVC/H.264, H.265/HEVC
Video Size	1920 x 1080, 1280 x 720, 640 x 360, 320 x 180
Video Output Frame Rate	JPEG: 0.1 – 15 fps MPEG-4 AVC/H.264, H.265/HEVC Frame Frequency 59.94P/29.97P: 0.99/4.99/9.99/14.98/29.97/59.94 fps Frame Frequency 50.00P/25.00P: 1/5/12.5/25/50 fps
Network Protocol	IPv4, IPv6, TCP/IP, UDP, HTTP, SNMPv1/v2c/v3 (MIB2), RTP/RTCP, RTSP, DHCP, AutoIP, DNS, mDNS, ARP, ICMP, NTP, SSL/TLS
Control Protocol	NU (Canon proprietary, Serial), Pelco-D (Serial), ONVIF, WV-HTTP (Canon proprietary), WVCOM (Canon proprietary)
POWER	
External Power Input	External power source: 12 – 30 V DC (connector included)
Power Consumption	DC input: Max. 23.7 W (camera body only)
OTHER	
Temperature	Operating temperature range: -20°C – +45°C (-4°F – +113°F) Start-up temperature range: -10°C – +45°C (-14°F – +113°F) Storage temperature range: -30°C – +60°C (-22°F – +140°F), 5%-90% Humidity without condensation
Dimensions	Approx. 128 x 128 x 184 mm (5.04 x 5.04 x 7.24 in.) (excluding protrusions)
Weight	Approx. 2.2 kg (4.86 lb.) (camera body only)
Included In Box	MS-500 Camera, Power Supply Connector, Warranty Card

*Additional specifications for MS-500 camera and SPAD sensor available under NDA.