

MEMRECAM ACS-1 **M60 / M40**



World's First 60 GPixel/sec High Speed Camera System

1280 × 896 pixel @150,000 fps (M60)
@120,000 fps (M40)

1 Mpixel Resolution at Ultra-Fast Framing Rates ※ In Boost4 mode

Ultra High Sensitivity

Color ISO 20,000

Mono ISO 100,000

500% brighter than conventional model ※ Compare to MEMRECAM GX-8F

USB 3.0B Fast download

400% faster data transfer ※ vs LAN connection

Up to 256GB Built-in memory

For longer recording time & memory segmentation for repetitive events

Features

Boost mode ^{※3}	For increased FPS or Vertical Resolution
Auto Black Balance	Mechanical Calibration Shutter
Memory Segment	Up to 64 Segments
Built-in SSD ^{※1}	Faster Auto Storage into Built-in SSD Backup image data while recording
Faster Download	Download via USB3.0B (to PC)
DOWNLOAD REC	Recording to a memory segment in parallel with downloading to another memory segment
Image Trigger	Triggered by intensity shifts detected in a minimum area of 21x16 pixel
Dual Framing Rate	1x and 1/2 ~ 1/100x
CAM MODE LED	Status LED : STOP-READY / VIEW / ARM / REC
SYNC Recording	Fully synchronized with GX-HUB
Frame straddling shooting	Record continuous image pairs for PIV analysis Support minimum 210ns laser pulse
Fan control	Pause control / auto fancontrol / forced cooling mode
Auto pilot	Read sequence and execute automatically
EST SYNC	Sync with an external signal

Specifications

Sensor	1.14M Pixel, CMOS
Active Pixel	1280x896
ISO	ISO 5,000 — 40,000 (color)
(REI)	ISO25,000 — 200,000 (Mono)
Electric Shutter <M60>	1/10 ~ 1/2,500,000 sec. ^{※5} 1/10 ~ 1/909,090 sec. ^{※4}
<M40>	1/10 ~ 1/1,666,666 sec. ^{※5} 1/10 ~ 1/909,090 sec. ^{※4}
Memory	64GB / 128GB / 256GB
Memory Segment	Up to 64 Segments
Bit Depth	8bit / 10bit / 12bit
Lens Mount ^{※1}	F Mount (Support to Iris ring-less Lens) C Mount · EF Mount
Video Output	DisplayPort / 3G-SDI (Level A)
Input Signal	Trigger(TTL/Contact)/ EST/ IIRIG-B/ ARM CMD/ PWR CTL
Output Signal	Status(ARM/FAULT)/ Exp. Pulse/ EPO/ Trigger OUT/ VD OUT
Trigger Mode	NORMAL/ EVENT/ BURST/ MULTI/ LINEAR
Interface	1000BASE-T / USB3.0B / 3.0 / 2.0
Control ^{※1}	PC / V-PAD (11.6" Touch Panel Monitor)
Power	20-32VDC
Dimensions	Approx. 175Wx175Hx206D mm (without handle)
Weight	Approx. 7.3kg

Recording Time ^{※2}

fps	M60				M40			
	(Normal mode)	(Boost mode)	(Boost4 mode)		(Normal mode)	(Boost mode)	(Boost4 mode)	
	pixel (H) x (V)	Time in sec.	pixel (H) x (V)	Time in sec.	pixel (H) x (V)	Time in sec.	pixel (H) x (V)	Time in sec.
50 ~	1280		1280		1280		1280	
25,000	× 896	3.04	—	—	× 896	3.04	—	—
30,000	↓	2.53	—	—	↓	2.53	—	—
35,000	↓	2.17	—	—	↓	2.17	—	—
40,000	↓	1.90	—	—	× 800	2.12	× 896	3.80
45,000	↓	1.69	—	—	× 720	2.10	↓	3.38
50,000	↓	1.52	—	—	× 640	2.12	↓	3.04
60,000	× 800	1.41	× 896	2.53	× 528	2.15	↓	2.53
65,000	× 736	1.42	↓	2.34	× 480	2.18	↓	2.34
75,000	× 624	1.45	↓	2.02	× 400	2.27	× 800	2.27
100,000	× 448	1.52	↓	1.52	× 288	2.36	× 576	2.36
120,000	× 368	1.54	× 704	1.61	× 224	2.53	× 448	2.53
150,000	× 288	1.57	× 544	1.67	× 176	2.58	× 352	2.58
200,000	× 192	1.77	× 384	1.77	× 112	3.04	× 224	3.04
220,000	× 176	1.76	× 352	1.76	× 96	3.22	× 192	3.22
300,000	× 96	2.36	× 192	2.36	× 48	4.73	× 96	4.73
400,000	× 48	3.54	× 96	3.54	× 32	5.32	× 64	5.32
500,000	× 32	4.25	× 64	4.25	× 16	8.51	× 32	8.51
700,000	× 16	6.08	× 32	6.08	× 16	6.08	× 32	6.08
1,000,000	× 16	4.25	× 32	4.25				

※4

※5

Configurations

Standard

- ACS Camera
- Tripod Plate
- Standard Comm. Cable
- NAC Control Software MLink
- Operation Manual

Options

- AC Adapter(Power Supply)
- F-Mount Adapter
- C-Mount Adapter
- EF-Mount Adapter
- V-PAD
- Analog Wave Inserter
- Built-in SSD 1TB
- AUX Cable
- SYNC Cable
- Carrying Case

※1 Option

※2 Recording Time is 128GB model at 12-bit recording

※3 Only monochrome

※4 Export Control Model

※5 Required Export License

V-PAD ^{※1}

マゼンタ ARM

REC



Visit our website at

Specifications described above are subject to change without notice.



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