

MEMRECAM ACS-1 **M60 / M40**



World First's 60G Pixel/sec High Speed Camera System

1,280×896 pixel 100,000 fps(M60)
65,000 fps(M40)

1Mpixel Resolution at Ultra-High Speed shooting range ※ In boost 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 time ※ vs LAN connection

Max. 256GB Built-in memory

For longer recording time & memory segment recording in repetitive experiments

Features

Boost mode ^{※3}	For increased FPS or Vertical Resolution
Auto Black Balance	Auto correction by Mechanical Shutter
Memory Segment	Up to 64 Segments
Built-in SSD ^{※1}	Faster Auto Storage into Built-in SSD Backup image data while in 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 sensed at the minimum area of 21x16 pixel
Dual Framing Rate	1x and 1/2 ~ 1/100x
CAM MODE LED	Status LED : READY / VIEW / ARM / REC
SYNC Recording	Fully synchronized with GX-HUB
Frame straddling shooting	Record continuous 2 pictures for PIV analysis Support minimum 500ns laser pulse <M60/M40>
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	1,280×896
ISO(REI)	ISO 5,000 - 40,000 (color) ISO 25,000 - 200,000 (Mono)
Electric Shutter	<M60>1/100 ~ 1/2,500,000 sec. 1/100 ~ 1/909,090 sec. ^{※4} <M40>1/100 ~ 1/1,666,666 sec. 1/100 ~ 1/909,090 sec. ^{※4}
Memory	64GB / 128GB / 256GB
Memory Segment	Up to 64 Segments
Bit Depth	8bit / 10bit / 12bit
Lens Mount	F Mount (Support to Iris ring-less Lens) C Mount ^{※1} EF Mount ^{※1}
Video Output	DisplayPort/ 3G-SDI (Level A)
Input Signal	Trigger(TTL/Contact)/ EST/ IRIG-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. 175W×175H×206D mm (without protuberance)
Weight	Approx. 7.3kg

Recording Time ^{※2}

fps	M60				M40			
	(Normal mode)		(Boost mode)		(Normal mode)		(Boost mode)	
	pixel (H) × (V)	Time in sec.	pixel (H) × (V)	Time in sec.	pixel (H) × (V)	Time in sec.	pixel (H) × (V)	Time in sec.
50~25,000	1,280 × 896	3.04	—	—	1,280 × 896	3.04	—	—
30,000	↓	2.54	—	—	↓	2.54	—	—
35,000	↓	2.17	—	—	↓	2.17	—	—
40,000	↓	1.90	—	—	1,280 × 800	2.13	1,280 × 896	3.80
45,000	↓	1.69	—	—	1,280 × 720	2.10	↓	3.38
50,000	↓	1.52	—	—	1,280 × 640	2.13	↓	3.04
60,000	1,280 × 800	1.42	1,280 × 896	2.54	1,280 × 528	2.15	↓	2.54
65,000	1,280 × 736	1.42	↓	2.27	1,280 × 480	2.18	↓	2.34
75,000	1,280 × 624	1.46	↓	2.03	1,280 × 400	2.27	1,280 × 800	2.27
100,000	1,280 × 448	1.52	↓	1.52	1,280 × 288	2.37	1,280 × 576	2.27
120,000	1,280 × 368	1.54	1,280 × 704	1.61	1,280 × 224	2.54	1,280 × 448	2.54
150,000	1,280 × 288	1.58	1,280 × 544	1.67	1,280 × 176	2.58	1,280 × 352	2.58
200,000	1,280 × 192	1.77	1,280 × 384	1.77	1,280 × 112	3.04	1,280 × 224	3.04
220,000	1,280 × 176	1.76	1,280 × 352	1.76	1,280 × 96	3.23	1,280 × 192	3.23
^{※5} 300,000	1,280 × 96	2.37	1,280 × 192	2.37	1,280 × 48	4.73	1,280 × 96	4.73
^{※5} 400,000	1,280 × 48	3.55	1,280 × 96	3.55	1,280 × 32	5.32	1,280 × 64	5.32
^{※5} 500,000	1,280 × 32	4.26	1,280 × 64	4.26	1,280 × 16	8.52	1,280 × 32	8.52
^{※5} 700,000	1,280 × 16	6.09	1,280 × 32	6.09	1,280 × 16	6.09	1,280 × 32	6.09
^{※5} 1,000,000	1,280 × 16	4.26	1,280 × 32	4.26				

Configurations

Standard (Japan)

- ACS Camera
- F-Mount Adapter
- Tripod Plate
- Standard Comm. Cable
- AC Adapter
- NAC Control Software MLink
- Operation Manual
- Carrying Case

Options

- C-Mount Adapter
- EF-Mount Adapter
- V-PAD
- Analog Wave Inserter
- Built-in SSD 1TB
- AUX Cable
- SYNC Cable

※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
VIEW
RECVisit our website at www.nacinc.jp

Please Note: Specifications described above are preliminary and subject to change.

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