



Providing quality and reliability since 1958

MEMRECAM HX-4

High Speed Camera System

1280 x 960 up to 6,250 frames per second (fps)
Max frame rate 1,080,000 fps



Memrecam HX-4 Features

CMOS Sensor

1280 X 960 - all Active Pixels

Bit Depth

12/10/8-bit (selectable)

Adjustable Electronic Shutter

down to < 1us

Adjustable Frame Rates

in 1fps steps

Adjustable Resolution

Variable Framing Profile

a variety of frame rates in one recording sequence

Multiple Trigger Modes

Burst, multi-trigger, restart-trigger and image trigger

Sync

High resolution timing and sync to < 62ns

Straddle Mode

Inter-frame time for PIV applications = 154ns

Memory Segmentation

Dual Segment Recording

Simultaneously record to two separate memory segments at two different recording speeds

Ultra High Sensitivity

ISO 10,000 (colour) ISO 40,000 (mono)

Sealed Core

protects against dust, sand, dirt, etc. for use in dirty environments

Auto Exposure Control

Automatic Temperature Calibration

Ultra-Fast Gig-E Interface with DataLock

Fast Download

to USB 2.0 HDD

Continuous Live Video Output

Stand alone control

no PC required

Memory Backup Battery

Dynamic Range Expansion Shutter

IRIG-B Capture & Sync with Phase Shift

Compact Design

5.5kg -110W x 140H x 333D(mm)



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High Speed Camera System



Frame Rate	Available Resolution (examples)		Record Time Sec (8 bit)		
	FPS	Hor.	Vert.	16GB	32GB
100	1280	960	136.72	273.44	546.88
250	1280	960	54.69	109.38	218.75
500	1280	960	27.34	54.69	109.38
1,000	1280	960	13.67	27.34	54.69
2,000	1280	960	6.84	13.67	27.34
3,000	1280	960	4.56	9.11	18.23
4,000	1280	960	3.42	6.84	13.67
5,000	1280	960	2.73	5.47	10.94
6,000	1280	960	2.28	4.56	9.11
7,000	1280	856	2.19	4.38	8.76
7,100	1024	1024	2.26	4.51	9.03
7,500	1280	792	2.21	4.42	8.84
8,000	1280	744	2.21	4.41	8.82
10,000	1024	728	2.25	4.51	9.01
15,000	960	512	2.28	4.56	9.11
20,000	768	464	2.36	4.71	9.43
25,000	640	440	2.39	4.77	9.55
30,000	576	400	2.43	4.86	9.72
40,000	512	328	2.50	5.00	10.00
50,000	448	288	2.10	4.20	8.40
70,000	384	232	2.17	4.34	8.68
100,000	320	184	2.30	4.60	9.20
200,000	320	80	2.65	5.30	10.60
285,000	320	56	2.65	5.30	10.60
430,000	320	32	3.08	6.16	12.32
500,000	320	24	3.53	7.06	14.12
663,000	320	16	4.00	8.00	16.00
1,000,000	320	8	5.30	10.60	21.20

The above are some common format examples

* Note: Recording Time Depends on Memory Configuration, Resolution, Frame Rate and Image Bit Depth.

Recording Time (seconds) = [(Memory Configuration X 1024 X 1,000,000) / (Bytes/Frame)] / (Frames/Second)

Bytes/Frame= (Horizontal pixels X Vertical Pixels X Bit Depth/8)



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