Image Technology

Providing quality and reliability since 1958

MEMRECAM HX-4

High Speed Camera System

1280 x 960 up to 6,250 frames per second (fps)

HX4 : Full Performance

HX4E : Limited in Frame Rate and Shutter Speed

Memrecam HX-4 Features

CMOS Sensor
1280 X 960 - all Active Pixels

Bit Depth
12/10/8-bit (selectable)

Adjustable Electronic Shutter
Minimum HX4E 1.1µs; HX4 < 1µs

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

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)

MEMRECAM HX-4

High Speed Camera System

Frame Rate	Available Resolution (examples)		Record Time Sec (8 bit)		
FPS	Hor.	Vert.	16GB	32GB	64GB
100	1280	960	138.12	276.24	552.48
250	1280	960	55.25	110.50	221.00
500	1280	960	27.62	55.24	110.48
1,000	1280	960	13.81	27.62	55.24
2,000	1280	960	6.90	13.80	27.60
3,000	1280	960	4.60	9.20	18.40
4,000	1280	960	3.45	6.90	13.80
5,000	1280	960	2.76	5.52	11.04
6,000	1280	960	2.30	4.60	9.20
7,000	1280	856	2.21	4.42	8.84
7,500	1280	792	2.23	4.46	9.92
8,000	1280	744	2.22	4.44	8.88
10,000	1024	728	2.27	4.54	9.08
15,000	960	512	2.30	4.60	9.20
20,000	768	464	2.38	4.76	9.52
25,000	640	440	2.41	4.82	9.64
30,000	576	400	2.45	4.90	9.80
40,000	512	328	2.52	5.04	10.08
50,000	448	288	2.63	5.26	10.52
70,000	384	232	2.72	5.44	10.88
100,000	320	184	2.88	5.76	11.52
200,000	320	80	3.31	6.62	13.24
210,000	320	80	3.15	6.30	12.60
Below is HX4 model ONLY					
285,000	320	56	3.32	6.64	13.28
430,000	320	32	3.85	7.70	15.40
500,000	320	24	4.42	8.84	17.68
663,000	320	16	5.00	10.00	20.00
1,000,000	320	8	6.63	13.26	26.52

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)
Model HX4 requires Export Licence
Specification subject to change

Image Technology
The visible difference

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