IDT *INNOVATION IN MOTION*

The IDT X-Stream Cameras offer continuous frame streaming via the PCI Express® 2.0 x4 interface with a sustained transfer speed of 1.75 GB/sec. This flexible design has been implemented around two CMOS sensors with Global Shutter: the 720p delivering over 1,700 fps at full resolution (1280×720 pixels) and 1440p delivering over 400 fps at full resolution (2560×1440 pixels). Advanced features include Frame to frame Auto-exposure and Motion Trigger and Double-exposure for PIV users. The especially tuned Motion Monitor application operates the cameras in the Windows, Linux or Mac OSX environments, with features that include always-on live, record while saving and on-demand playback from disk. The cameras are especially suited for a variety of uses ranging from industrial and packaging inspection, microscopy, media/cine including special effects, traffic control and surveillance.

KEY FEATURES

Maximum Resolution	2560 x 1440
Maximum FPS @ Maximum Resolution	425 fps
Maximum FPS	81,050 @ 2560 x 8
Minimum Exposure Time	1µs
Sensitivity ASA/ISO	15000 ASA mono 5000 ASA Color
Power Requirements	7-12 VDC
Operating Temperature	-40+40 °C / -40+104 °F

SENSOR

Sensor Type	CMOS – Proprietary
Sensor Size	36 x 36 mm
Sensor Format	1.3 inch
Pixel Size (micron)	7 x 7 um
Pixel Depth	24-bit mono 8-bit color

INPUTS

Trigger	TTL & Switch/Circular buffer with on-camera or software trigger
Sync	Phase-lock TTL

OUTPUTS

Sync	Frame sync / Strobe

FEATURES

Approx. Size	65 x 116 x 18 mm (W x H x L)
Approx. Weight	0.24 kg or 0.53 lbs
Shock/Vibration Rating	Shock: 100G /Vibration: 40G – All axes
Mount	C-Mount standard, F & PL Adaptor optional

SOFTWARE

Motion Studio	Windows 32/65
Motion Inspector	Windows 32/64 – MAC OS X – Apple iOS
Plug-ins/SDK	SDK, LabVIEW™ or MatLab®
File Formats	Proprietary RAW
On-the-fly Conversion	TIF, BMP, JPG, PNG, AVI, MPG, TP2, MOV, MRF, MCF

COMMUNICATION

Ethernet	100/1000BaseT