

MV-D1024-TRACKCAM

Don't Lose Your Target!

Features

- 1024 x 1024 pixel resolution
- Global shutter
- Dynamic range up to 120 dB via LinLog®
- Up to 75 fps @ full resolution
- Sensor without cover glass
- Multiple Region of Interest (MROI)
- CameraLink® interface
- 8 bit greyscale
- Superior Signal-to-Noise Ratio (SNR)
- Look-up Table (LUT)
- CE, RoHS & WEEE compliant



Application Examples

Machine vision

- Standard vision applications
- PCB inspection
- Welding & soldering
- Laser triangulation
- High-speed laser pattern tracking with dynamic windowing

Motion analysis

- High-speed object tracking
- Slow-motion sequences
- Biomedical applications

Accessories

- Power & signal connector 3 pin (included in the shipment)
- Digipeater CameraLink® repeater enables extended cable lengths.
- See section Accessories in this booklet for further details. Lenses are not included.

MV-D1024-TrackCam

Image Sensor

Image sensor	Photonfocus A1024B (2. generation)
Technology	CMOS active pixel
Scanning system	Progressive scan
Optical format / diagonal	1" / 15.42 mm
Resolution	1024 x 1024 pixels
Pixel size	10.6 µm x 10.6 µm
Active optical area	10.9 mm x 10.9 mm
Random noise	< 0.5 DN RMS @ 8 bit / gain = 1
Fixed pattern noise (FPN)	< 2.5 DN RMS @ 8 bit / gain = 1
Dark current	2 fA/pixel @ -30°C
Full well capacity	200 ke ⁻
Spectral range	400 nm ... 900 nm
Responsivity	120 x 10 ³ DN / (J/m ²) @ 610 nm / 8 bit / gain = 1 (approximately 350 DN / (lux s) @ 610 nm / 8 bit / gain = 1)
Optical fill factor	35 %
Dynamic range	Up to 120 dB (with LinLog [®])
Colour format	Monochrome
Characteristic curve	Linear, LinLog [®] , Skimming
Shutter mode	Global shutter
Read out mode	Sequential read out

Camera

Exposure time	10 µs ... 0.5 s / 50 ns steps
Frame rate	75 fps
Pixel clock	40 MHz
Camera taps	2
Greyscale resolution	8 bit
Analogue gain	1 or 4
Configuration interface	CL SERIAL (9600 baud) and high-speed synchronous (40 Mbits/s)
Trigger modes	<ul style="list-style-type: none"> • Free running (non triggered) • Edge controlled trigger • Level controlled
Features	<ul style="list-style-type: none"> • Multiple Regions of Interest (ROI) • Look-up-Table (LUT) • High-speed configuration interface • Skimming • LinLog[®]
Interface	CameraLink [®] base configuration
Operating temperature	0 °C ... +60 °C
Power supply	+5 V DC (+10 % / -5 %)
Power consumption	2.0 W
Lens mount	C-Mount
Dimensions	55 x 55 x 46 mm ³
Mass	200 g
Conformity	CE / RoHS / WEEE
Special	Microbench compatible mountings

Software

Camera control	PFRremote™ graphical user interface (GUI) and PFLib (SDK) - Frame grabber GUI & SDK for 40 Mbits / s high-speed configuration
OS	win2k; winxp; winvista; other OS (Linux, QNX, etc.) on request