

## MV-D752E SERIES

Enhanced High-Dynamic Range CCIR

### Features

- 752 x 582 pixel resolution
- Global shutter
- Dynamic range up to 120 dB via LinLog®
- Up to 37 fps @ full resolution
- Sensor without cover glass
- Multiple Regions of Interest (MROI)
- CameraLink® and USB 2.0 interfaces
- 12 bit greyscale
- Superior Signal-to-Noise Ratio (SNR)
- On-camera shading correction
- Look-up Table (LUT)
- CE, RoHS & WEEE compliant

### Application Examples

#### Machine vision

- Standard vision applications
- Quality control
- PCB inspection
- Welding & soldering
- Laser triangulation
- Packaging inspection
- Keyhole analysis

#### Motion analysis

- Slow-motion sequences
- Biomedical applications



### Accessories

- Power & signal connector 7 pin (included in the shipment)
- Digipeater CameraLink® repeater enables extended cable lengths (CameraLink® cameras only).
- See section Accessories in this booklet for further details. Lenses are not included.

MV-D752E-40-CL-12

MV-D752E-40-U2-12

## Image Sensor

Image sensor	Photonfocus A1024B (2. generation)
Technology	CMOS active pixel
Scanning system	Progressive scan
Optical format / diagonal	1/4" / 10.12 mm
Resolution	752 x 582 pixels
Pixel size	10.6 µm x 10.6 µm
Active optical area	8.0 mm x 6.2 mm
Random noise	< 0.5 DN RMS @ 8 bit / gain = 1
Fixed pattern noise (FPN)	< 1.0 DN RMS @ 8 bit / gain = 1 / offset correction on
Dark current	2 fA/pixel @ 30 °C
Full well capacity	200 ke <sup>-</sup>
Spectral range	400 nm ... 900 nm
Responsivity	120 x 10 <sup>3</sup> DN / (J/m <sup>2</sup> ) @ 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 ... 0.41 s / 25 ns steps
Frame rate CL	87 fps
Frame rate USB2.0	Up to 87 fps (mode & bitdepth dependent)
Pixel clock	40 MHz
Camera taps	1
Greyscale resolution	12 bit / 10 bit / 8 bit
Analogue gain	1
Digital gain	1 or 2 or 4
Configuration interface	CL SERIAL (9600 baud)
Trigger modes	• Free running (non triggered) • Interface trigger • I/O trigger
Features	• (Multiple) Regions of interest (ROI/MROI) • On-camera shading correction • Decimation in x / y direction • Look-up Table • Image information • Enhanced trigger features • Skimming • LinLog® • Trigger input • Strobe output
Interfaces	CameraLink® base configuration   USB 2.0
Operating temperature	0 °C ... +60 °C
Power supply	+12 V DC (+/-10 %)
Power consumption	1.6 W   3.0 W
Lens mount	C-Mount (CS-Mount optional)
Dimensions (C-Mount)	55 x 55 x 32 mm <sup>3</sup>   55 x 55 x 48 mm <sup>3</sup>
Mass	200 g   210 g
Conformity	CE / RoHS / WEEE
Special	Adjustable backfocus

## Software

Camera control	PFRemote™ graphical user interface (GUI) and PFLib (SDK); for USB 2.0: MicroDisplay GUI + SDK
OS	win2k; winxp; winvista; other OS (Linux, QNX, etc.) on request