

## CCIR Cameras

# MV-D752E SERIES

## Enhanced High-Dynamic Range CCIR

### Features

- 752 x 582 pixel resolution
- Global shutter
- LinLog<sup>®</sup> functionality
- Dynamic range up to 120 dB
- Up to 37 fps @ full resolution
- Multiple Regions of Interest (MROI)
- CameraLink<sup>®</sup> 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

- Suitable power supply 12 Volt
- Power & signal connector 7 pin (included in the shipment)
- USB & CL cables
- A selection of suitable lenses is available on our website [www.photonfocus.com](http://www.photonfocus.com). Lenses are not included.



MV-D752E-40-CL	MV-D752E-40-U2
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**Image Sensor**

Technology	CMOS active pixel
Scanning system	Progressive scan
Optical format / diagonal	2/3" / 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	<ul style="list-style-type: none"> <li>• Free running (non triggered) • Interface trigger • I/O trigger</li> </ul>	
Features	<ul style="list-style-type: none"> <li>• (Multiple) Regions of interest (ROI/MROI) • On-camera shading correction • Decimation in x / y direction</li> <li>• Look-up Table • Image information • Enhanced trigger features • Skimming</li> <li>• LinLog® • Trigger input • Strobe output</li> </ul>	
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 43 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
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