

CMOS Cameras

MV-D752 SERIES

High-Dynamic Range CCIR

Benefits

- Up to 350 fps at full resolution
- Exceptional linear response curve
- Superior SNR (Signal to Noise Ratio)
- Region of Interest (ROI)
- Ultra low trigger delay and jitter
- LinLog™ functionality
- CameraLink™ interface
- Look-up table (LUT)



MV-D752

Application examples

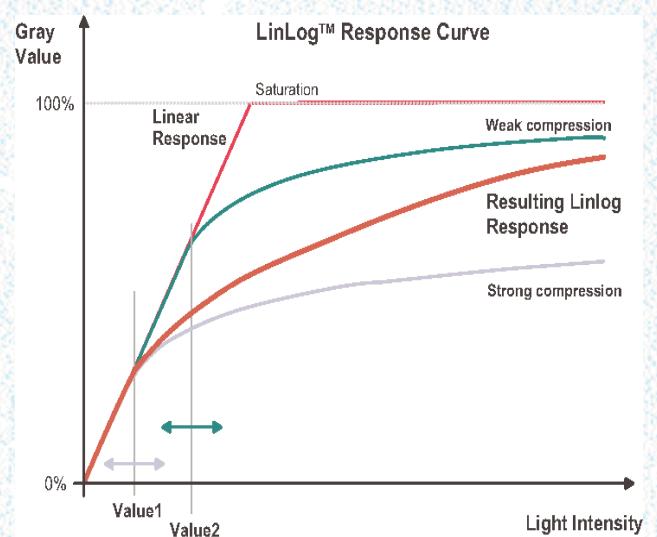
Machine vision

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

Motion analysis

- Slow-motion sequences
- Biomedical applications

Visit our website www.photonfocus.com for application reports.



MV-D752 SERIES

High-Dynamic Range CCIR

- Digital 2/3" monochrome CMOS cameras with 752 x 582 pixels (CCIR-standard)
- Up to 350 frames per second with full resolution
- Up to 120 dB dynamic range with LinLog™ technology
- No motion artefacts due to global shutter
- No image lags, no smear and no blooming
- Selectable windows (Region of Interest - ROI) enables higher frame rates
- Advanced trigger modes
- CameraLink™ interface
- Compact & robust industrial housing

	MV-D752-28-CL-10	MV-D752-80-CL-8	MV-D752-160-CL-8
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 x 10.6 µm²		
Active optical area	8.0 x 6.2 mm²		
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 sensitivity	400 nm ... 900 nm		
Responsivity	120 x 10³ DN / (J/m²) @ 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 or LinLog™		
Shutter mode	Global shutter		
Camera			
Exposure time	10 µs ... 0.5 s / 35 ns steps	10 µs ... 0.5 s / 50 ns steps	10 µs ... 0.5 s / 25 ns steps
Frame rate	60 fps	175 fps	350 fps
Pixel clock	28 MHz	40 MHz	80 MHz
Camera taps	1	2	
Greyscale resolution	10 bit	8 bit	
Analogue gain	1 or 4		
Configuration interface	CL SERIAL (9600 baud)		
Trigger modes	• Free running (non triggered) • External trigger • Start/stop trigger • Combined trigger • Region of Interest (ROI) • Line Hopping • Skimming • LinLog™ • Options: Master and slave modes • Look-up-Table (LUT)	• Free running (non triggered) • External trigger • Start/stop trigger • Combined trigger • Region of Interest (ROI) • Line Hopping • Skimming • LinLog™ • Options: Master and slave modes • Look-up-Table (LUT)	-
Features			
Interface	CameraLink™ base configuration		
Operating temperature	0 °C ... + 60 °C		
Power supply	Input voltage + 5 V DC + 10% / - 5%		
Power consumption	2.0 W		
Lens mount	C-Mount		
Dimensions	55 x 55 x 46 mm³		
Mass	200 g		
Conformity	CE / UL		
Special	Microbench compatible mountings		
Software			
Camera control	PFRemote™ graphical user interface (GUI) and PFLib (SDK)		

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