

EMVA 1288 Datasheet

This datasheet describes the specification according to the standard 1288 Standard for Characterization and Presentation of Specification Data for Image Sensors and Cameras of European Machine Vision Association (EMVA) (See www.standard1288.org).

Vendor	Simulation	Dark current compensation	-
Model	Simulated camera	Interface type	-
Data type	Single	Light source	-
Sensor type	simulated sensor	Light source non uniformity	-
Diagonal	-	Irradiation calibration accuracy	-
Lens category	-	Irradiation measurement error	-
Resolution	640x480 pixels	Standard version	3.1
Pixel size	- μm		
Maximum readout rate	-		

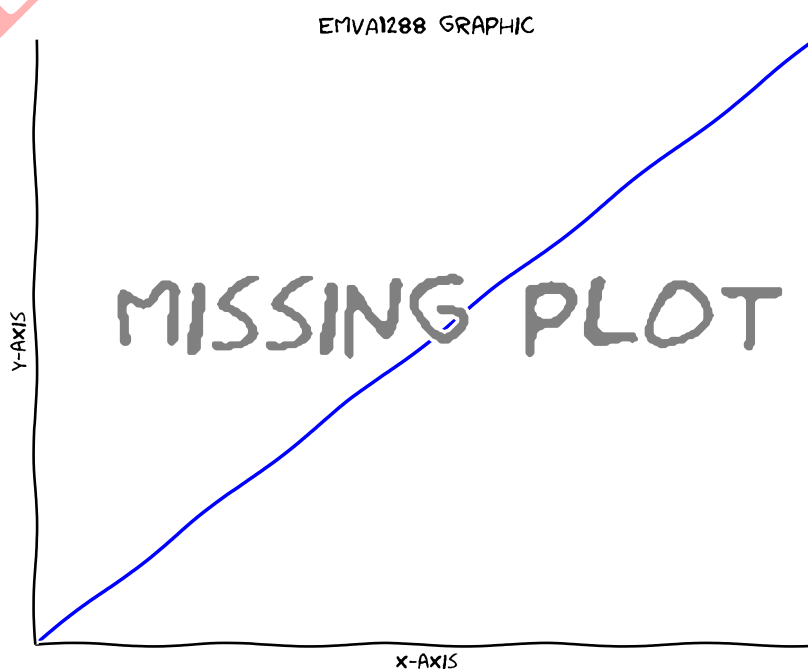
Operation Point: **OP1** (Page 2)

Camera setting

Gain	0.1
Black level	29.4
Bit depth	12 bits

Operation point parameters

Illumination	Variable with constant exposure time
Irradiation steps	50



Summary sheet for Operation Point: **OP1** (@ wavelength)

Camera setting

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Operation point parameters

Illumination	Variable with constant exposure time
Irradiation steps	50

Performance

Quantum efficiency

η	65.46 %
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System gain

K	0.100 DN/e^-
1/K	9.998 e^-/DN

Temporal dark noise

σ_d	4.153 e^-
$\sigma_{y.dark}$	0.506 DN

Signal-to-Noise Ratio

SNR_{max}	200
	46.03 dB
	7.6 bit
SNR_{max}^{-1}	0.499 %

Absolute sensitivity threshold

$\mu_{p.min}$	8.489 p
$\mu_{p.min.area}$	- $p/\mu m^2$
$\mu_{e.min}$	5.557 e^-
$\mu_{e.min.area}$	- $e^-/\mu m^2$

Saturation Capacity

$\mu_{p.sat}$	61300 p
$\mu_{p.sat.area}$	- $p/\mu m^2$
$\mu_{e.sat}$	40129 e^-
$\mu_{e.sat.area}$	- $e^-/\mu m^2$

Dynamic Range

DR	7221
	77.2 dB
	12.8 bit

Spatial Nonuniformities

$DSNU_{1288}$	nan e^-
	nan DN
$PRNU_{1288}$	nan %

Linearity error

LE_{min}	-0.002 %
LE_{max}	0.002 %

Dark current

$\mu_{I.mean}$	- e^-/s
	- DN/s
$\mu_{I.var}$	- e^-/s
	- DN/s

