

**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](http://www.standard1288.org)).

<i>Vendor</i>	Simulation	<i>Dark current compensation</i>	-
<i>Model</i>	Simulated camera	<i>Interface type</i>	-
<i>Data type</i>	Single	<i>Light source</i>	-
<i>Sensor type</i>	simulated sensor	<i>Light source non uniformity</i>	-
<i>Diagonal</i>	-	<i>Irradiation calibration accuracy</i>	-
<i>Lens category</i>	-	<i>Irradiation measurement error</i>	-
<i>Resolution</i>	640x480 pixels	<i>Standard version</i>	3.1
<i>Pixel size</i>	- $\mu m$	<i>Light source</i>	Integrating sphere
<i>Maximum readout rate</i>	-		

Operation Point: OP1 (Page 2)

**Camera setting**

<i>Gain</i>	0.1
<i>Black level</i>	29.4
<i>Bit depth</i>	12 bits

**Operation point parameters**

<i>Illumination</i>	Variable with constant exposure time
<i>Irradiation steps</i>	50

Example

EMVA1288 GRAPHIC



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

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**Operation point parameters**

Illumination	Variable with constant exposure time
Irradiation steps	50

**Performance**

**Quantum efficiency**  
 $\eta$  50.37 %

**System gain**  
K 0.098 DN/e<sup>-</sup>  
1/K 10.219 e<sup>-</sup>/DN

**Temporal dark noise**  
 $\sigma_d$  30.647 e<sup>-</sup>  
 $\sigma_{y.dark}$  3.013 DN

**Signal-to-Noise Ratio**  
 $SNR_{max}$  202  
46.12 dB  
7.7 bit  
 $SNR_{max}^{-1}$  0.494 %

**Absolute sensitivity threshold**  
 $\mu_{p.min}$  62.120 p  
 $\mu_{p.min.area}$  - p/ $\mu m^2$   
 $\mu_{e.min}$  31.289 e<sup>-</sup>  
 $\mu_{e.min.area}$  - e<sup>-</sup>/ $\mu m^2$

**Saturation Capacity**  
 $\mu_{p.sat}$  81323 p  
 $\mu_{p.sat.area}$  - p/ $\mu m^2$   
 $\mu_{e.sat}$  40961 e<sup>-</sup>  
 $\mu_{e.sat.area}$  - e<sup>-</sup>/ $\mu m^2$

**Dynamic Range**  
DR 1309  
62.3 dB  
10.4 bit

**Spatial Nonuniformities**  
 $DSNU_{1288}$  21.7 e<sup>-</sup>  
2.1 DN  
 $PRNU_{1288}$  1.0 %

**Linearity error**  
 $LE_{min}$  -0.966 %  
 $LE_{max}$  0.382 %

**Dark current**  
 $\mu_{I.mean}$  - e<sup>-</sup>/s  
- DN/s  
 $\mu_{I.var}$  - e<sup>-</sup>/s  
- DN/s

















