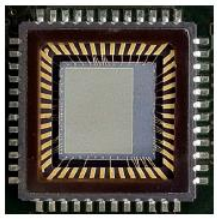
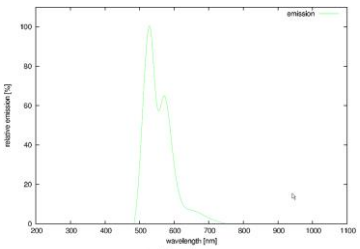


UV Sensor Coating
- Technical Data -

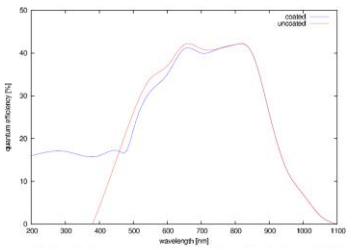
A typical limitation of CCD / CMOS sensors is that light with short wavelengths is absorbed by the very first structures of the sensor and is not recognized as a signal. The shorter the wavelength is, the less the sensors output signal is affected by illumination. A UV to VIS converting coatings which absorbs UV light and emits visual light instead is covered by a thin layer on the sensor. The robust fluorescent material is ideally suited for UV imaging. The material shows an excellent quantum yield of nearly 100% for wavelengths below 450nm and down to 100nm. In contrast there is a high transparency of the material for wavelengths above 480nm which gives a very good response even in the visual and near infrared range.

Technology:	Fluorescence material (Lumigen)
Thickness:	1µm
Sensitivity:	<150nm - 450nm
Emission spectrum:	500nm - 650nm
Peak emission:	530nm
Fluoresces decay time:	Some ns
Phosphorescence:	Not significant
Resolution:	Sensor MTF is reduced by 50%
Technology:	Fluorescence material (Lumigen)

Design and specification of the described product(s) are subject to change without notice.



typical emission



example for effective quantum efficiency of a front side illuminated CCD

All UV coatings show aging effects (degradation). But CINOGY Technologies gives important handling advice to significantly extend the lifetime (e.g. low illumination, no overexposed).

Sensor without Microlenses (On Request):

Alternatively, CINOGY Technologies has developed a unique technique to remove the microlenses on the sensor resulting in higher sensitivity down to 240nm.

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