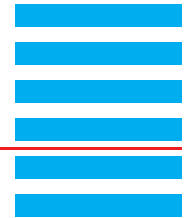


# EMCCD technology within everyone's reach...

## ...the Andor Luca<sup>EM</sup> family



### Upgrade to Andor Luca<sup>EM</sup>... The extremely affordable, supremely sensitive EMCCD camera from Andor, the EMCCD experts

Andor's Luca<sup>EM</sup> is the latest TE-cooled Electron Multiplying CCD innovation, a highly cost-effective yet powerful camera making EMCCD available to every laboratory. Luca<sup>EM</sup> represents a new performance standard in 'workhorse' cameras. Operate 'gain off' for conventional CCD operation under brighter conditions – turn on the EM gain when the photons become scarce!

#### Luca<sup>EM</sup> R

The Luca<sup>EM</sup> R is designed with resolution and flexibility in mind. Ultra-sensitive EMCCD performance, megapixel sensor, small 8x8 µm pixels, QE up to 65% and fast frame rates, render this the ideal 'workhorse' camera for live cell microscopy, applicable across all light intensities. Additional elevated red response offers higher sensitivity to long wavelength emitting dyes such as CY7.

#### Luca<sup>EM</sup> S

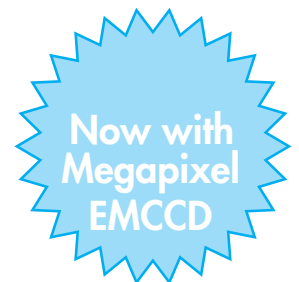
The Luca<sup>EM</sup> S is designed with speed in mind. At 37 full frames/sec, direct through a USB2.0 interface, the Luca<sup>EM</sup> S interline EMCCD is a great camera with which to upgrade performance in applications such as calcium signaling microscopy. Luca<sup>EM</sup> customer benefits include: (see many more benefits at [www.andor.com](http://www.andor.com))

#### Luca<sup>EM</sup> customer benefits include:

- EMCCD Technology – Single photon sensitivity + full QE of sensor.
- RealGain™ – Andor's unique linear and quantitative EM gain scale.
- Baseline Clamp – Essential for quantitative accuracy of dynamic processes.
- Auto Dynamic Range – Automatically tunes to enable maximum dynamic range.
- USB 2.0 – No PCI card, no controller box, it's that simple!
- Video out – Direct PAL output from Luca<sup>EM</sup> S for video analogue display on.
- Visual Acquisition – Observe events in real time during data acquisition.
- Highly Compact – Adaptable across many set-ups. 'Extreme compact' OEM version available.
- Software – Use with Andor's Solis-i image acquisition software or iQ multi-dimensional microscopy software for optimized performance. Other 3rd party software drivers available.
- Price/Performance - Most affordable EMCCD available.
- Application Flexibility - image bright or weak signals.
- High Resolution - megapixel sensor now available
- Rapid frame rates - image dynamic events at high S/N.

#### Applications include:

- Widefield fluorescence microscopy
- Living and fixed cells
- Ion signalling
- Single molecule detection
- Fluorescent proteins inc. GFP
- FISH
- Immunofluorescence
- Comet assay
- High content screening
- Spectral imaging
- Ophthalmic imaging
- Machine vision



	Sensor Size	Pixel Size	QEmax	Frame Rate
Luca <sup>EM</sup> R	1002x1004	8x8 µm	65%	12.4 fps
Luca <sup>EM</sup> S	658x496	10x10 µm	52%	37 fps

