



The TE-77 is the first of our advanced CCD cameras, and showcases the power and possibilities of CCD technology. Utilising novel new chamber sealing methodology, alongside increased cooling delta, this camera achieves incredibly low read noise, enabling detection of the faintest signals. Furthermore, the exceptionally deep full well depth means there is much lower saturation when imaging, revealing exceptional detail. Atik's design and engineering complements this advanced sensor from Teledyne e2v perfectly.

With its large pixels, low noise characteristics and excellent QE, this camera will provide fantastic results in the most demanding of applications such as chemiluminescence, fluorescence, spectroscopy, microscopy, and bioluminescence.

This advanced imaging solution also comes with the option to add a 45mm, bi-stable high speed scientific shutter, capable of 20.0 millisecond opening times.

Our TE-77 camera comes with the assurance of Atik's reliable build quality and comprehensive software development kit. It can be fully customised to suit the requirements of specific OEM applications with integration assistance from our in-house engineering team, so please contact us to discuss your needs.

## Key Features

- Exposure control 0.001s - 24 hrs
- -60°C cooling delta
- Asymmetric binning
- True 16 bit digitisation
- Optional mechanical shutter
- Full frame operation
- 8e- read noise typical
- > 600k e extended full well
- 24 µm square pixels
- External trigger
- Fully customisable - available as a board set

## Key Benefits

- Very low read noise and dark current
- Very high dynamic range
- Reliable and robust
- Customisable to your specific requirements
- No moving parts (shutter and fans excluded)
- Manufactured at our ISO 9001 accredited European premises
- Reflection free imaging

## Software Development Kit (SDK)

- C interface covering all camera functions
- Windows c++ examples
- .net examples
- .net Wrapper
- Linux compatible
- µManager compatible
- Python compatible

## Available Accessories

- Universal power supply (90-240V AC/DC) 12V
- C-mount lens adaptor

## Service Item

- Desiccant cartridge

## Ordering Codes

<b>ATK0207</b>	Front illuminated
<b>ATK0208</b>	Front illuminated with shutter
<b>ATK0209</b>	Back illuminated
<b>ATK0210</b>	Back illuminated with shutter

For enquiries, please contact:

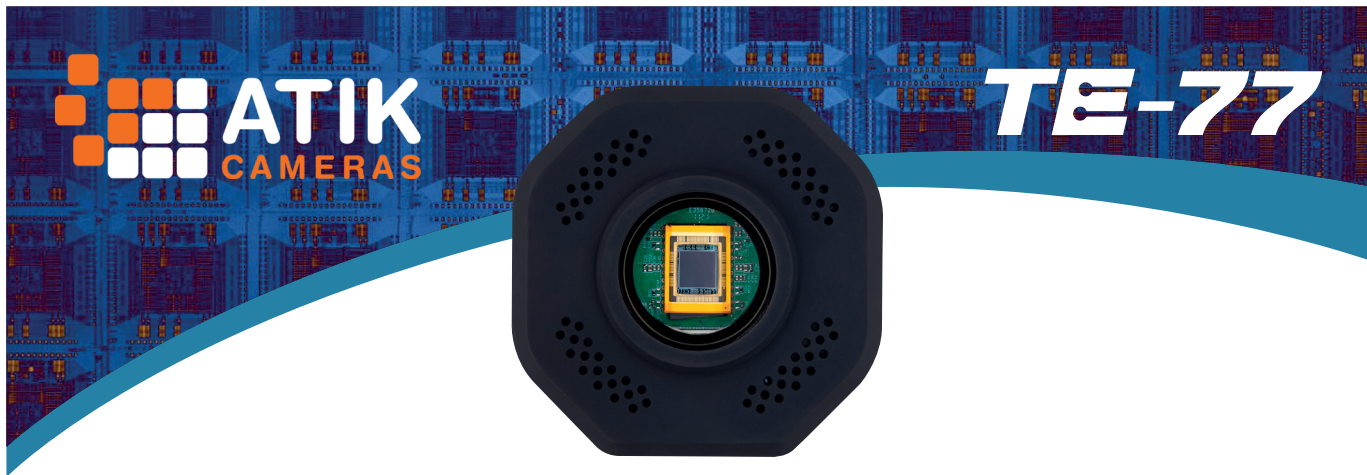
## Atik Cameras

**T: +44 (0)1603 740397** (sales and general enquiries)

**T: +351 210 868 596** (accounts and production)

**E: sales@atik-cameras.com**

**W: www.atik-cameras.com**



TE-77		
Sensor	e2v CCD77 Front Illuminated	e2v CCD77 Back Illuminated
Pixel Array (resolution)	512 x 512 px	512 x 512 px
Pixel Size	24 x 24 µm	24 x 24 µm
Sensor Size	12.3 x 12.3 mm	12.3 x 12.3 mm
Full Well	300,000 e- (summing well 600,000 e-)	300,000 e- (summing well 600,000 e-)
ADC	16 bit with low noise and high speed readout options	16 bit with low noise and high speed readout options
Cooling Delta	-60°C (provisional)	-60°C (provisional)
Read Noise	8e- (provisional)	8e- (provisional)
QE (peak)	46%	>92% with midband coating
Digitisation MBPS	200kHz or 2 MHz	200kHz or 2 MHz
Regulated cooler	Yes	Yes
Water assist	No	No
Max. exposure	Unlimited	Unlimited
Min. exposure	10 ms	10 ms
PC Interface	USB 2.0	USB 2.0
Power requirements	12V DC, 10A	12V DC, 10A
Backfocus distance	11.9mm ±0.5 16.9mm ±0.5 with Shutter	11.9mm ±0.5 16.9mm ±0.5 with Shutter
Thread on front	M54 x 0.75	M54 x 0.75
Weight	2.5kg without shutter 2.65kg with shutter	2.5kg without shutter 2.65kg with shutter
Mono or Colour	Mono	Mono
Optional scientific high speed shutter	Yes	Yes



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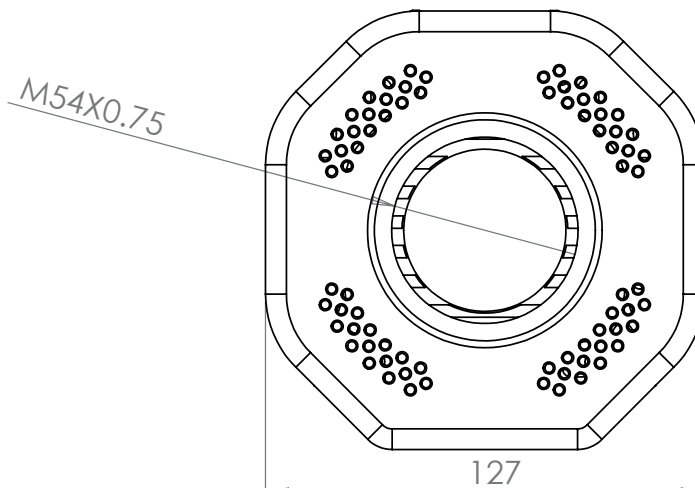
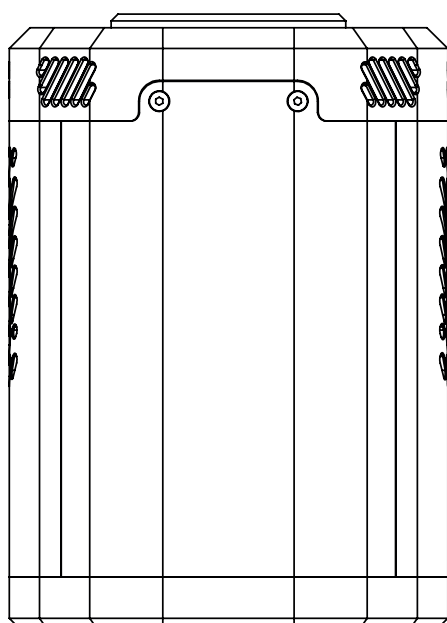
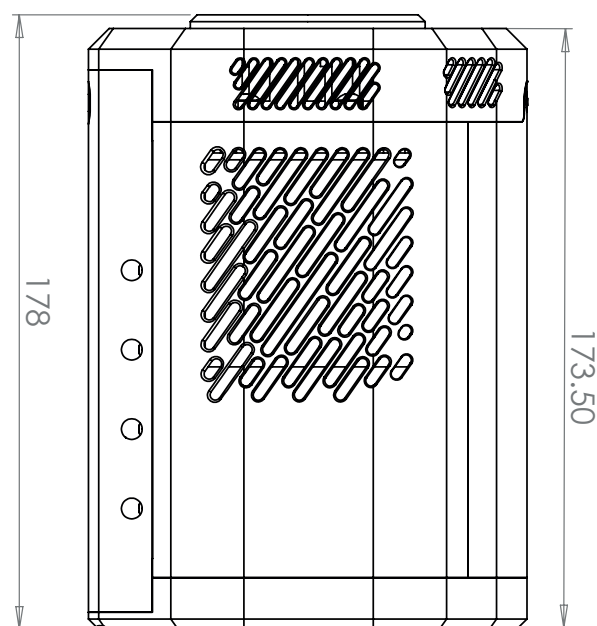
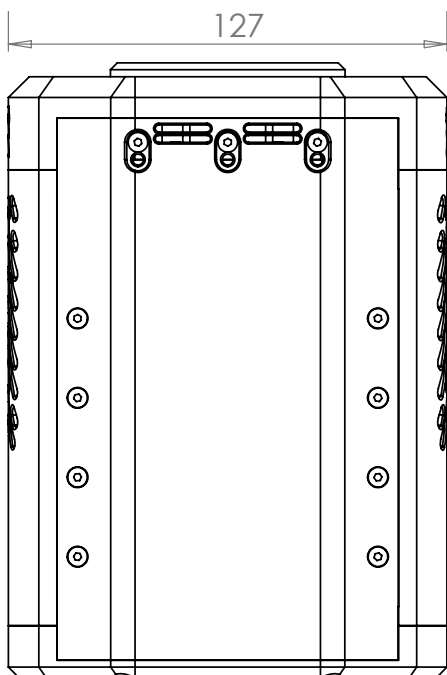
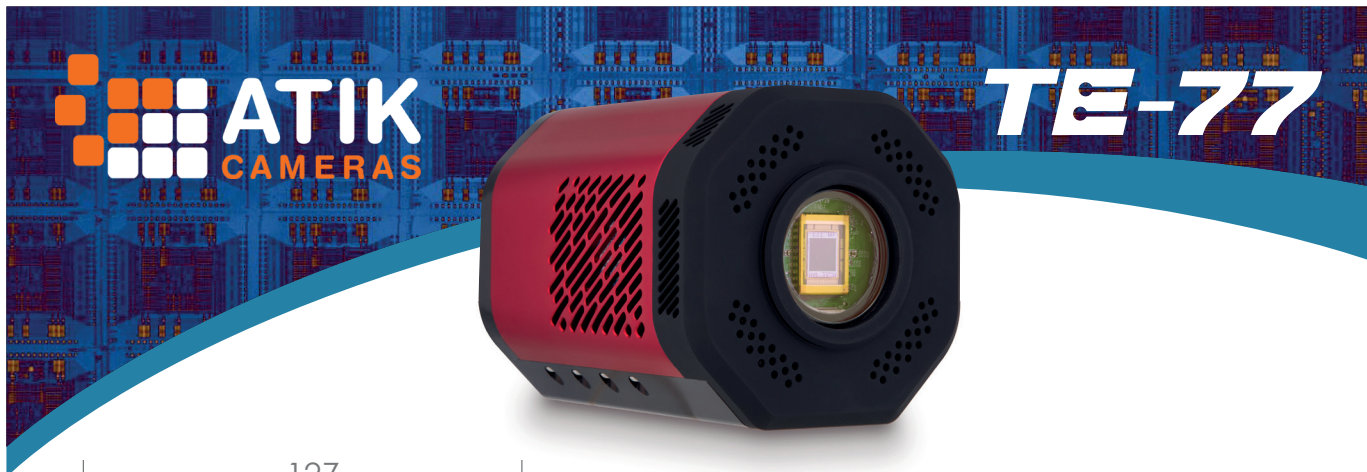
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