



# Fetura+<sup>™</sup> Advanced Zoom Lens System

High-Performance, High Speed

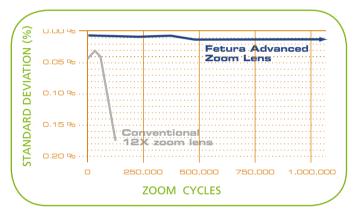


# The Fetura+ Advantage

**Fetura+ Advanced Zoom Lens** is a self-contained, controllable zoom optical system which represents the performance apex of zoom optical lens technology. The unique electronic, linear-rail optomechanical design offers a number of distinct operational advantages.

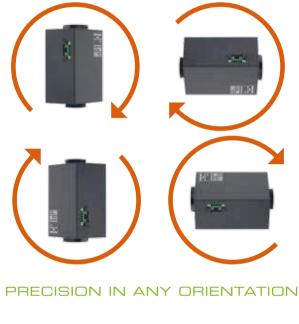
### **Innovative Precision and Durability**

The unique linear-rail design and robust engineering ensure consistent repeatability precision throughout an impressive 1-million zoom cycles. Fetura+ experiences virtually no repeatability fall-off across 1-million zoom cycles.



MAGNIFICATION REPEATABILITY

The linear-rail design further maintains this performance consistency in any orientation of the Fetura+ lens (vertical, horizontal or inverted and any angle in between).



 Results of comparative service life testing of Fetura and conventional 12X motorized zoom lenses.

### **Compatibility to Optem FUSION**

Optem FUSION is the most versatile Zoom System on the market with unrivalled flexibility offering magnifications from 0.045X up to 41X and a multitude of accessories for focusing, illumination and mounting as well as connectivity to cameras with virtually any mount up to F-mount. Even microscope lenses can be used to further increase optical magnification. Existing Fusion setups with motorized zooms can be upgraded by just exchanging the zoom against Fetura+.







ADVANCED ZOOM IMAGING

#### 9-Times Longer Service Life = Added Value

Fetura+ endurance translates to an extended service life well beyond 1-million zoom cycles... a feat that would exhaust as many as nine conventional motorized zoom lenses\*. This extreme durability translates into an operational cost nearly 1/3 that of nine conventional motorized zoom lenses for applications with extremely frequent zoom movements.



## **Unmatched Zoom Speed**

The unique linear rail design combines with synchronized lens cell motors to propel Fetura across its 12.5:1 optical zoom range in under one second. This unprecedented optomechanical speed removes the zoom imaging bottleneck and makes Fetura the ideal solution for the growing demands of high repetition machine vision.



## **Streamlined Integration**

Fetura+ offers a standard RS232 interface with a rich intuitive command set that is described in detail in the SDK. An example software is available as well. Instead of Sub-D connectors Fetura+ uses industrial connectors for industrial grade electrical connections.

The mechanical integration can be done either via the inline clamps of the Fusion system or the 2 threads on the bottom of the housing.

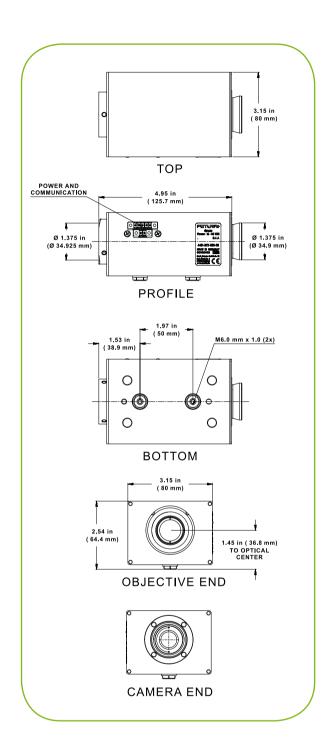
#### **Next-Generation Improvements**

continuous zoom feature that enables

The most significant change is in the optics: Fetura+ is infinity corrected on both sides to permit compatibility with Optem FUSION accessories. The next generation optical redesign also recognized improvements to the optical performance and increasing contrast especially in the edges of the FoV. Further changes have been implemented in mechanics and electronics to achieve improved focus repeatibility and mechanical stability for the most demanding applications and imaging environments. On the firmware side we added the

zooming with a constantly focused object for a live view of the zooming progress - the zoom speed can be adjusted of course. This can also be realized with external simple potentiometer as well

to achieve headless operation without a PC.





## Your Key to Photonic Innovation...

Qioptiq serves a wide variety of applications across the industrial manufacturing sector. With a rich history of delivering innovative photonic components, modules and instruments to integrators, engineers and OEMs, we also offer custom-tailored photonic solutions to maximize the potential and capabilities of tomorrow's many processes and industrial manufacturing systems.

# ...and Manufacturing Advancement

#### **Contact Qioptiq today:**

www.qioptiq.com vision@qioptiq.com

#### Europe

Phone: +49(0)89255458-0

#### **North America**

Phone: +18007244274

#### **Asia Pacific**

Phone: +65 6499 7766