

## VisionAI – ready for TensorFlow Lite and AutoML Vision Edge

The VisionAI has an integrated Google Edge TPU which offers support for **TensorFlow Lite and AutoML Vision Edge**. It is an extremely small, **programmable** camera and addresses programmers and engineers who invent **their own individual** AI system. Example program, SDK and a video training course make it very easy to start. Engineers familiar with Linux, AI and imaging are able to run their own application within one working day.

The Quad-Core ARM **Cortex-A53** runs with a modern Debian based Linux OS. The **5MP sensor** is available in color or monochrome. For communication with the machine/process, there are 2 digital inputs, 4 digital outputs and a 1000 Mbit/s Ethernet interface. This allows image acquisition with hardware and software trigger as well as a free running mode.

### Sensor Options / CMOS – Global Shutter

Size	1/1.8"
Resolution	2560 × 1936 pixels (5 MP)
Pixelsize	(2.8 μm) <sup>2</sup>
Framerate (full res.)	65 fps
Partial Scan	yes
Color	Mono or bayer pattern



### Processor

Type	Quad Core ARM Cortex-A53
Processor Clock	4 × 1.8 GHz
DDR RAM	2 GB DDR4
Mass Storage	1 × μSD Card ≥ 32 GB
Google Edge TPU	Supports TensorFlow Lite, AutoML Vision Edge

### Interfaces

Ethernet TCP/IP, FTP	1 000 Mbit/s
Digital In/Out	2 × Input / 4 × Output, 24V

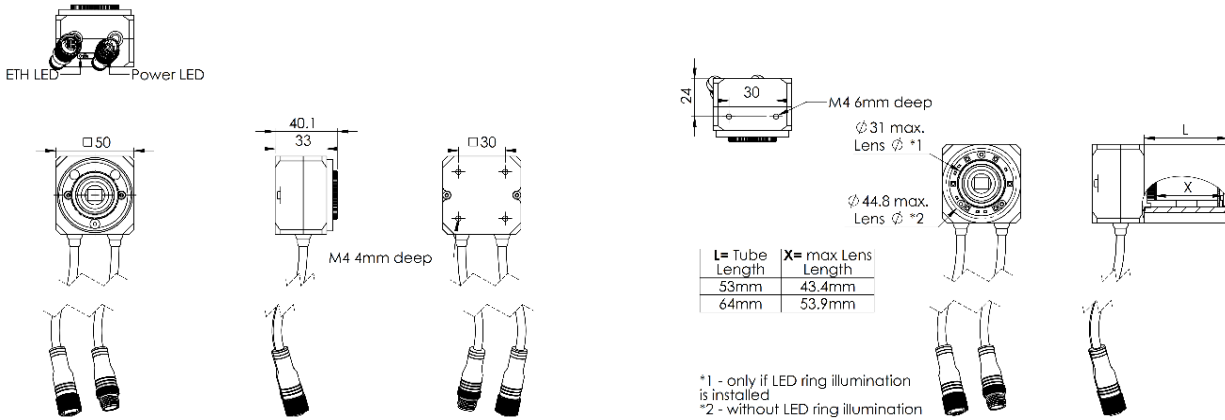
### Mechanical / Electrical

Lens Mount	C-Mount [Optional: Lens protection tube]
Ethernet Cable	0.5 m, M12 8 pin
I/O & Power Cable	0.5 m, M12 8 pin
Power Supply	24 VDC / (21...28 V)
Dimension W × D × H	50 mm × 50 mm × 40.1 mm (without tube)
Weight	198 g (incl. cable)
Temperature Range	+5 °C ... +40 °C
Mounting	4 × M3

### LED Strobe

White LED	Optional: LED ring illumination
Pulse Duration	Synchronized with shutter

### Dimensional Drawing



### Block Diagram

