



Aptiris Series ApM 39UR2020-F

- AR2020 CMOS Sensor
- 19.7 MP
- USB3 Vision / UVC compliant
- Trigger and I/Os
- M12x0.5 Mount



The Aptiris series camera ApM 39UR2020-F with a onsemi AR2020 sensor delivers 19 frames per second with a resolution of 5120x3840 (19.7 MP).

Aptiris – Always in Focus. In dynamic machine vision environments, exact working distances aren't always possible – leading to blurred images. The Imaging Source's latest USB 3.1 autofocus cameras solve this with software-driven one-push autofocus, ensuring sharp results even when distances change.

Featuring latest onsemi and Sony CMOS sensors, they deliver outstanding image quality, even in low light. Thanks to USB3 Vision and UVC (USB Video Class) compatibility and their compact design, integration into new or existing systems is seamless.

The USB3 Vision standard allows for rapid integration into new and existing applications via The Imaging Source's [IC Imaging Control 4 SDK](#) as well as most other third-party image processing libraries.

Aptiris delivers unmatched precision across industries such as medical & life sciences, laboratory automation, warehouse automation and logistics.

Note: This Data Sheet is intended to provide a summary overview for an individual camera model. The Imaging Source's website also offers information on spectral sensitivity, dimensional diagrams, sensor data sheets, STEP files as well as our full product catalog. For comprehensive technical information, please refer to the Technical Reference Manual specific to each camera model.

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1 Quick Facts

General	
Vision Standard	USB3 Vision (UVC compliant)
Resolution	5120x3840
Dynamic Range	10 bit
Frame Rate at Full Resolution	19

Optical Interface	
IR-Cut filter	No
Sensor Type	onsemi AR2020
Shutter Type	Rolling
Sensor Format	1/1.8 inch
Pixel Size	1.4 μm
Lens Mount	M12x0.5
Auto-Focus Stroke	1.1 mm (divided into 704 1/8-steps)

Electrical Interface	
Interface	USB 3.1gen1
Supply Voltage	4.75 VDC to 5.25 VDC
Current Consumption	approx 380 mA @ 5 VDC
I/O Connector	4-pin connector for trigger and strobe or general purpose input/output

Mechanical Data	
Dimensions	H: 36 mm, W: 36 mm, L: 33.8 mm
Mass	65 g

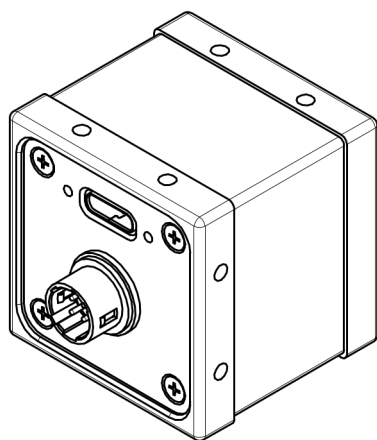
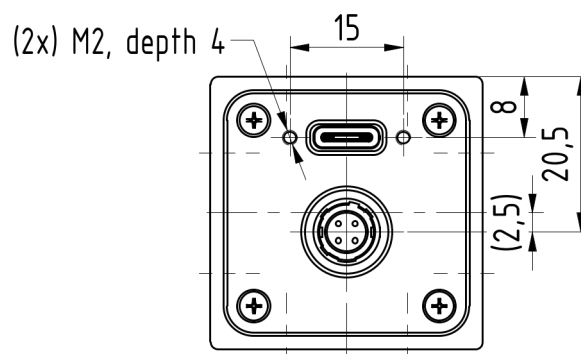
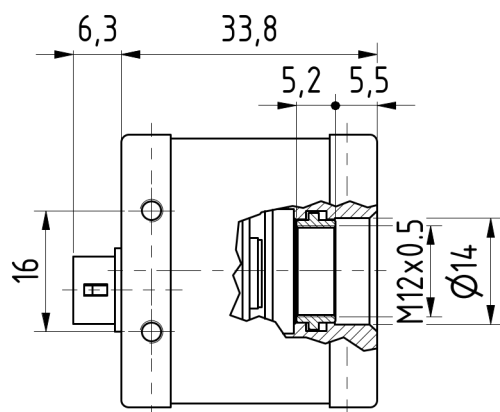
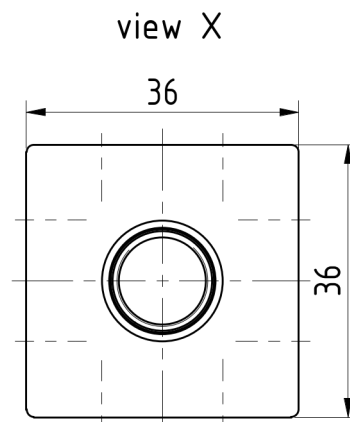
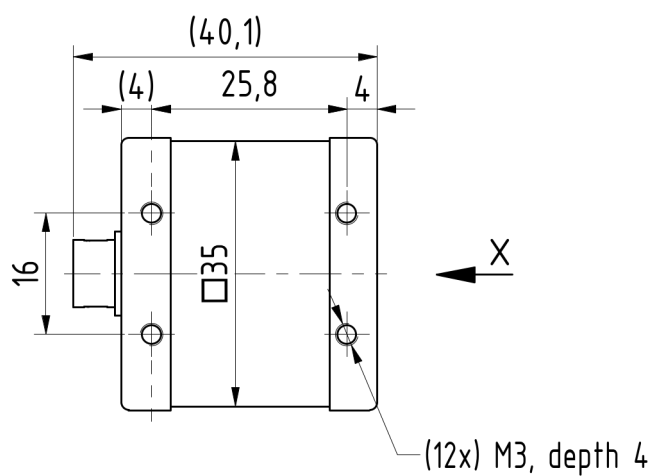
Environmental Conditions	
Housing Temperature (operating)	-5 °C to 50 °C
Temperature (storage)	-20 °C to 80 °C
Humidity (operating)	20 % to 80 % (non-condensing)
Humidity (storage)	20 % to 95 % (non-condensing)



Dimensional Diagrams

2 Dimensional Diagrams

2.1 ApM 39UR2020-F without Tripod Adapter



Scale: 1 : 1
Dimensions: mm
Tolerances: DIN ISO 2768-f
314-25-00-00-00-c





3 Spectral Characteristics

3.1 Spectral Sensitivity - AR2020

Sensor: onemi AR2020 *courtesy of onsemi*

