Data Sheet - DFK 37BUR2020





37U Series **DFK 37BUR2020**

- AR2020 CMOS Sensor
- 19.7 MP
- USB3 Vision / UVC compliant
- Trigger and I/Os
- C/CS mount



The 37U series camera DFK 37BUR2020 with a onsemi AR2020 sensor delivers 19 frames per second with a resolution of 5120x3840 (19.7 MP).

37U Series: Featuring a range of Sony and onsemi sensors with resolutions up to 12MP, these cost-optimized, single-board industrial cameras are available in several form factor variants, providing a flexible customization concept for systems engineers and OEMs. These streamlined, standard-feature cameras offer a reduced hardware footprint with USB-C connector and optional hardware trigger and I/Os.

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.

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)
Dynamic Range	10 bit
Resolution	5120x3840
Frame Rate at Full Resolution	19

Optical Interface	
IR-Cut filter	Yes
Sensor Type	onsemi AR2020
Shutter Type	Rolling
Sensor Format	1/1.8 inch
Pixel Size	1.4 µm
Lens Mount	C/CS

Electrical Interface	
Interface	USB 3.1gen1
Supply Voltage	4.75 VDC to 5.25 VDC
Current Consumption	approx 280 mA @ 5 VDC
I/O Connector	4-pin connector for trigger and strobe or general purpose input/output

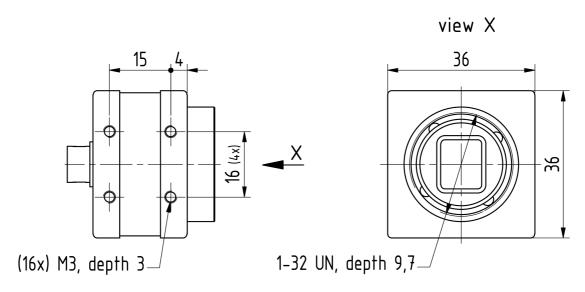
Mechanical Data	
Dimensions	H: 36 mm, W: 36 mm, L: 25 mm
Mass	70 g

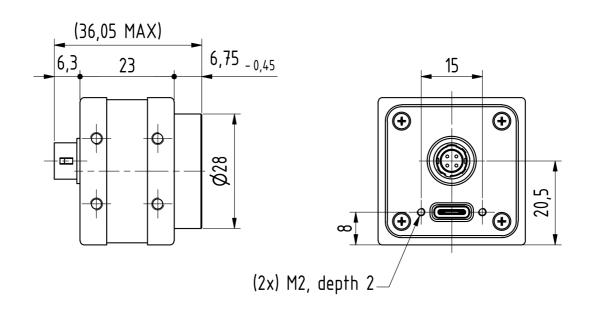
Environmental Conditions	
Housing Temperature (operating)	-5 °C to 50 °C
Temperature (storage)	-20 °C to 80 °C
Humidity (operating)	20 % to 80 % (non-condensing)
Humidity (storage)	20 % to 95 % (non-condensing)



2 Dimensional Diagrams

2.1 DFK 37BUR2020 C-Mount without Tripod Adapter





Dimensions: mm

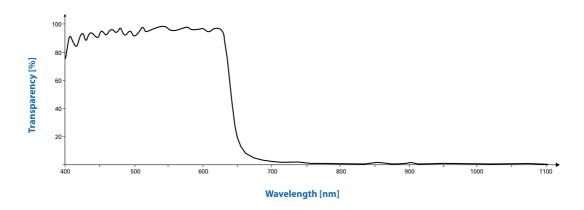
Tolerances: DIN ISO 2768-f





3 Spectral Characteristics

3.1 IR-Cut Filter



3.2 Spectral Sensitivity - AR2020

Sensor: onsemi AR2020 courtesy of onsemi

