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# IM200

BST Berlin Space Technologies

## Optical imager

The IM200 Series smart optical imager is a low mass, low power, general purpose imager aimed at providing medium resolution imaging capability to small platforms, such as nano-satellites. It offers on-board image compression and holds a frame-buffer which can contain up to 25 full frame raw images.

**Flight heritage since 2019**

The default version uses USB2.0 for image transfers, which presents itself to the host system as a mass storage device.

The IM200 is also suitable for applications on larger satellite platforms. For these applications, additional interfaces, power supply ranges and optics are available.

### HIGHLIGHTS

- 4 Megapixel imager
- > 30 MPixel/s scan rate
- 16 mm F1.2 or 25, 35, 50 mm F2.0 lens
- USB2.0 480 Mbps high speed image transfer interface. Medium speed RS422/RS485 is optional.
- TTL UART command interface.
  USB, RS422, RS485, I²C are optional
- Monochrome and RGB versions available
- Radiation tolerance qualified up to 9 krad (Si) for all components[1].
- Plug-and-play design

- Low mass: 59 g
- Low power: (nominal) < 700 mW
- Outer dimensions: 29 x 29 x 70.7 mm

[1] Final radiation tolerance of the product can be tailored to customer needs. Please contact Hyperion Technologies for information.

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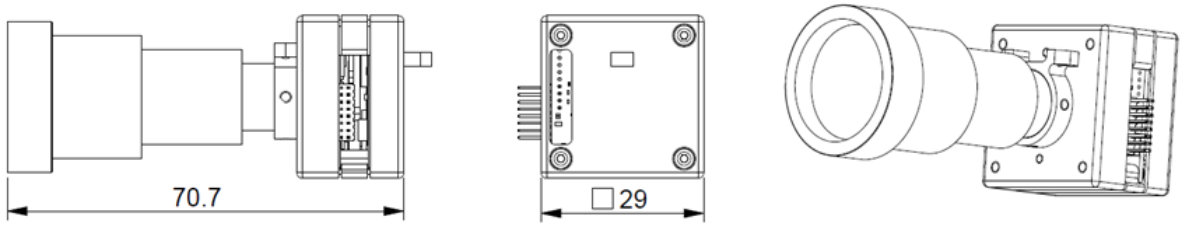
## SPECIFICATIONS

| | | | | |
|---|---|---|---|---|
| **Performance** | | | | |
| Full frame size | | 2048x1944 | | pixels |
| Pixel scan rate | | > 30 | | MPixel/s |
| Standard lens focal length | | 16 / 25 / 35 / 50 | | mm |
| Standard lens F-number | | 1.2 / 2.0 | | - |
| | | | | |
| **Dimensions** | | | | |
| Outer Dimensions | | 29 x 29 x 70.7 | | mm |
| Mass (using 50mm F2.0 lens) | | 59 | | g |
| | | | | |
| **Environmental** | | | | |
| Operating temperature | | -20 - +40 | | °C |
| Radiation tolerance | | > 9 | | krad (Si) |
| | | | | |
| **Electrical** | | | | |
| | Min. | Typ. | Max. | |
| Supply voltage | 3.6 | 3.65[1] | 5.0 | V |
| Bus logic level voltage | Referenced to VREF[4] | | | V |
| | | | | |
| **Power and current consumption** | | | | |
| | Min. | Typ. | Max. | |
| Current consumption | 110 | 190[2] | 200 | mA |
| Power consumption | 400 | 700[3] | 1000 | mW |
| | | | | |

[1] Maximum efficiency is reached when operating at the lowest voltage
[2] At 5Hz update rate
[3] At 3.65V, at 5Hz full frame capture rate
[4] VREF can range from 1.8 to 5.1V for I²C and UART interfaces.

## MECHANICAL CHARACTERISTICS (IN MM)




For pricing, delivery, configuration and ordering information please contact us at **sales@hyperion.space** or call us at **+31(0)15-5160905**