

Pantera 22M04

Area Scan Cameras



Key Features

- Large Field of View: 5344 (H) x 4008 (V) resolution
- Full frame CCD architecture for 100 % optical fill factor and excellent noise performance
- High Linear Dynamic range > 66 dB
- Low dark current, low fixed pattern noise (FPN), low read noise
- 3.6 fps at 22 megapixel resolution
- Up to 12-bit digitization
- Excellent antiblooming
- 0.035 dB/steps for gain adjustment

Programmability

- Gain and offset adjustment
- Small gain steps for easy tap matching - 0.035 dB/step
- Exposure modes and timing control
- Test pattern and camera diagnostics

Typical Applications

- Solar panel inspection
- Aerial reconnaissance
- Medical Imaging
- Flat Panel Inspection
- Industrial Metrology

Overview

Capture fine detail with 22 megapixels and high dynamic range imaging.

The Pantera 22M04 camera provides 22 mega pixels at 3.6 fps using DALSA's full-frame FTF4052M sensor. This camera delivers the highest possible image quality, with lower dark current, lower noise, and higher dynamic range, than competitive products. With 5344 x 4008 pixels, 9 μm x 9 μm in size, large field of views can be captured with the ability to resolve very small defects. For example, the 22M04 examining a solar cell that is 180 mm x 180 mm in size can capture in one image the entire solar cell and resolve approximately 45 μm defects with one pixel. In addition, the 100 % optical fill factor, 12-bit digitization, and antiblooming allows the camera to produce incredibly detailed images exceeding 66 dB in dynamic range, and ensuring high quality inspection.

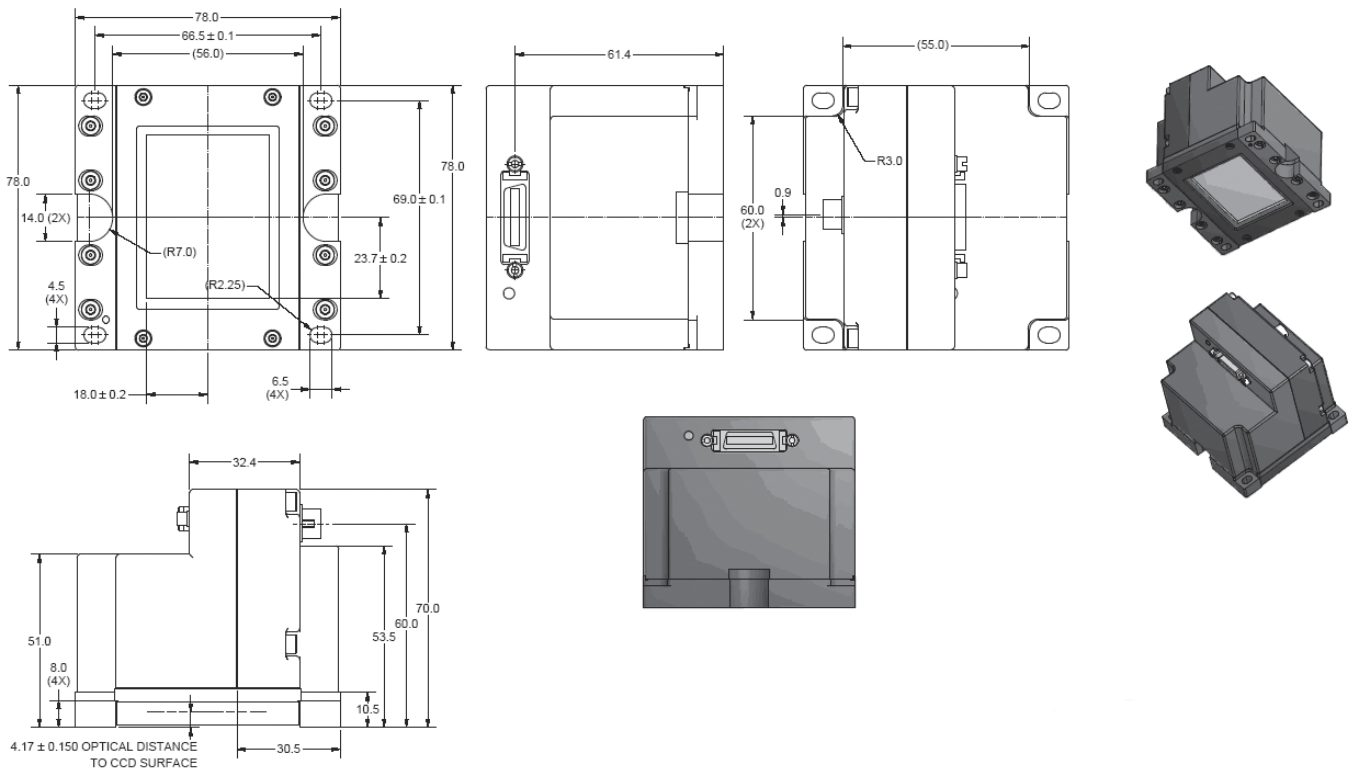
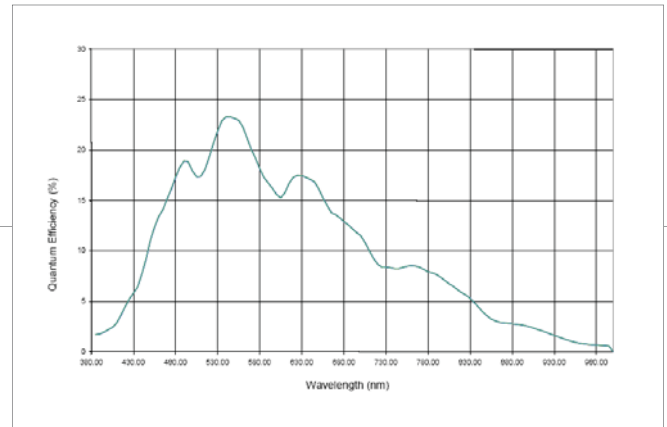
Specifications

| | |
|-----------------------|---|
| Resolution | 5344 (V) x 4008 (H) |
| Data Rate | 2 x 54 MHz, 12 bits |
| Max. Frame Rate | 3.6 fps |
| Pixel Size | 9 μm x 9 μm |
| Data Format | Base Camera Link |
| Output | Base Camera Link |
| Lens Mount | 4 oblong 2.25 mm radius holes |
| Responsivity | 20 DN/(nJ/cm ²) @ 530 nm, 12 bit, 1x gain |
| Dynamic Range | 66 dB |
| Nominal Gain Range | 0 – 24 dB |
| Size | 78 mm x 78 mm x 70 mm |
| Mass | 650 g |
| Operating Temp | 0 to 50 °C |
| Power Supply | 12 V – 15 V |
| Power Dissipation | < 10 W |
| Regulatory Compliance | None |
| Control | MDR26 Camera Link |
| Data | Shared with Control |
| Power | Hirose 6 pin Circular |
| Example Part Number | PT-20-22M04 |

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The Pantera 22M04 excels at low dark current, low noise and excellent dynamic range compared to competitive products. Its large resolution allows you to capture large field of views with incredible detail.



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