

A Pro Series

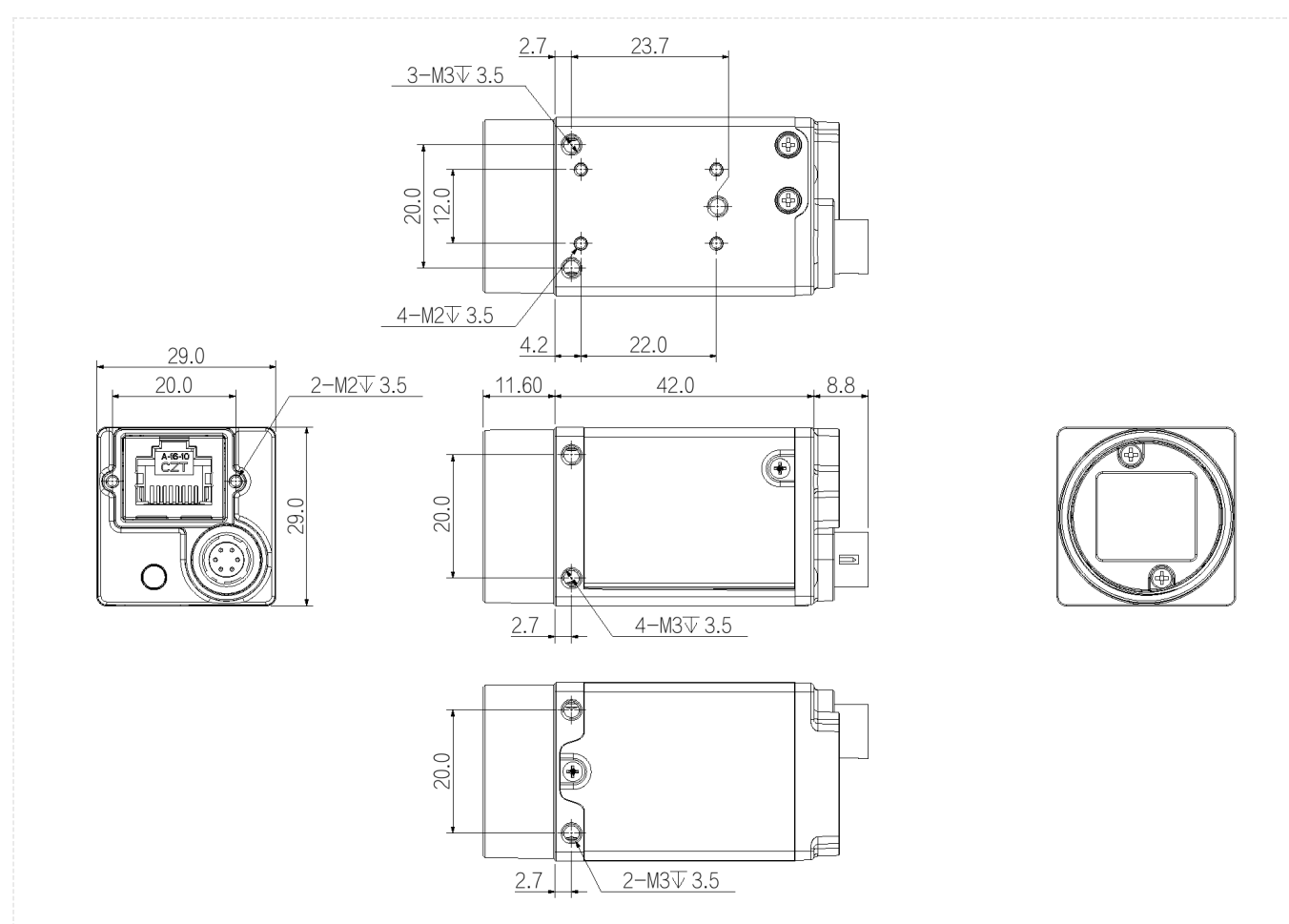
AH7A20MG000E



Features

- Gigabit Ethernet interface, providing 1Gbps bandwidth with a maximum transmission distance of 100m;
- 256MB on-board cache for data transmission or image resend;
- Support Software Trigger/Hardware Trigger/Free Run Mode;
- Support ISP functions including Gamma/LUT/BlackLevel Correction/TargetBrightness/Contrast,FFC,Denoising Sharpness etc.;
- Support multiple image data formats output/ROI/Binning(Including Pixel arbitrary scaling)/Mirror/AutoFunction/Compress/Sequencer etc.;
- Conform to GigE Vision V2.0 protocol and GenICam standard;
- Conform to CE/UKCA/UL/KC,RoHS;

Dimensions (mm)



Specification

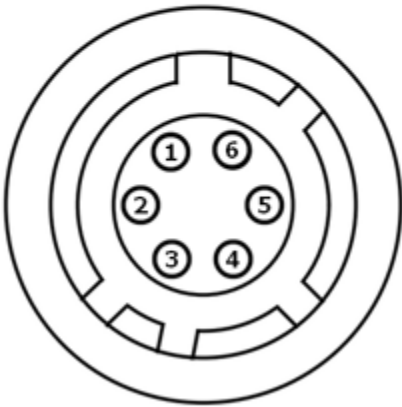
| | | |
|-------------|-----------------------|---|
| Model | | AH7A20MG000E |
| Basic | Sensor | IMX304 |
| | Image Sensor | 1.1"CMOS |
| | Shutter | Global |
| | Resolution | 4096 × 3000 |
| | Frame Rate | 9.9 fps (16 fps @Compression Mode Burst) |
| | Bit Depth | 12 |
| | Mono/Color | Mono |
| | Pixel Size | 3.45 μm × 3.45 μm |
| Image | Pixel | 12.0 MP |
| | S/N Ratio | 39.9 dB |
| | Dynamic Range | 70.9 dB |
| | Image Format | Mono8/10/10Packed/Mono12/Mono12Packed |
| | Binning | off/onebytwo/twobyone/twobytwo/onebyfour/fourbyone/twobyfour/fourbytwo/fourbyfour/ThreebyThree/onebySix/SixbyOne/SixbySix |
| | ROI | Support |
| | X Flip | Support |
| | Y Flip | Support |
| | Gain | 1 ~ 32X |
| | Gamma | From 0 to 3.99998, support LUT |
| | Exposure Time | SE: 1 μs ~ 14 μs UE: 15 μs ~ 10 sec |
| | Trigger Mode | Software Trigger/Hardware Trigger/Free Run Mode |
| | SPC | Support |
| Performance | User Setting | Support three sets of user-defined configurations |
| | Image Buffer | 256MB |
| Port | Port | GigE, PoE |
| | GPIO Interface | 1× 6 pin Hirose: 1× Opto-isolated input, 1× Opto-isolated output, 1 configurable input and output |
| | Lens Mount | C-mount |
| Power | Power Supply | PoE/ DC 9V~24V power supply via Hirose interface |
| | Power Consumption | 12 VDC≈2.4W(Typ.) |
| Structure | Product Dimensions | 29 mm×29 mm×42 mm (not including lens mount and rear case connector) |
| | Net Weight | 98 g |
| Environment | Storage Temperature | -30℃ ~ +80℃ |
| | Operating Temperature | 0℃ ~ +50℃ |

Connector Pin-out

Definitions of camera 6-pin ports:

| Pin | Description | Features |
|-----|-------------|---|
| 1 | - | +9VDC to 24VDC power supply |
| 2 | Line1 | Opto-isolated input |
| 3 | Line2 | GPIO (I/O can be configured for non-isolated software) ¹ |
| 4 | Lineo | Opto-isolated output |
| 5 | - | Opto-isolated signal ground (ISO_GND) |
| 6 | - | Camera DC power ground and GPIO signal ground (GND) |

Definition of 6-pin power port



Spectrogram

(Excludes lens characteristics and light source characteristics.)

