

# A Pro Series

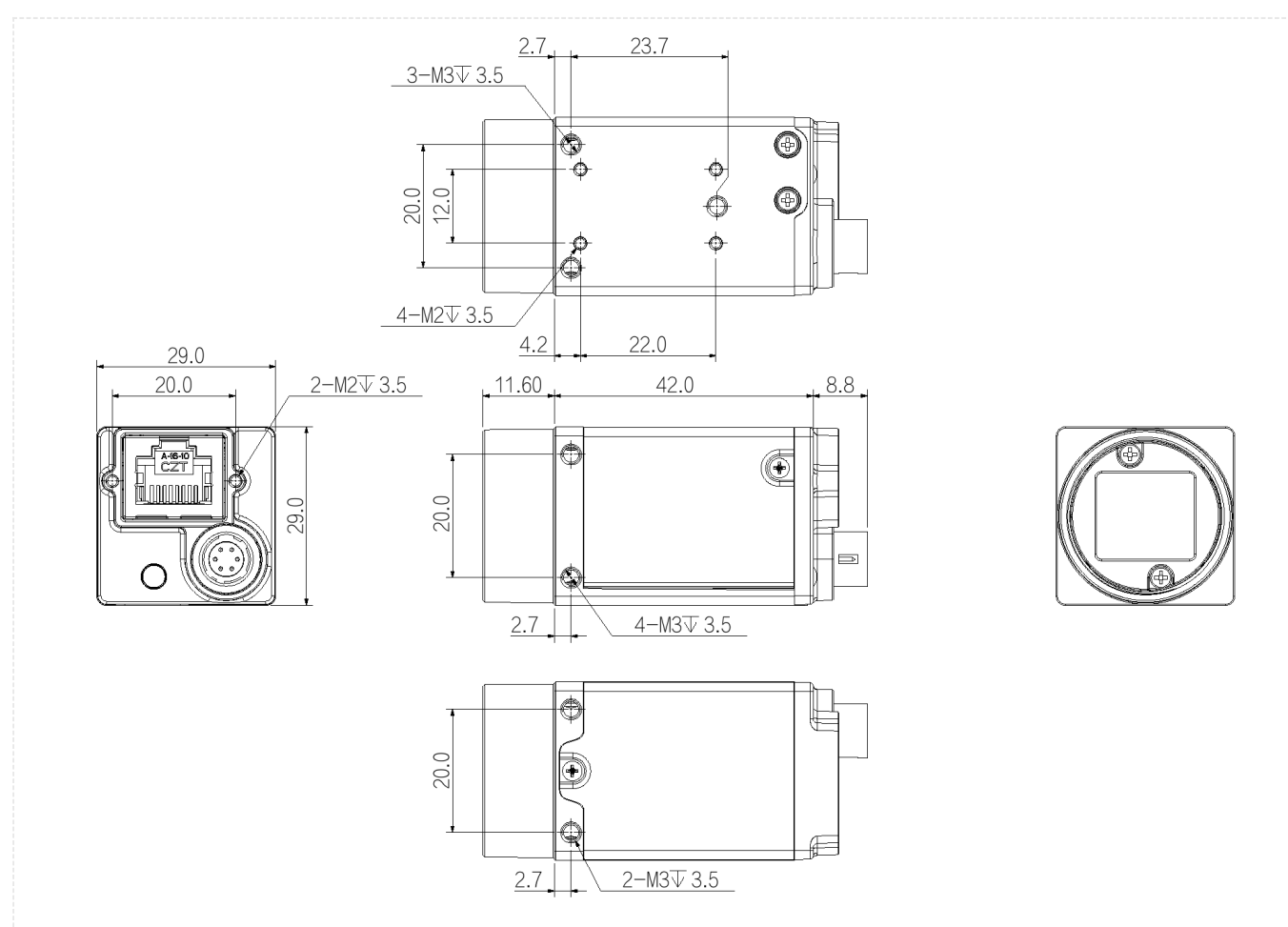
## AH7A20CG000E



### 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,BalanceWhite,CCM,ColorAdjustment,Multi-color temperature adjustment, multi-function interpolation adjustment 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       |                       | AH7A20CG000E                                                                                                              |
| 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            | Color                                                                                                                     |
|             | Pixel Size            | 3.45 μm × 3.45 μm                                                                                                         |
| Image       | Pixel                 | 12.0 MP                                                                                                                   |
|             | S/N Ratio             | 39.9 dB                                                                                                                   |
|             | Dynamic Range         | 70.8 dB                                                                                                                   |
|             | Image Format          | Mono 8/10/12, Bayer RG<br>8/10/10Packed/12/12Packed,YUV422_8_UYVY,YUV422_8,RGB8,BGR8                                      |
|             | 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≈2.65W(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℃                                                                                                                 |

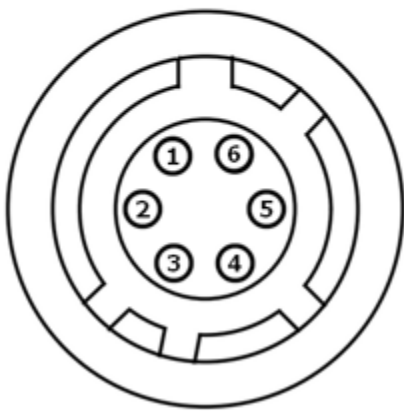


Connector Pin-out

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) <sup>1</sup> |
| 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

