# A Pro Series

## AH7B0AMG000E



## ⫻ 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)
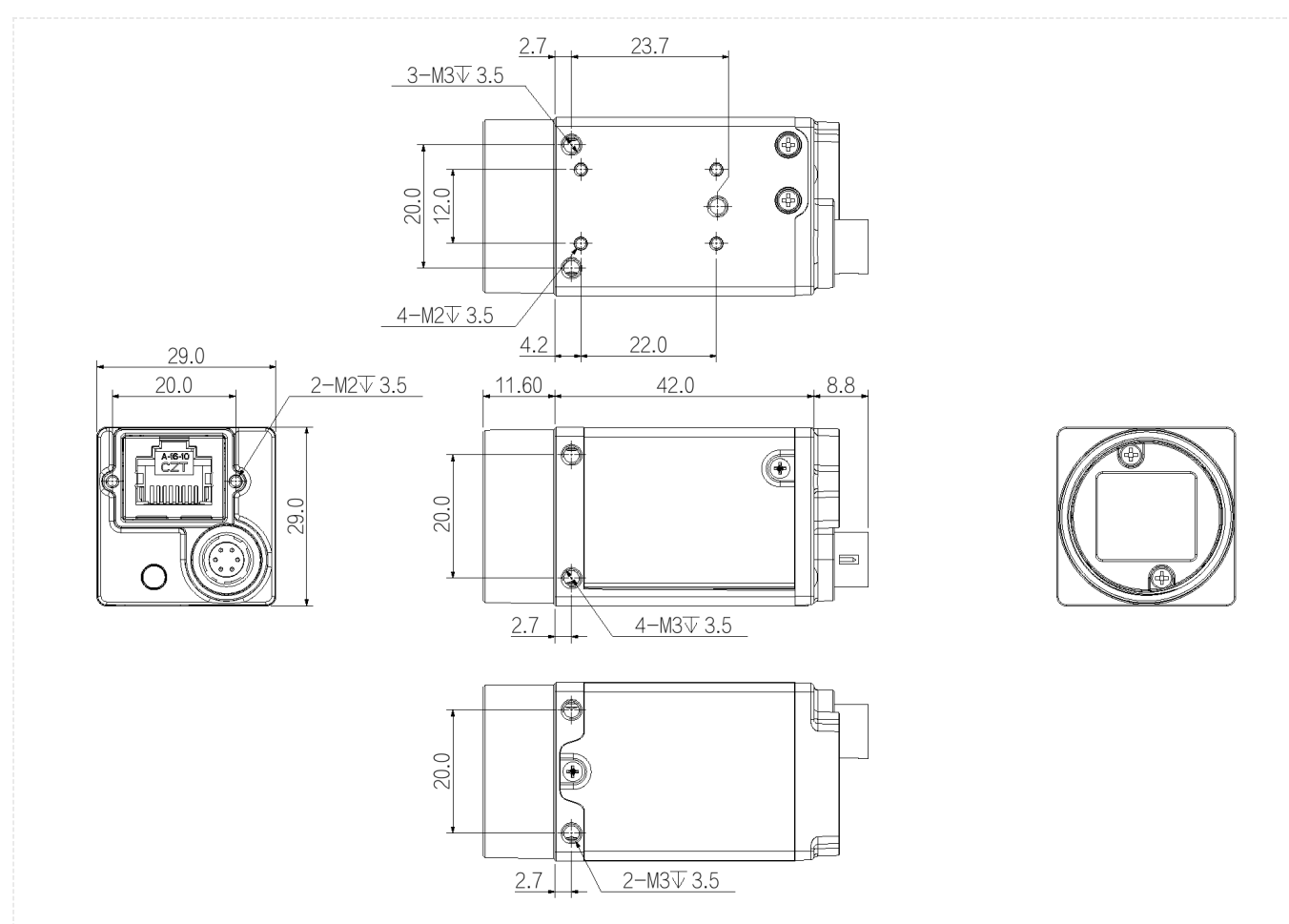
## Specification

| | | |
|---|---|---|
| | Model | AH7B0AMG000E |
| Basic | Sensor | IMX541 |
| | Image Sensor | 1.2"CMOS |
| | Shutter | Global |
| | Resolution | 4504×4504 |
| | Frame Rate | 5.9 fps ( 8 fps @Compression Mode Burst) |
| | Bit Depth | 12 |
| | Mono/Color | Mono |
| | Pixel Size | 2.74 μm × 2.74 μm |
| Image | Pixel | 20.0 MP |
| | S/N Ratio | 40 dB |
| | Dynamic Range | 71 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 ~ 2.4 μs UE: 28 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 | Line0 | 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