

Features

- USB3.0 interface, 5Gbps theoretical transfer bandwidth, power supply via USB interface ;
- Compact size of 29mmx29mmx30mm;
- 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,Sequencer (Gain、Exposure) etc.;
- Compatible with USB3.0 Vision protocol and GenICam standard;
- Conform to CE/UKCA/UL/KC,RoHS;

I Dimensions (mm)



Specification

Model		AH3B01CU000E	
Basic	Sensor	AR2020	
	Image Sensor	1/1.8"CMOS	
	Shutter	Rolling/GlobalResetRealease	
	Resolution	5120 × 3840	
	Frame Rate	19.6 fps @5120 × 3840 Bayer RG 8	
	Bit Depth	12	
	Mono/Color	Color	
	Pixel Size	1.4 μm × 1.4 μm	
	Pixel	20.0 MP	
	S/N Ratio	39 dB	
	Dynamic Range	61 dB	
	Image Format	Mono 8/10/12, Bayer RG 8/10/10Packed/12/12Packed,YUV422_8_UYVY,YUV422_8,RGB8,BGR8	
	Binning	off/onebytwo/twobyone/twobytwo/onebyfour/fourbyone/twobyfour/fourbytwo/ ourbyfour/ThreebyThree	
Imaga	ROI	Support	
Image	X Flip	Support	
	Y Flip	Support	
	Gain	1~32X	
	Gamma	From 0 to 3.99998, support LUT	
	Exposure Time	45 μs ~ 10sec	
	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	USB 3.0	
	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	Power supply via USB connector /DC power supply by Hirose connector, with voltage range from 9V to 24V	
	Power Consumption	≈2.7W(USB3.0 provide power supply)	
Structure	Product Dimensions	29 mm×29 m×30 mm (not including lens mount and rear case connector)	
	Net Weight	Approx 85g	
	Storage Temperature	-30°C~+80°C	



Connector Pin-out

Pin	Description	Features	Definition of 6-pin power port
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)	

Spectrogram

