

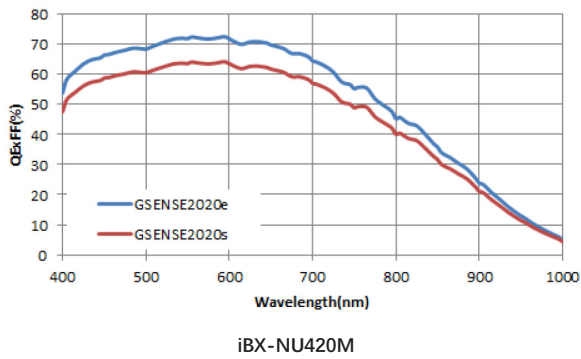
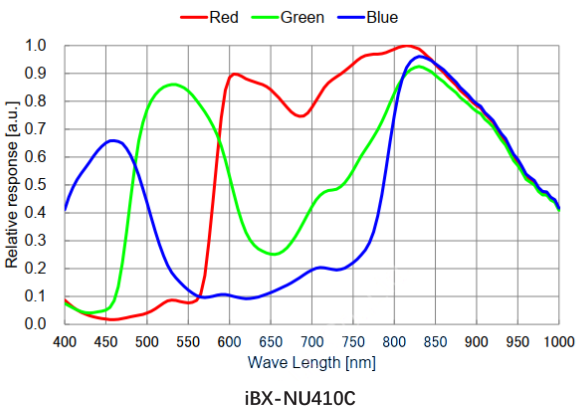
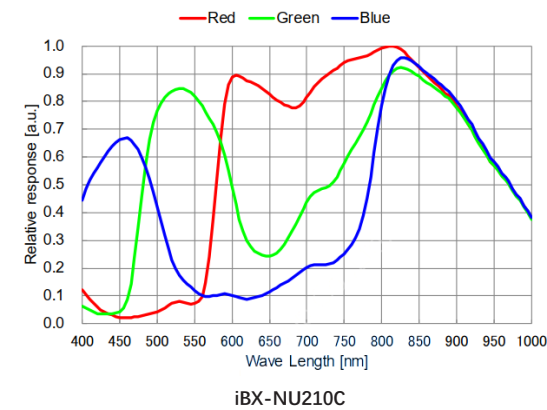
iBX-NU NIR USB3.0 Camera

- Near-infrared band
- 2.1MP - 4.2MP
- Utilizes high-quality image sensors from Sony/Gpixel
- With USB3.0 interface
- Supporting external trigger and built-in hardware ISP image processing engine

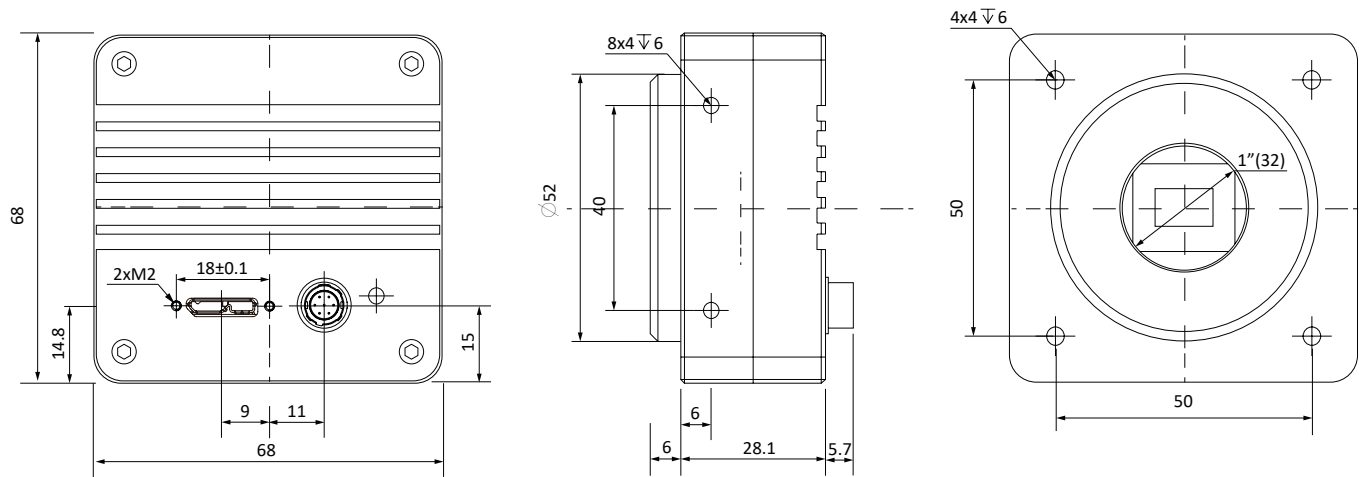
Applied range • Electronic Board&Semiconductor Inspection • Food and Beverage
• Medical Packaging • Industrial Inspection • Life Sciences Fields

Camera	iBX-NU210C	iBX-NU410C	iBX-NU420M
Resolution [H*V]	1920 x 1080	2688 x 1520	2048 x 2048
Sensor Technology	Sony IMX462LQR	Sony IMX464LQR	GPiXeI GSENSE2020e
Sensor Type	CMOS,Rolling	CMOS,Rolling	CMOS,Rolling
Pixel Size[μm]	2.9μm	2.9μm	6.5μm
Sensor Size[μm]	1/2.8"	1/1.8"	1.2"
Frame Rate [Fps]	120.3fps	90fps	45fps
SNR	42.8(HCG) / 47.0(LCG)		41.3(HCG) / 49.3(LCG) / 46.6(HDR)
Dynamic Range	72		66.5(HCG) / 67.0(LCG) / 84.0(HDR)
Conversion Gain	4.71(HCG) / 12.29(LCG)		0.83(HCG) / 5.23(LCG) / 0.70(HDR)
Sensitivity	2376mV		73%@595nm
Dark current	0.15mV		13e-/s/pix
Gain Range	1x-50x		1x-8x
Exposure time	11μs-15s		21us~60s
Digital I/O	7Pin: One opto-isolated input, one opto-isolated output, two non-isolated input and output		
Data Bit	8bit / 12bit		8bit / 12bit / HDR16
Interface	USB3.0		
Housing Size	68 × 68 × 28.1 mm (228g)		68 × 68 × 28.1 mm (270g)
Operating Temp	-30~70 ° C (Storage), -10~50° C (Working)		
Lenses Mount	C-Mount		
Power Input	Power with USB3.0/ DC12V		
Power Consumption	12V @1.9W		12V @3W
Operating System	Windows/Linux		

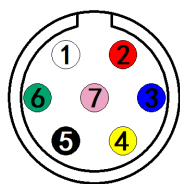
Spectral Response



Dimensions



IO Interface Definitions



Color	Pin	Signal	Signal Description
White	1	GDN	Direct-coupled signal ground
Red	2	12V	12VDC power input
Blue	3	OPTO_GND	Opto-isolated signal ground
Yellow	4	DIR_GPIO1	Direct-coupled General Purpose I/O (Software configurable input/output) (line2)
Black	5	DIR_GPIO2	Direct-coupled General Purpose I/O (Software configurable input/output) (line3)
Green	6	OPTO_IN	Opto-isolated input signal (line0)
Pink	7	OPTO_OUT	Opto-isolated output signal (line1)



The I/O definitions in this manual apply only to Vision Datum standard cables for iBoostX cameras. Connect according to the I/O types and pinout. Using cables with different color codes from other manufacturers may cause incorrect connections and damage the camera. Always use Vision Datum standard cables.

