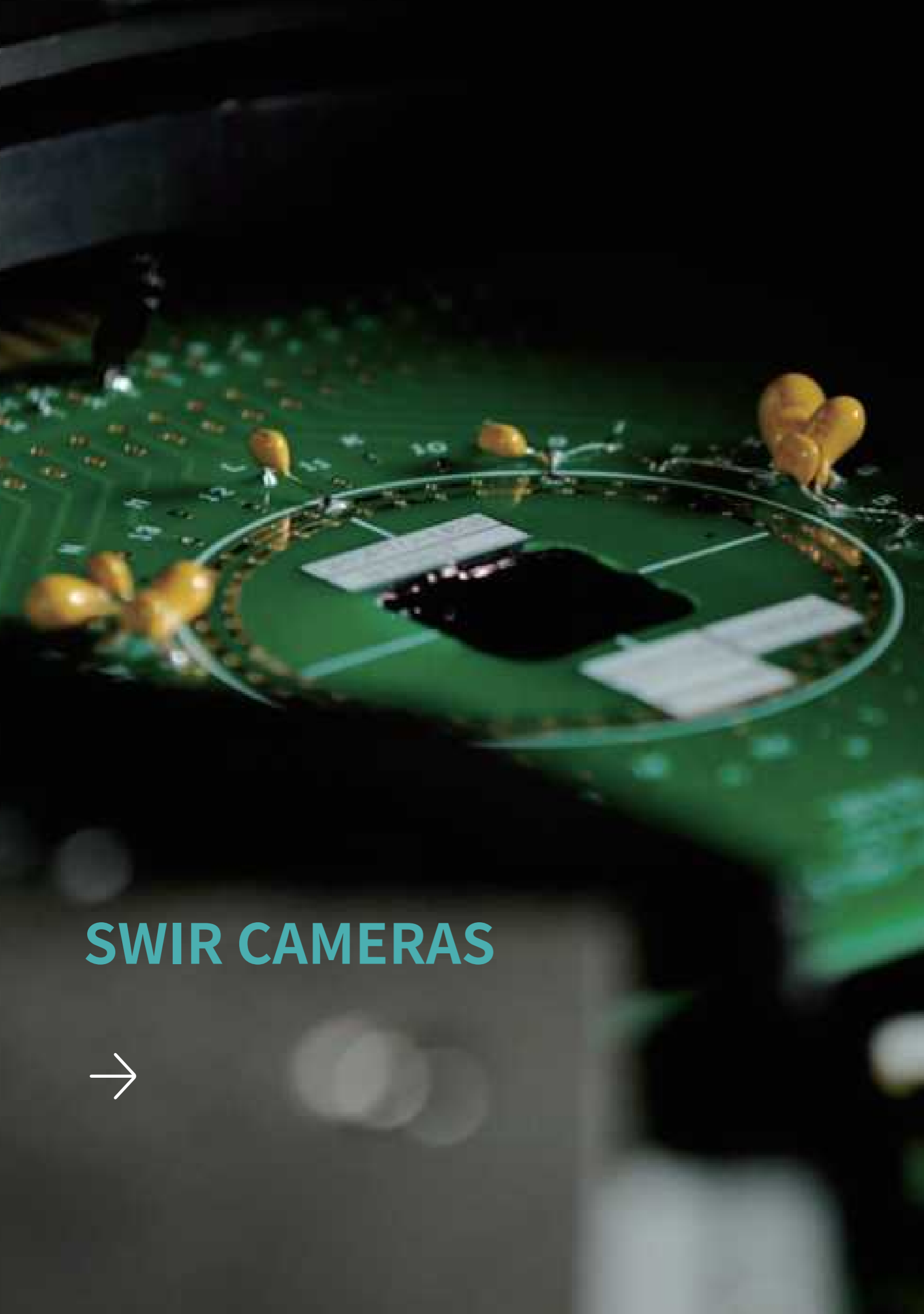


# IMX Series Cooled SWIR Camera


**GHCT-991T-U3 | GHCT-990T-U3 | GHCT-992T-U3**



## SWIR CAMERAS



 640 x 512 / 1280 x 1024 / 2592 x 2056

 5μm / 3.45μm

 400-1700nm

 USB3.0

 TEC



Type	GHCT-991T-U3	GHCT-990T-U3	GHCT-992T-U3
Sensor	Sony IMX991	Sony IMX990-AABA-C	Sony IMX992-AABA-C
Pixel Pitch	640 x 512	1280 x 1024	2592 x 2056
Active Area	3.2mm x 2.56mm	6.4mm x 5.12mm	9.72mm x 7.09mm
Pixel Pitch	5μm	5μm	3.45μm
Frame Rate	212fps@640 x 512 400fps@320 x 256	400fps@640 x 512 753fps@320 x 256	108fps@1280x1024 209fps@640x512
ADC	12bit	8bit	12bit
Conversion Gain	42.29e/ADU	44.3e/ADU	10.3e/ADU (HCG) 17.29e/ADU (LCG)
Dynamic Range	59.7dB	58.7dB	51.36dB (HCG) 51.47dB (LCG)
Readout Noise	176.7e-	211e-	111.88e (HCG) 186.61e (LCG)
Full Well Charge	173.23ke-	181.6ke-	41.39ke (HCG) 69.92ke (LCG)
Max SNR	52.39dB	52.6dB	46.17dB (HCG) 48.45dB (LCG)
Sensitivity	121mV	121mV	/
Cooling temp	25°C below ambient temperature	25-30°C below ambient temperature	25°C below room temperature
Dark Current	383e-/s(0°C) 510e-/s(10°C) 638e-/s(20°C)	383e-/s(0°C) 510e-/s(10°C) 638e-/s(20°C)	/

Key Specs	Parameter	Value
Key Specs	Spectral Range	0.4 μm~ 1.7μm
	DDR3	512MB
	Gain Range	1x – 15x
	Shutter Mode	Global Shutter
	Binning	Software 2x2, 3x3, 4x4
	Data Interface	USB3.0
	Pixel Format	8bit / 12bit
	Exposure Time Range	15us ~ 60s
	Power Supply	USB3.0 interface power supply /12V power adapter power supply
	Power Consumption	<2.1W (uncooled) / <25W (cooled)
Key Specs	Temperature	Operating Temp 20°C~ 60°C , Storage Temp -40°C~ 85°C
	Humidity	20% ~ 80% No Condensation
	Weight	<390g
	Dimensions	80*80*45.5mm
	Lens Mount	C Mount
	Certificate	CE, FCC
	Filter	400 ~ 1800nm (Standard) , 1030 ~ 1800nm (Optional)
Software	SDK	
Digital I/O	1 optocoupler isolated input, 1 optocoupler isolated output, 2 non-isolated input and output ports	
Operating System	Win32/ WinRT/ Linux/ MacOS/ Android	

\* Technical data are subject to change without notice