

rc_visard NG Vision Platform

Technical Specifications

The rc_visard NG combines the high-performance rc_reason software suite with the UserSpace, which allows users to deploy their own software in Docker containers – directly on the sensor. This smart vision platform is powered by the high-performance NVIDIA® Jetson Orin™ series, the most advanced embedded AI solution for robot vision on the market today. Designed to perform most powerfully and power-efficiently, this small AI computer is housed directly in the sensor hardware, making the rc_visard NG smarter than ever!

Model (type)	rc_visard NG (160m-6)			
CPU/GPU	Nvidia® Jetson Orin™ Nano 8 GB			
Calibration	Factory-calibrated			
Mono/color	Monochrome			
Shutter	Global			
Base distance	160 mm			
Focal length	6 mm			
Field of view	Horizontal	43°		
	Vertical	33°		
Image resolution	1440 x 1080 pixels (1.6 MPixel)			
IR cutoff	650 nm			
Depth range	0.5 m to infinity			
Depth image resolution & FPS with minimum distance of 0.5 m	720 x 540 pixel (High)	@ 7 Hz	(latency: 230 ms)	
	360 x 270 pixel (Medium)	@ 25 Hz	(latency: 70 ms)	
	240 x 180 pixel (Low)	@ 25 Hz	(latency: 50 ms)	
Depth image resolution & FPS with minimum distance of 1.2 m	1440 x 1080 pixel (Full)	@ 3 Hz	(latency: 530 ms)	
	720 x 540 pixel (High)	@ 16 Hz	(latency: 170 ms)	
	360 x 270 pixel (Medium)	@ 25 Hz	(latency: 70 ms)	
	240 x 180 pixel (Low)	@ 25 Hz	(latency: 50 ms)	
Workspace	240 mm x 300 mm @ 500 mm distance			
	640 mm x 600 mm @ 1000 mm distance			
	1440 mm x 1200 mm @ 2000 mm distance			
	2240 mm x 1800 mm @ 3000 mm distance			
Depth resolution	500 mm	0.05 mm	Average depth accuracy	
	1000 mm	0.2 mm		
	2000 mm	0.9 mm		
	3000 mm	2.0 mm		
			500 mm	0.2 mm
			1000 mm	0.9 mm
			2000 mm	3.5 mm
			3000 mm	7.8 mm
Interface & applications	GenICam (via SGM®Producer software library GenTL) Rest-API, gRPC (can also be used within the onboard UserSpace)			



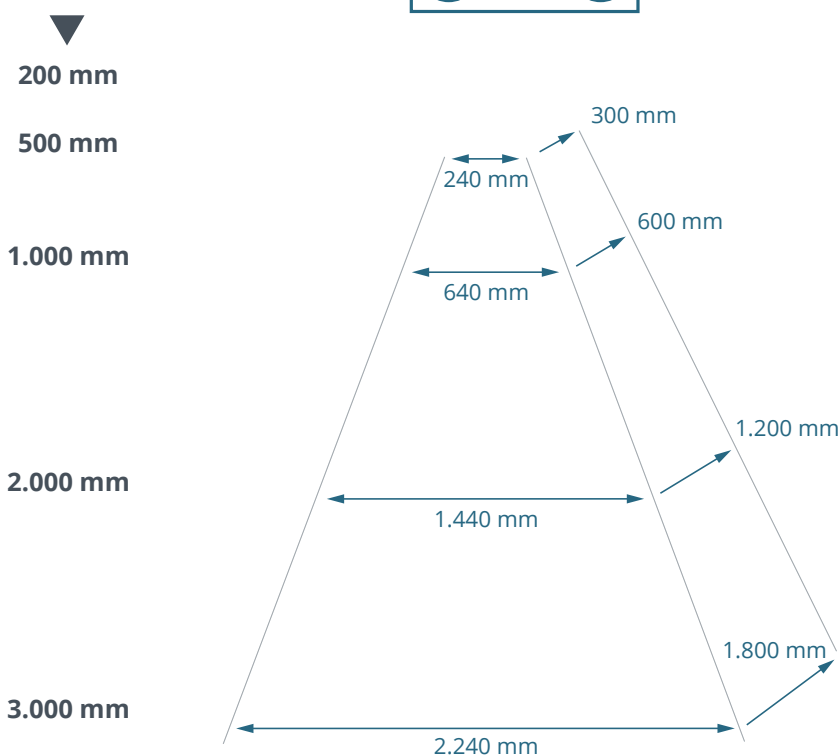


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Connectors	M12, 8-pin, X-coded socket connector M12, 8-pin, A-coded plug connector	
Dimensions	230 mm x 75 mm x 85 mm (L x W x H)	
Weight	979 g	
Supply voltage	18 - 30 V	
Max power consumption	48 W	
Storage/transport temperature	-25° C to 70° C	
Operating temperature	0° C to 50° C	
Relative humidity (non-condensing)	20 % to 80 %	
Warm-up time	No warm-up time required after power-up	
Cooling	Passive	
Protection class	IP 54	

We recommend to use the plug-and-produce software modules of the rc_reason suite for taking full advantage of this sensor's capabilities (roboception.com/rc_reason). All rc_reason modules have (with standard parameters) a latency of less than 0.5 s on the rc_visard NG.

rc_visard NG



Find more information on doc.rc-visard-ng.com

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