

BECOM TOF Camera Selection Sheet



Type	Argos P230-80	Argos P230-110	Argos P231 mit POE	Argos P330	Argos 3D - Pulse 80	TOREO – P650
General Information						
FPS	60 fps	60 fps	60 fps	40 fps 3D, 2D depends on config	40 fps	30
Application Range	5m indoor	10 m indoor typically 7 m	10 m indoor - typically 7 m	0,1 - 10 m indoor up to 3m outdoor	5 m indoor	up to 5m indoor 3m outdoor
Cooling	Passive	Passive	Passive	Passive	Passive	Passive
Temperature Range	-20 ... + 65 °C	65 °C	65 °C	0 ... 50 °C	-20 ... + 45 °C	-40 ... + 60 °C
Width	173 mm	173 mm	173 mm	200 mm	173 mm	230mm
Height	46 mm	46 mm	46 mm	200 mm	46 mm	148mm
Depth	65 mm	65 mm	65 mm	62 mm	65 mm	106mm
Protection Class	IP 65	IP 65	IP 65	IP 42	IP 65	IP 67
CPU						
CPU	N/A	N/A	N/A	i.MX6 Quad	N/A	
RAM	N/A	N/A	N/A	2x Gbyte DDR3	N/A	
Flash	N/A	N/A	N/A	4 x Gbyte eMMC	N/A	
AI / Machine Learning						NVIDIA Tegra TX2 processing module
Optical Information						
Depth Sensing Technology	Time of Flight (ToF)	Time of Flight (ToF)	Time of Flight (ToF)	Time of Flight (ToF)	Time of Flight (ToF)	Time of Flight (ToF)
Sensor Name	Infineon IRS1125	Infineon IRS1125	Infineon IRS1125	Infineon IRS1125	VGA 3D Depth Sensor	VGA 3D Depth Sensor
Resolution	352 x 287 Pixel	352 x 287 Pixel	352 x 287 Pixel	352 x 287 Pixel	640 x 480 Pixel (VGA)	640 x 480 Pixel (VGA)
FoV	80 °	110 °	80 °	80 °	60 °or 80 °	60 °
pxl size / image size @ 5 m	for QVGA (340x420) 1px ca 10x10mm on 5m distance, The image size (captured area) ca 3x2,3m the bigger the FoV and the farther the distance, the bigger the pxl (independent of the resolution) best quality / accuracy always in the optical axis edge pxl mostly no longer usable					
# LEDs	8 x Laser based	8 x Laser based	8 x Laser based	16 x Laser based	8 x Laser based	16 x Laser based
Imager				OV5640 (CMOS)		
Illumination	850 nm Laser	850 nm Laser	850 nm Laser	Active IR 850nm	2 x Active IR 850nm/940nm	850nm
2D Sensor				CMOS, 720p resolution (HD)		Stereo RGB, 13M pxl
Software / APIs						
Frameworks	MATLAB(R)	MATLAB(R)	MATLAB(R)	MATLAB(R)	MATLAB(R)	MATLAB®
Frameworks	Halcon	Halcon	Halcon	Halcon	Halcon	Halcon
Frameworks	MetriCam	MetriCam	MetriCam	MetriCam	MetriCam	
Frameworks	ROS			ROS	ROS	
Frameworks				LabView		
Frameworks						Data Spree Deep Learning DS
Frameworks	All cameras have basic filters for correction and calculation of the distance value etc. already integrated					
Communication, Signaling						
I/O	1 x GPIO 1 x Trigger In	1 x GPIO 1 x Trigger In	1 x GPIO , 1 x Trigger In	1 x GPIO , 1 x Trigger In, 1x Trigger out	1 x GPIO , 1 x Trigger In	coded M12 (Gbit/s Ethernet, 1x Trigger in, 1x Reset, 2 outputs)
Communication	1 x ETH (10/100 Mbits/s)	1 x ETH (Gbit/s)	1 x ETH (Gbit/s)	1 x ETH (Gbit/s) PoE	1 x ETH (Gbit/s)	