

	LEO*	EVA	SPACE SPIDER
Working distance	0.35 – 1.2 m	0.4 – 1 m	0.2 – 0.3 m
Volume capture zone	173 000 cm ³	61 000 cm ³	2 000 cm ³
Linear field of view, H×W @ closest range	246 × 153 mm	214 × 148 mm	90 × 70 mm
Linear field of view, H×W @ furthest range	843 × 527 mm	536 × 371 mm	180 × 140 mm
Angular field of view, H×W	38.5 × 23°	30 × 21°	30 × 21°
3D resolution, up to	0.25 mm	0.5 mm	0.1 mm
3D point accuracy, up to	0.1 mm	0.1 mm	0.05 mm
3D accuracy over distance, up to	0.03% over 100 cm	0.03% over 100 cm	0.03% over 100 cm
Ability to capture texture	Yes	Yes	Yes
Texture resolution	2.3 mp	1.3 mp	1.3 mp
Colors	24 bpp	24 bpp	24 bpp
3D reconstruction rate, up to	80 fps	16 fps	7.5 fps
Data acquisition speed, up to	4 million points/s	2 million points/s	1 million points/s
3D exposure time	0.0002 s	0.0002 s	0.0002 s
2D exposure time	0.0002 s	0.00035 s	0.0002 s
3D light source	VCSEL	flash bulb (no laser)	blue LED
2D light source	White 12 LED array	White 12 LED array	White 6 LED array
Position sensors	Built-in 9DoF inertial system	—	—
Display / touchscreen	Integrated 5.5" half HD, CTP. Optional Wi-Fi / Ethernet video streaming to external device	USB streaming through an external computer	USB streaming through an external computer
Multi core processing	Embedded processors: NVIDIA® Jetson™ TX1 Quad-core ARM® Cortex®-A57 MPCore Processor NVIDIA Maxwell™ 1 TFLOPS GPU with 256 NVIDIA® CUDA® Cores	On external computer	On external computer
Interface	Wi-Fi, Ethernet, SD card	1 × USB 2.0, USB 3.0 compatible	1 × USB 2.0, USB 3.0 compatible
Internal hard drive	256 GB SSD	—	—

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Supported OS	Quick mode: not required HD mode: Windows 7, 8, 10 x 64	Windows 7, 8, 10 x64	Windows 7, 8, 10 x 64
Minimum computer requirements <i>(Please refer to www.artec3d.com for detailed hardware requirements.)</i>	Quick mode: No computer required HD mode: i5 or better, 12Gb RAM or greater	i5 or i7 recommended 12Gb RAM	i5 or i7 recommended 18Gb RAM
Output formats	OBJ, PLY, WRL, STL, AOP, ASCII, PTX, E57, XYZRGB	OBJ, PLY, WRL, STL, AOP, ASCII, PTX, E57, XYZRGB	OBJ, PLY, WRL, STL, AOP, ASCII, PTX, E57, XYZRGB
Output format for measurements	CSV, DXF, XML	CSV, DXF, XML	CSV, DXF, XML
Power source	In-built exchangeable battery, optional mains power	Mains power or external battery pack	Mains power or external battery pack
Dimensions H×D×W	227 × 163 × 228 mm	262 × 158 × 63 mm	190 × 140 × 130 mm
Weight	1.8 kg / 4 lb	0.85 kg / 1.9 lb	0.85 kg / 1.9 lb

*Leo specifications under consideration

