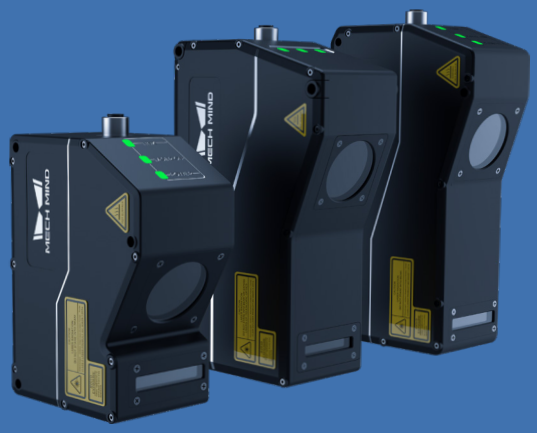
MECH MIND



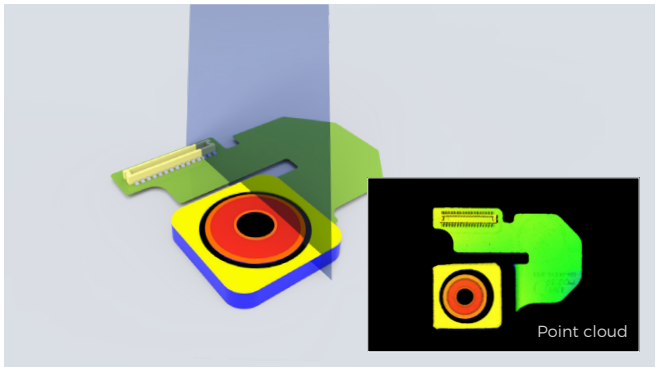
Mech-Eye LNX-7500 Series High-Speed 3D Laser Profilers

Ideal for inline inspection in consumer electronics and EV battery

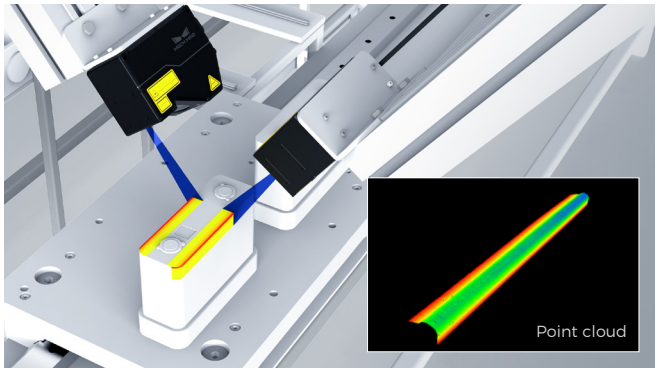
- High resolution (3,200 points/profile)
- 10 kHz scan rates
- Z repeatability down to 0.2 μm [1]
- Single-shot HDR
- Open and intuitive SDK

High speed, high-resolution in the inline inspection.

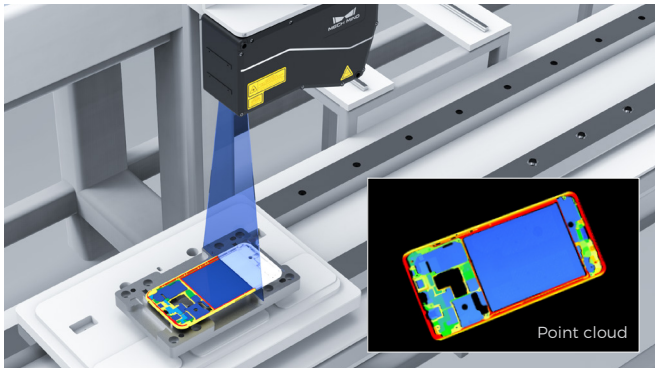
Designed for inline inspection, Mech-Eye LNX-7500 3D sensors achieve fast scan rates up to **10 kHz** and Z repeatability down to **0.2μm**. It's a good choice for you to measure and inspect **height**, **flatness**, and **geometric features** of various parts, such as electronic components (e.g., connectors), battery components (e.g., cell caps), and automotive parts (e.g., bumper beams). The sensors have wide application in electronics, semiconductor, photovoltaic, EV battery, metal & machining, and automotive industries.



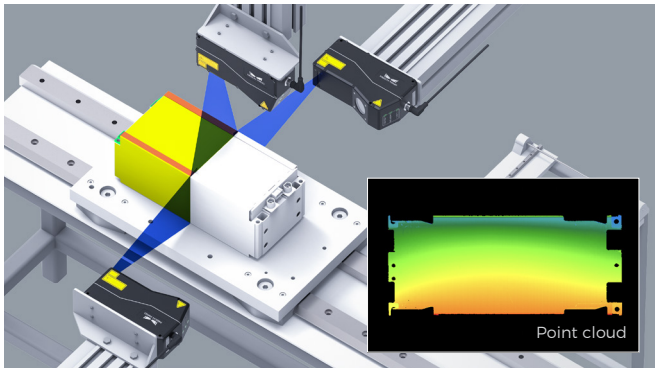
Flatness inspection (smartphone camera module)



Weld seam inspection (battery cell cap)



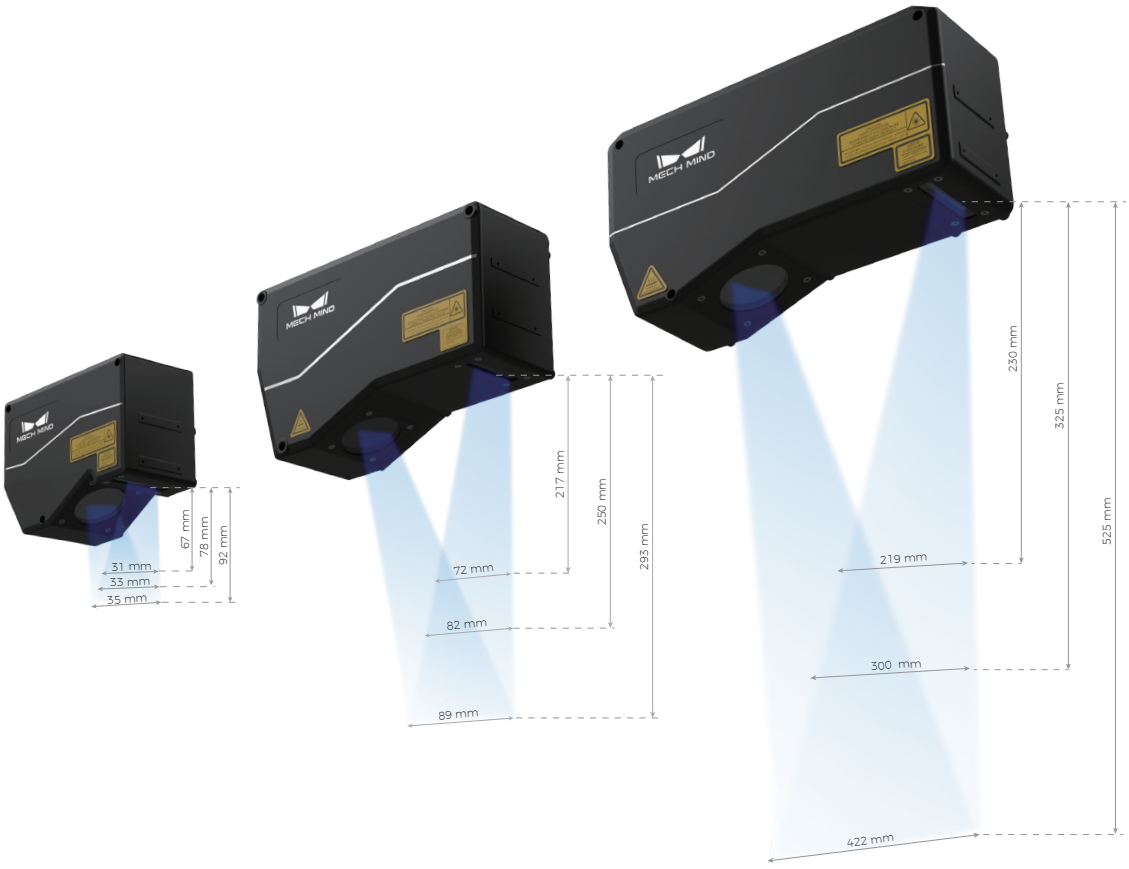
Flatness inspection (smartphone midplate)



Dimensional measurement (battery module)

[1] Applicable to LNX-7530.

Specifications



Models	LNX-7530	LNX-7580	LNX-75300
Data points/profile	3200	3200	3200
Reference distance (RD)	78 mm	250 mm	325 mm
Measurement range Z	25 mm	76 mm	295 mm
Measurement range X (near/RD/far)	31/33/35 mm	72/82/89 mm	219/300/422 mm
Resolution X	11 µm	28 µm	132 µm
Repeatability Z	0.2 µm	0.5 µm	2 µm
Linearity Z	± 0.02% of F.S.	± 0.02% of F.S.	± 0.02% of F.S.
Scan rate	2–10 kHz	2–10 kHz	2–10kHz
Dimensions	133 × 61 × 102 mm	182 × 63 × 112 mm	195 × 61 × 109 mm
Weight	0.9 kg	1.2 kg	1.2 kg
Laser	Blue (405 nm, Class 2)	Blue (405 nm, Class 2M)	Blue (405 nm, Class 2M)
Lens inclination	30°	22°	19°
Input voltage	24V DC	24V DC	24V DC
Max. input power	48W (25W for sensor head)	48W (25W for sensor head)	48W (25W for sensor head)
Communication interface	Gigabit Ethernet	Gigabit Ethernet	Gigabit Ethernet
Operating temperature	0–45° C	0–45° C	0–45° C
Encoder input	Single-ended and differential encoders supported	Single-ended and differential encoders supported	Single-ended and differential encoders supported
Safety and EMC	CE/FCC/VCCI/KC/ISED/NRTL	CE/FCC/VCCI/KC/ISED/NRTL	CE/FCC/VCCI/KC/ISED/NRTL
IP rating	IP67	IP67	IP67
Cooling	Passive	Passive	Passive

MECH MIND

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