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LC15Dx CMM LASER SCANNER

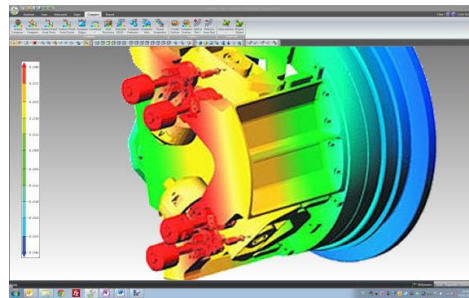
Thanks to the latest laser scanner technology the LC15Dx is a more capable alternative to a tactile probe for an increasing number of high precision CMM applications. Manufacturers gain a better appreciation of the dimensional quality of their products without compromising on cycle times. A wider range and mix of parts, geometry, materials and transitions can be measured more efficiently without user intervention.

The LC15Dx is available with any Nikon CMM and can be retrofitted to 3rd party CMMs and/or combined with a tactile probe and change rack to create a versatile multi-sensor CMM.



KEY FEATURES

- Accuracy 1.9 μ m (0.000075in)
- Speed 70,000 points/second
- Resolution 22 μ m (0.00087in)
- Automatic laser settings
- Zero warm-up time
- High quality Nikon lens
- Daylight filter
- Reflection filter
- Autojoint interface



STANDARD PACKAGE

- LC15Dx laser scanner
- Re-qualification sphere (\varnothing 30mm / 1.18in)
- User manual
- Calibration certificate
- Calibration data CD
- Autojoint key
- Stand stem (x2)
- Stand base
- M8 & M10 table inserts
- Storage case

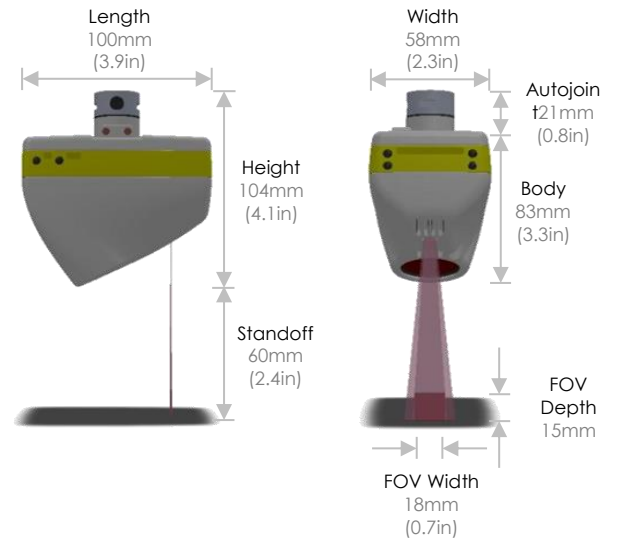


APPLICATIONS

- PROCESS: Production, R&D, Reverse Engineering
- METHOD: Machined, Molded, Stamped, Cast, Forged
- MATERIAL: Metal, Plastic, Rubber, Clay, Ceramic, Composites
- FINISH: Machine, Polished, Plated, Paint, Mixed Color's
- STRUCTURE : Ridged, Soft, Flexible, Fragile

SPECIFICATIONS

▪ Probing error (MPE _p) ¹	▪ 1.9µm (0.000075in)
▪ Ball bar length (MPE _E) ²	▪ 4µm +L/350mm ▪ (0.00016in +L/13.78in)
▪ Multi-stylus test (MPE _{AL}) ³	▪ 3.9µm (0.00015in)
▪ Resolution (point spacing)	▪ 22µm (0.00087in)
▪ Data acquisition (approx.)	▪ 70,000 points/sec
▪ Points per line (approx.)	▪ 900
▪ Measuring temperature range	▪ 18-22°C (64.4-71.6°F)
▪ Operating temperature range	▪ 10-40°C (50-104°F)
▪ Warm-up time	▪ 0 (zero) seconds
▪ Weight	▪ 370g (13oz)
▪ Ingress Protection	▪ IP30
▪ Power	▪ 110/240Vac, 50/60Hz, 5A
▪ Laser type	▪ Class 2 (670um)



¹Nikon Metrology test comparable to EN/ISO 10360-2 MPE_p using 1 sigma sphere fit.

²Nikon Metrology test comparable to EN/ISO 10360-2 MPE_E for CMM with accuracy of 2µm+L/350 or better.

³Nikon Metrology test comparable to EN/ISO 10360-5 MPE_{AL} for CMM with accuracy of 2µm+L/350 or better.

RETROFITS

Retrofitting your current CMM with an LC15Dx and FOCUS software is a cost effective solution. The retrofit integrates with the existing CMM controller hardware and compatible probe system to provide a versatile multi-sensor CMM

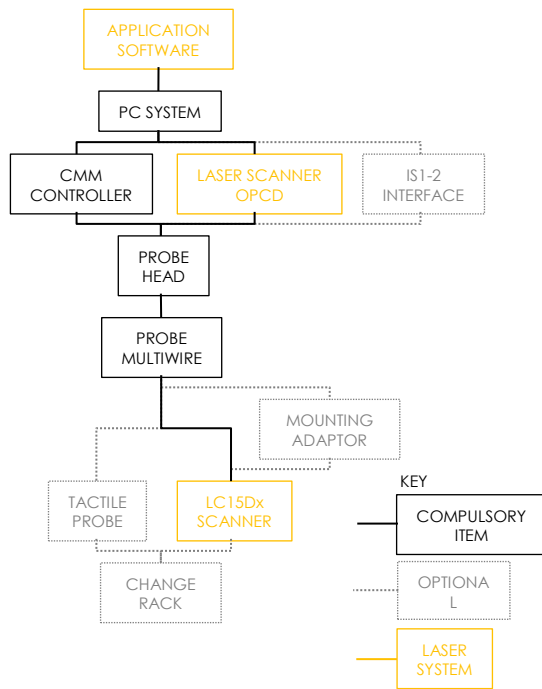
CMM Controller Brand	Model	Probe Head
Aberlink / Deva	DEVA 004	PH10M, PH10MQ
Coord3	P3M	PH10M, PH10MQ
Dukin	DKS	PH10M, PH10MQ
Hexagon - DEA	B3C-LC, B3C-S, B3P, B3P-S, B5P, B6C-S, Tutor-P, Master-P,FB2	PH10M, PH10MQ, CW43
Hexagon - Brown & Sharpe	Sharpe 32, Sharpe 32C, Sharpe 32Z	PH10M, PH10MQ
Hexagon - Sheffield	SMP300, SMP400	PH10M, PH10MQ
LK	AIM, MCC200, MCC250, MCC300	PH10M, PH10MQ
Mitutoyo	UC200E, UC200H, UC200S UC220E, UC220H, UC220S, UC240, UC300	PH10M, PH10MQ
Mora	ANC39, ANC40	PH10M, PH10MQ
Renishaw	UCC1, UCC2	PH10M, PH10MQ
Wenzel	WPC2010, WPC2020, WPC2030	PH10M, PH10MQ
	WPC2040	PH10M, PH10MQ, PHS
Werth	Werth	PH10M, PH10MQ
Zeiss	C99	PH10M,PH10MQ, RDS

UPGRADES

Tactile Probe In some cases a single sensor technology is insufficient for measuring all the features. The LC15Dx can be combined with an optional touch trigger probe and/or scanning probe to create a versatile multi-sensor CMM.

Change Rack For fully automatic scanner and tactile probe changes the LC15Dx can be combined with an optional Renishaw ACR2 or ACR3/MRS change rack.

CMM CONFIGURATION



Mounting Adaptor For applications where the orientation of the laser needs rotating in relation to the Probe Head, optional mounting adaptors are available for the Renishaw PH10M, PH10MQ and PHS probe heads.

IS1 Interface When the LC15Dx is used in combination with an optional Renishaw TP7M, SP25 or SP600 probe, an optional Renishaw IS1-2 Interface Selector is required.

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