

Technical Specifications

NIKON laser scanner LC60Dx

| | |
|---|------------------------------------|
| Probing error (MPE _p) ¹ | 9 µm (0.0004") |
| Ball bar length (MPE _E) ² | 6+L/350(µm) (0.00024+L/350) (") |
| Multi-stylus test (MPE _{AL}) ³ | 9 µm (0.0004") |
| ISO Probing form error ⁴ | 20 µm (0.00079") |
| ISO Probing size error all ⁵ | 30 µm (0.00118") |
| ISO Probing dispersion value ⁶ | 36 µm (0.00141") |
| ISO Cone angle ⁷ | 125° |
| Stripe width | 60 mm (2.36") |
| Scanning speed | 75,000pts/s |
| Resolution | 60µm (0.0024") |
| Stand-off distance | 95 mm (3.74") |
| Field-of-View (FOV) width and height | 60x60 mm (2.36x2.36") |
| Weight | 390 g (0.86 lbs) |
| Interface on manual localizers | Ethernet |
| Laser safety | Class 2 |
| Enhanced Scanner Performance | ESP3 |
| Daylight filter | yes |
| Probe head compatibility | PH10M, PH10MQ, CW43, PHS |



All accuracy specifications valid for a CMM with an accuracy of 2µm + L/350 or better using manufacturer supplied test sphere

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

³Nikon Metrology test comparable to EN/ISO 10360-5 MPE_{AL}

Accuracy specifications according ISO 10360-8:2013:

⁴P_{Form.Sph.1x25.Tr:ODS,MPE} : Maximum probing form error using 25 representative points in translatory scanning mode

⁵P_{Size.Sph.All.Tr:ODS,MPE} : Maximum probing size error All using all measured points in translatory scanning mode

⁶P_{Form.Sph.D95%.Tr:ODS,MpL} : Maximum probing dispersion value using 95% of the measured points in translatory scanning mode

⁷Cone angle : Region of sphere on which the measured points are selected

Technical Specifications

NIKON laser scanner L100

| | |
|---|--------------------------|
| Probing error (MPE _p) ¹ | 6.5 µm |
| Ball bar length (MPE _E) ² | 6 µm +L/350 mm |
| Multi-stylus test (MPE _{AL}) ³ | 6 µm |
| ISO Probing form error ⁴ | 15 µm |
| ISO Probing size error all ⁵ | 20 µm |
| ISO Probing dispersion value ⁶ | 26 µm |
| ISO Cone angle ⁷ | 125° |
| Scanning speed | 200,000 points/sec |
| Resolution | Max. 42 µm |
| Max. Field-of-View width | 110 mm |
| Field-of-View depth | 60 mm |
| Stand-off distance | 105 mm |
| Laser safety | Class 2 |
| Enhanced Scanner Performance | ESP4 |
| Daylight filter | Yes |
| Probe head compatibility | PH10M, PH10MQ, CW43, PHS |



All accuracy specifications valid for a CMM with an accuracy of 2µm + L/350 or better using manufacturer supplied test sphere.

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

²Nikon Metrology test comparable to EN/ISO 10360-2 MPEE

³Nikon Metrology test comparable to EN/ISO 10360-5 MPEAL

Accuracy specifications according ISO 10360-8:2013:

⁴P_{Form.Sph.1x25:Tr:ODS,MPE} : Maximum probing form error using 25 representative points in translatory scanning mode

⁵P_{Size.Sph.All:Tr:ODS,MPE} : Maximum probing size error All using all measured points in translatory scanning mode

⁶P_{Form.Sph.D95%:Tr:ODS,MPL} : Maximum probing dispersion value using 95% of the measured points in translatory scanning mode

⁷Cone angle : Region of sphere on which the measured points are selected

Technical Specifications

NIKON laser scanner XC65Dx



| | XC65Dx | XC65Dx-LS |
|---|---|---|
| Probing error(MPE_p)¹ | 12 μm (0.00047") | 15 μm (0.00060") |
| Ball bar length (MPE_E)² | 4+L/350(μm) (0.00016+L/350) (") | 4+L/350(μm) (0.00016+L/350) (") |
| Multi-stylus test (MPE_{al})³ | 9 μm (0.00035") | 9 μm (0.00035") |
| ISO Probing form error⁴ | 25 μm (0.00098") | 35 μm (0.00138") |
| ISO Probing size error all⁵ | 45 μm (0.00177") | 80 μm (0.00315") |
| ISO Probing dispersion value⁶ | 48 μm (0.00189") | 60 μm (0.00236") |
| ISO Cone angle⁷ | 115° | 125° |
| Scanning speed | Cross Scanner mode: 3 x 25,000 pts/s Line scanner mode: 1 x 75,000 pts/s 75 lines/s | Cross Scanner mode: 3 x 25,000 pts/s Line scanner mode: 1 x 75,000 pts/s 75 lines/s |
| Width of view | 3x65 mm (3x2.56") | 3x65 mm (3x2.56") |
| Depth of view | 3x65 mm (3x2.56") | 3x65 mm (3x2.56") |
| Stand-off distance (approx.) | 75 mm (2.95") | 170 mm (6.69") |
| Dimensions | 155x86x142 mm (6.1x3.4x5.6") | 155x86x142 mm (6.1x3.4x5.6") |
| Weight (approx.) | 440 g (0.97 lbs) | 480 g (1.06 lbs) |
| Enhanced Scanner Performance | ESP3 | ESP3 |
| Laser safety | Class 2 | Class 2 |
| Probe head compatibility | PH10M, PH10MQ, CW43, PHS | PH10M, PH10MQ, CW43, PHS |

All accuracy specifications valid for a CMM with an accuracy of 2μm + L/350 or better using manufacturer supplied test sphere

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

³Nikon Metrology test comparable to EN/ISO 10360-5 MPE_{AL}

Accuracy specifications according ISO 10360-8:2013:

⁴P_{Form.Sph.1x25:Tr:ODS,MPE} : Maximum probing form error using 25 representative points in translatory scanning mode

⁵P_{Size.Sph.All:Tr:ODS,MPE} : Maximum probing size error All using all measured points in translatory scanning mode

⁶P_{Form.Sph.D95%:Tr:ODS,MPL} : Maximum probing dispersion value using 95% of the measured points in translatory scanning mode

⁷Cone angle : Region of sphere on which the measured points are selected