

MEASURING ARMS (ADVANCED)

- According to ISO 10360-12
- External decoupling and internal balancing system
- Dual suspension support structure
- Specialized WiFi module
- Aerospace grade carbon-fiber material
- Smart sensing probe system
- Equivalent-arm design
- Optional 8-axis rotary worktable



CMM-HM30S

STANDARD ACCURACY, HE SERIES, 6-AXIS

Part No.	Measuring range	Maximum permissible error				
		SPAT	E _{UNI}	P _{SIZE}	P _{FORM}	L _{DIA}
CMM-HE15	59.0"	.00110"	.00141"	.00059"	.00114"	.00149"
CMM-HE20	78.7"	.00118"	.00157"	.00070"	.00137"	.00161"
CMM-HE25	98.4"	.00137"	.00177"	.00078"	.00149"	.00196"
CMM-HE30	118.1"	.00216"	.00255"	.00110"	.00189"	.00315"
CMM-HE35	137.8"	.00295"	.00315"	.00137"	.00228"	.00385"
CMM-HE40	157.5"	.00354"	.00393"	.00173"	.00267"	.00456"
CMM-HE45	177.2"	.00440"	.00472"	.00189"	.00338"	.00503"

STANDARD ACCURACY, HE SERIES, 7-AXIS

Part No.	Measuring range	Maximum permissible error				
		SPAT	E _{UNI}	P _{SIZE}	P _{FORM}	L _{DIA}
CMM-HE15S	59.0"	.00118"	.00157"	.00078"	.00137"	.00189"
CMM-HE20S	78.7"	.00137"	.00177"	.00098"	.00157"	.00205"
CMM-HE25S	98.4"	.00157"	.00196"	.00118"	.00177"	.00228"
CMM-HE30S	118.1"	.00236"	.00275"	.00137"	.00196"	.00358"
CMM-HE35S	137.8"	.00315"	.00334"	.00157"	.00255"	.00453"
CMM-HE40S	157.5"	.00374"	.00413"	.00196"	.00295"	.00551"
CMM-HE45S	177.2"	.00452"	.00492"	.00216"	.00374"	.00622"

HIGH ACCURACY, HM SERIES, 6-AXIS

Part No.	Measuring range	Maximum permissible error				
		SPAT	EUNI	P _{SIZE}	P _{FORM}	LDIA
CMM-HM15	59.0"	.00071"	.00095"	.00035"	.00063"	.00110"
CMM-HM20	78.7"	.00079"	.00102"	.00039"	.00071"	.00126"
CMM-HM25	98.4"	.00091"	.00114"	.00047"	.00087"	.00146"
CMM-HM30	118.1"	.00134"	.00161"	.00059"	.00122"	.00201"
CMM-HM35	137.8"	.00169"	.00217"	.00075"	.00150"	.00260"
CMM-HM40	157.5"	.00205"	.00260"	.00091"	.00169"	.00327"
CMM-HM45	177.2"	.00240"	.00350"	.00150"	.00307"	.00425"

HIGH ACCURACY, HM SERIES, 7-AXIS

Part No.	Measuring range	Maximum permissible error				
		SPAT	EUNI	P _{SIZE}	P _{FORM}	LDIA
CMM-HM15S	59.0"	.00079"	.00098"	.00043"	.00079"	.00169"
CMM-HM20S	78.7"	.00087"	.00118"	.00047"	.00087"	.00185"
CMM-HM25S	98.4"	.00102"	.00126"	.00051"	.00098"	.00201"
CMM-HM30S	118.1"	.00165"	.00209"	.00079"	.00138"	.00287"
CMM-HM35S	137.8"	.00217"	.00260"	.00095"	.00169"	.00370"
CMM-HM40S	157.5"	.00256"	.00323"	.00114"	.00189"	.00472"
CMM-HM45S	177.2"	.00287"	.00390"	.00169"	.00323"	.00539"

ULTRA HIGH ACCURACY, GP SERIES, 6-AXIS

Part No.	Measuring range	Maximum permissible error				
		SPAT	EUNI	P _{SIZE}	P _{FORM}	LDIA
CMM-GP15	59.0"	.00047"	.00087"	.00028"	.00047"	.00095"
CMM-GP20	78.7"	.00063"	.00095"	.00032"	.00059"	.00118"
CMM-GP25	98.4"	.00071"	.00102"	.00035"	.00071"	.00126"
CMM-GP30	118.1"	.00102"	.00150"	.00047"	.00098"	.00177"
CMM-GP35	137.8"	.00142"	.00205"	.00063"	.00134"	.00236"
CMM-GP40	157.5"	.00177"	.00248"	.00079"	.00150"	.00295"
CMM-GP45	177.2"	.00217"	.00315"	.00110"	.00197"	.00398"

ULTRA HIGH ACCURACY, GP SERIES, 7-AXIS

Part No.	Measuring range	Maximum permissible error				
		SPAT	EUNI	P _{SIZE}	P _{FORM}	LDIA
CMM-GP15S	59.0"	.00059"	.00091"	.00032"	.00071"	.00150"
CMM-GP20S	78.7"	.00071"	.00098"	.00039"	.00075"	.00165"
CMM-GP25S	98.4"	.00079"	.00110"	.00043"	.00087"	.00181"
CMM-GP30S	118.1"	.00126"	.00185"	.00063"	.00126"	.00279"
CMM-GP35S	137.8"	.00169"	.00224"	.00079"	.00154"	.00358"
CMM-GP40S	157.5"	.00213"	.00287"	.00102"	.00173"	.00441"
CMM-GP45S	177.2"	.00256"	.00374"	.00142"	.00256"	.00520"



Single-point articulation test



Distance measurement error between two points



Sphere size measurement error



Sphere form measurement error



Sphere diameter obtained from performing the articulated location test
(Diameter of the spherical zone containing the centers of a sphere
measured from multiple orientations)

SPECIFICATION

Temperature rate	5.4°F/5min
Battery life	16h for one battery; 32h for two batteries
Output	USB, Wi-Fi
Operation Temperature	41°F-113°F
Operation humidity	0-95%, no condensation
Power supply	100-240VAC, 50/60Hz
Net weight	19.4lb to 23.4lb

STANDARD DELIVERY

Main unit	1 pc
.118" zircon ball probe	1 pc
.236" zircon ball probe	1 pc
Calibration cone	1 pc
Lithium battery	2 pcs
USB cable	1 pc
Power adapter	1 pc
Dust cover	1 pc



.118" intelligent probe (included)



.236" intelligent probe (included)



calibration cone (included)

LASER LINE PROBE SPECIFICATION (OPTIONAL)

Part No.		CMM-CEM-GH	CMM-CEM-GS
Accuracy		±.00059"	±.00102"
Scan distance	furthest	8.66"	
	best	6.18"	
	recent	4.33"	
Scan width	furthest	5.91"	
	best	4.33"	
	recent	3.15"	
Depth of field		4.33"	
Maximum points per line		4000	
Maximum scan frame rate		300Hz	
Scan rate		1200000 points/s	
Laser type		450nm, class2	
Net weight		0.62lb	



laser line probe (optional)

Matching accuracy of standard scanning probe with measuring arms *

Part No.	CMM-CEM-GS	Part No.	CMM-CEM-GS	Part No.	CMM-CEM-GS
CMM-HE15S	.00197"	CMM-HM15S	.00177"	CMM-GP15S	.00157"
CMM-HE20S	.00228"	CMM-HM20S	.00197"	CMM-GP20S	.00169"
CMM-HE25S	.00256"	CMM-HM25S	.00217"	CMM-GP25S	.00189"
CMM-HE30S	.00295"	CMM-HM30S	.00244"	CMM-GP30S	.00217"
CMM-HE35S	.00374"	CMM-HM35S	.00299"	CMM-GP35S	.00268"
CMM-HE40S	.00433"	CMM-HM40S	.00354"	CMM-GP40S	.00311"
CMM-HE45S	.00728"	CMM-HM45S	.00547"	CMM-GP45S	.00492"

*Sphere diameter obtained from performing the articulated location test (diameter of the spherical zone containing the centers of a sphere measured from multiple orientations)

Matching accuracy of high accuracy scanning probe with measuring arms*

Part No.	CMM-CEM-GH	Part No.	CMM-CEM-GH	Part No.	CMM-CEM-GH
CMM-HE15S	.00177"	CMM-HM15S	.00150"	CMM-GP15S	.00138"
CMM-HE20S	.00201"	CMM-HM20S	.00158"	CMM-GP20S	.00150"
CMM-HE25S	.00224"	CMM-HM25S	.00177"	CMM-GP25S	.00165"
CMM-HE30S	.00256"	CMM-HM30S	.00205"	CMM-GP30S	.00185"
CMM-HE35S	.00337"	CMM-HM35S	.00256"	CMM-GP35S	.00236"
CMM-HE40S	.00413"	CMM-HM40S	.00319"	CMM-GP40S	.00291"
CMM-HE45S	.00591"	CMM-HM45S	.00516"	CMM-GP45S	.00472"

*Sphere diameter obtained from performing the articulated location test (diameter of the spherical zone containing the centers of a sphere measured from multiple orientations)

Matching accuracy of standard scanning probe with rotary table*

Part No.	CMM-CEM-GS	Part No.	CMM-CEM-GS	Part No.	CMM-CEM-GS
CMM-HE15S	.00197"	CMM-HM15S	.00177"	CMM-GP15S	.00157"
CMM-HE20S	.00228"	CMM-HM20S	.00197"	CMM-GP20S	.00169"
CMM-HE25S	.00256"	CMM-HM25S	.00217"	CMM-GP25S	.00189"
CMM-HE30S	.00295"	CMM-HM30S	.00244"	CMM-GP30S	.00217"
CMM-HE35S	.00374"	CMM-HM35S	.00299"	CMM-GP35S	.00268"
CMM-HE40S	.00433"	CMM-HM40S	.00354"	CMM-GP40S	.00311"
CMM-HE45S	.00728"	CMM-HM45S	.00547"	CMM-GP45S	.00492"

*Sphere diameter obtained from performing the articulated location test (diameter of the spherical zone containing the centers of a sphere measured from multiple orientations)

Matching accuracy of high accuracy scanning probe with rotary table*

Part No.	CMM-CEM-GH	Part No.	CMM-CEM-GH	Part No.	CMM-CEM-GH
CMM-HE15S	.00177"	CMM-HM15S	.00150"	CMM-GP15S	.00138"
CMM-HE20S	.00201"	CMM-HM20S	.00158"	CMM-GP20S	.00150"
CMM-HE25S	.00224"	CMM-HM25S	.00177"	CMM-GP25S	.00165"
CMM-HE30S	.00256"	CMM-HM30S	.00205"	CMM-GP30S	.00185"
CMM-HE35S	.00337"	CMM-HM35S	.00256"	CMM-GP35S	.00236"
CMM-HE40S	.00413"	CMM-HM40S	.00319"	CMM-GP40S	.00291"
CMM-HE45S	.00591"	CMM-HM45S	.00516"	CMM-GP45S	.00472"

*Sphere diameter obtained from performing the articulated location test (diameter of the spherical zone containing the centers of a sphere measured from multiple orientations)

Matching accuracy of 8-Axis rotary worktable with measuring arms*

Part No.	CMM-CEM-8AXIS	Part No.	CMM-CEM-8AXIS	Part No.	CMM-CEM-8AXIS
CMM-HE15	.00150"	CMM-HM15	.00110"	CMM-GP15	.00095"
CMM-HE20	.00161"	CMM-HM20	.00126"	CMM-GP20	.00118"
CMM-HE25	.00197"	CMM-HM25	.00146"	CMM-GP25	.00126"
CMM-HE30	.00315"	CMM-HM30	.00201"	CMM-GP30	.00177"
CMM-HE35	.00386"	CMM-HM35	.00260"	CMM-GP35	.00236"
CMM-HE40	.00457"	CMM-HM40	.00327"	CMM-GP40	.00295"
CMM-HE45	.00504"	CMM-HM45	.00425"	CMM-GP45	.00398"
CMM-HE15S	.00189"	CMM-HM15S	.00169"	CMM-GP15S	.00150"
CMM-HE20S	.00205"	CMM-HM20S	.00185"	CMM-GP20S	.00165"
CMM-HE25S	.00228"	CMM-HM25S	.00201"	CMM-GP25S	.00181"
CMM-HE30S	.00358"	CMM-HM30S	.00287"	CMM-GP30S	.00280"
CMM-HE35S	.00453"	CMM-HM35S	.00370"	CMM-GP35S	.00358"
CMM-HE40S	.00551"	CMM-HM40S	.00472"	CMM-GP40S	.00441"
CMM-HE45S	.00622"	CMM-HM45S	.00539"	CMM-GP45S	.00520"

*Sphere diameter obtained from performing the articulated location test (diameter of the spherical zone containing the centers of a sphere measured from multiple orientations)

OPTIONAL ACCESSORY

DELL laptop	CMM-CEM-PCE
PolyWorks software	CMM-CEM-PW
Adjustable tripod	CMM-CEM-FAT
Electric vacuum base	CMM-CEM-EVCP
Magnetic base	CMM-CEM-IMM
Magnetic cones	CMM-CEM-MC
Magnetic spheres	CMM-CEM-MS
Point probe	CMM-CEM-PPS
.0787" ruby ball probe	CMM-CEM-RPS2
.197" zircon ball probe	CMM-CEM-ZPS5
Intelligent probe head	CMM-CEM-IPH
Probe adapter	CMM-CEM-PAS
8-Axis rotary worktable	CMM-CEM-8AXIS
High accuracy laser line probe	CMM-CEM-GH*
Standard accuracy laser line probe	CMM-CEM-GS*

*Laser line probes are suitable for 7-axis measuring arms only



adjustable tripod (optional)



DELL laptop (optional)



8-axis rotary worktable (optional)



electric vacuum base (optional)