

# MEASURING ARMS

- In accordance with ISO 10360-12
- Internal balance
- Dual high performance batteries
- Equivalent-arm design
- High-Speed WiFi performance
- Aerospace grade carbon-fiber material
- Automatic power off
- U-shaped anti-collision design base



**CMM-CM30**

## HIGH PRECISION, CM SERIES, 6-AXIS

Unit: mm

Code	Measuring range	Maximum permissible error				
		SPAT	E <sub>UNI</sub>	P <sub>SIZE</sub>	P <sub>FORM</sub>	L <sub>DIA</sub>
CMM-CM15	1500	0.018	0.025	0.009	0.016	0.026
CMM-CM20	2000	0.020	0.028	0.010	0.018	0.032
CMM-CM25	2500	0.023	0.030	0.012	0.022	0.038
CMM-CM30	3000	0.034	0.042	0.016	0.032	0.052
CMM-CM35	3500	0.043	0.056	0.020	0.038	0.066
CMM-CM40	4000	0.052	0.066	0.024	0.044	0.083
CMM-CM45	4500	0.061	0.089	0.038	0.078	0.108

## HIGH PRECISION, CM SERIES, 7-AXIS

Unit: mm

Code	Measuring range	Maximum permissible error				
		SPAT	E <sub>UNI</sub>	P <sub>SIZE</sub>	P <sub>FORM</sub>	L <sub>DIA</sub>
CMM-CM20S	2000	0.022	0.030	0.012	0.022	0.040
CMM-CM25S	2500	0.027	0.032	0.013	0.025	0.048
CMM-CM30S	3000	0.042	0.053	0.020	0.035	0.078
CMM-CM35S	3500	0.055	0.066	0.024	0.043	0.092
CMM-CM40S	4000	0.065	0.082	0.029	0.048	0.102
CMM-CM45S	4500	0.073	0.099	0.043	0.082	0.132

## STANDARD PRECISION, BE SERIES, 6-AXIS

Unit: mm

Code	Measuring range	Maximum permissible error				
		SPAT	E <sub>UNI</sub>	P <sub>SIZE</sub>	P <sub>FORM</sub>	L <sub>DIA</sub>
CMM-BE15	1500	0.028	0.036	0.015	0.029	0.038
CMM-BE20	2000	0.030	0.040	0.018	0.035	0.041
CMM-BE25	2500	0.035	0.045	0.020	0.038	0.050
CMM-BE30	3000	0.055	0.065	0.028	0.045	0.080
CMM-BE35	3500	0.075	0.080	0.035	0.058	0.098
CMM-BE40	4000	0.090	0.100	0.044	0.068	0.116
CMM-BE45	4500	0.112	0.120	0.048	0.086	0.128



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	3°C/5min
Battery life	5h for one battery; 10h for two batteries
Output	USB, WI-FI
Operation Temperature	5°C-45°C
Operation humidity	0-95%, non-condensing
Power	100-240VAC, 50/60HZ
Weight	8.8kg to 10.6kg

### STANDARD DELIVERY

Main unit	1 pc
3mm zircon ball probe	1 pc
6mm zircon ball probe	1 pc
Calibration cone	1 pc
Lithium batteries	2 pcs
USB cable	1 pc
Power adapter	1 pc
Dust cover	1 pc



3mm zircon ball probe (included)



6mm zircon ball probe (included)



calibration cone (included)

### LASER LINE PROBE SPECIFICATION

Code	CMM-CEM-SD	CMM-CEM-HD
Accuracy	±28µm(2σ)	±15µm(2σ)
Working distance	115mm	
Effective scan width	near field 80 mm, far field 150 mm	
Points per line	maximum 4000 points per line	
Scan rate	1200000 points per second	
Laser	class 2	
Weight	536g	

### SYSTEM ACCURACY WITH LASER LINE PROBE

Code	CMM-CEM-SD	CMM-CEM-HD
CMM-CM20S	0.050mm	0.040mm
CMM-CM25S	0.055mm	0.045mm
CMM-CM30S	0.062mm	0.052mm
CMM-CM35S	0.076mm	0.065mm
CMM-CM40S	0.090mm	0.081mm
CMM-CM45S	0.139mm	0.131mm



laser line probe(optional)



DELL laptop (optional)



magnetic base (optional)



electric vacuum base (optional)

#### 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-PP
2mm ruby ball probe	CMM-CEM-RP2
5mm zircon ball probe	CMM-CEM-ZP5
10mm zircon ball probe	CMM-CEM-ZP10
3" straight probe extension	CMM-CEM-SPE3
4" straight probe extension	CMM-CEM-SPE4
60° probe adapter	CMM-CEM-DP60
90° probe adapter	CMM-CEM-DP90
3mm extended ball probe	CMM-CEM-EPB3
6mm extended ball probe	CMM-CEM-EPB6
Probe adapter	CMM-CEM-PA
High accuracy laser line probe	CMM-CEM-HD*
Standard accuracy laser line probe	CMM-CEM-SD*

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



adjustable tripod (optional)