

iOptron CEM40 Fact Sheet

Model	CEM40	CEM40EC
Mount Type	Center-Balanced Equatorial Mount (CEM)	Center-Balanced Equatorial Mount (CEM)
Payload (excl. CW)	18 kg (40 lbs), exclude counterweight	18 kg (40 lbs), exclude counterweight
Mount Weight	7.2 kg (15.8 lbs)	7.2 kg (15.8 lbs)
Payload/Mount Weight	2.5	2.5
Structure Material	All metal, CNC machined	All metal, CNC machined
Exterior Finish	Anodized red/black	Anodized red/black
Latitude Adjustment Range	0~60° (special CW shaft mounting if < 10°)	0~60° (special CW shaft mounting if < 10°)
Azimuth Adjustment Range	±6°	±6°
Tracking Accuracy (PE)	< ±7 arcsec	< 0.25 arcsec RMS (EC)
PEC	PPEC	Real time PEC
Period	400 sec	400 sec
Worm diameter	Φ17mm, Brass	Φ17mm, Brass
Worm wheel/Ring Gear	216 teeth, Ø110 mm, zero backlash	216 teeth, Ø110 mm, zero backlash
Counterweight Shaft	Ø20 x 410 mm (SS, 1 kg)	Ø20 x 410 mm (SS, 1 kg)
Counterweight	4.5 kg (10 lbs) x1	4.5 kg (10 lbs) x1
Mounting Base Diameter	Ø125mm	Ø125mm
Motor	precision stepper motor, 1.8°/128 micor-step	precision stepper motor, 1.8°/128 micor-step
Motor Resolution	0.08 arcsec (200 PPS)	0.08 arcsec (200 PPS)
Transmission	Synchronous belt	Synchronous belt
Hand Controller	Go2Nova 8407+; 8 line 21 character LCD	Go2Nova 8407+; 8 line 21 character LCD
Star Database	212,000+, star identification	212,000+, star identification
Power	DC 12V, 5A (5.5mm/2.1mm plug)	DC 12V, 5A (5.5mm/2.1mm plug)
Power Consumption	0.6A (tracking), 0.9A (GOTO)	0.6A (tracking), 0.9A (GOTO)
AC adapter	100V ~ 240V (included)	100V ~ 240V (included)
Power-down memory	Yes	Yes
Polar Scope	Internal iPolar eletronic polar scope	Internal iPolar eletronic polar scope
Meridian treatment	Stop (0-10° pass), flip	Stop (0-10° pass), flip
Zero position	Automatic zero search	Automatic zero search
Dovetail saddle	iOptron Universal saddle, 5"	iOptron Universal saddle, 5"
Max slew speed	4.5°/sec (1080x)	4.5°/sec (1080x)
Guiding scope/camera	No	No
Guiding Port	ST-4 compatible	ST-4 compatible
Communication Port	USB	USB
GPS	Yes, external	Yes, external
WIFI	External (optional)	External (optional)
Cable Management	DC12V (3A), ST4,USB	DC12V (3A), ST4,USB
Tripod	LiteRoc 1.75"	LiteRoc 1.75"
Hard case	Optional	Included
Operation temperature	-10°C ~ 40°C	-10°C ~ 40°C
Warranty	Two year limited	Two year limited
Price	\$1,998	\$2,998

CEM40G
Center-Balanced Equatorial Mount (CEM)
18 kg (40 lbs), exclude counterweight
7.9 kg (17.4 lbs)
2.28
All metal, CNC machined
Anodized red/black
0~60° (special CW shaft mounting if < 10°)
±6°
< ±7 arcsec
PPEC
400 sec
Φ17mm, Brass
216 teeth, Ø110 mm, zero backlash
Φ28X280 mm, Stainless Steel (1.2 kg)
5kg (11 lbs) X1
Ø125mm
precision stepper motor, 1.8°/128 micor-step
0.08 arcsec (200 PPS)
Synchronous belt
Go2Nova 8407+; 8 line 21 character LCD
212,000+, star identification
DC 12V, 5A (5.5mm/2.5mm plug)
0.6A (tracking), 0.9A (GOTO)
100V ~ 240V (included)
Yes
Internal iPolar eletronic polar scope
Stop (0-10° pass), flip
Automatic zero search
8" Losmandy D & Vixen
4.5°/sec (1080x)
Built in guiding scope and camera, iGuider
ST-4 compatible
USB
Yes, external
External (optional)
DC12V (3A), ST4,USB
LiteRoc 1.75"
Optional
-10°C ~ 40°C
Two year limited
\$2,498