BL690 LARGE AREA BLACK BODY CALIBRATION SOURCE

The BL690 series large area calibration source combine high temperature, unchangeable stability and perfect uniformity. The multi-segmentation temperature control provides a very precision and stable performance. Emitter source temperature control is carried out by a precision digital PID controller. User can pre-set 10 sets parameters to fast heat up the emitter. Eight different plat plate size is available, also custom design is possible.

FEATURE

- Large area plat plate black body
- Emissivity is better than 0.97
- Aluminum surface, high heat uniformity
- Design heat size is much bigger than actual emitted size, that ensures the blackbody have a very high temperature uniformity.
- Pre-set 10 sets of PID parameter can control each temperature range separately, this technology provides fast heating up time, fast stability and long temperature stable time
- Tri-segmentation temperature control technology minimizes the temperature uniformity error from air cross ventilation
- Over temperature protection technology helps heating system turned off automatically in case of measuring temperature is higher 5℃~10℃ than upper limit range
- Custom design are available.

TYPICAL APPLICATION

- Infrared temperature sensors
- Infrared thermal imaging systems
- Spectrographic analyzers

SPECIFICATION

Part Number (P/N)	26L	26G	33L	33G
Temperature range (℃)	50~300	50~500	50~300	50~500
Emitted target size mm	260 x 260	260 x 260	330 x 330	330 x 330
Designed heat size mm	300 x 305	300 x 305	380 x 382	380 x 382
Resolution(℃)	0.01	0.1	0.01	0. 1
Stability (10 min) (℃)	0.02~0.08	0.1~0.2	0.02~0.08	0.1~0.2
Approx. net weight	30kg	30kg	50kg	50kg
Power supply	220V AC, 2.7kW		220V AC, 3.9kW	
Dimension (cm)	58(L) x 78(W) x 42(D)		65(L) x 85(W) x 42(D)	
Emissivity	≥0.97			
Heated emitter type	Flat Plate			
Blackbody uniformity	0.2℃ to 0.2%RD			
Temperature accuracy	0.5℃+ 0.001%RD			
Temperature sensor	Pt100			
Control	Digital PID step control			
Communication	RS485, RS232, USB			

Part Number (P/N)	41L	41G	55L	55G
Temperature range(℃)	50℃~300	50~400	50~300	50~400
Emitted target size mm	410 x 410	410 x 410	550 x 550	550 x 550
Designed heat size mm	460 x 458	460 x 458	610 x 610	610 x 610
Resolution (℃)	0.01	0.1	0.01	0. 1
Stability (10 min) (℃)	0.02~0.08	0.1~0.2	0.02~0.08	0.1~0.2
Approx. net weight	65kg	65kg	78kg	78kg
Power supply	220V AC, 3.6kW		Three phase, 7.8kW	
Dimension (cm)	72(L) x 90(W) x 42(D)		80(L) x 100(W) x 42(D)	
Emissivity	≥0.97			
Heated emitter type	Flat Plate			
Blackbody uniformity	0.2℃ to 0.2%RD			
Temperature accuracy	0.5℃+ 0.001%RD			
Temperature sensor	Pt100			
Control	Digital PID step control			
Communication	RS485, RS232, USB			

SCOPE OF DELIVERY

- BL690 Large area black body calibration source
- Power cord with adapter
- User manual
- Accredited calibration certificate (optional)

ORDERING MODEL NUMBER

- BL690- 26L
- BL690- 26G
- BL690- 33L
- BL690- 33G
- BL690- 41L
- BL690- 41G
- BL690- 55L
- BL690- 55G