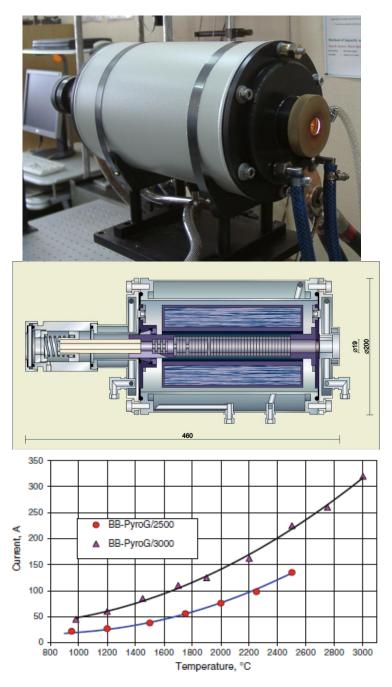


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## **PYROLITIC GRAPHITE HIGH TEMPERATURE BLACKBODY BB-PyroG** for metrological applications

High temperature blackbody model (1300-2800 K, optionally to 3300 K) for metrological applications (radiometry, radiation thermometry), with cylindrically shaped radiation cavity of 10 mm inner diameter (optionally, extended upto 25 mm), made of pyrolytic graphite. Cavity emissivity is 0.9996.



# Company LLC «ULTRATHERM»

## PYROLITIC GRAPHITE HIGH TEMPERATURE BLACKBODY BB-PyroG for metrological applications

#### **TECHNICAL SPECIFICATIONS (BB-PyroG3000)**

Temperature Range, <sup>0</sup> C	800-3000
Radiating Cavity Inner Diameter, mm	10 (optionally: 15 mm / 25 mm)
Cavity aperture	10/12/15 (optionally)
Emissivity in the ranges 1800 – 3300 K and 350 – 2500 nm	$0.9995 \pm 0.0005$
	(with installed 10-mm aperture)
Maximum Current, A	320 (at 3000 °C)
Maximum Voltage, V	25
Service life of Radiator, hrs at 2800 / 3200 K	more 500 / 150
Cooling Agent	Plant water
Operating atmosphere	vacuum or inert gas (Argon)
Orientation:	vertical (for filling fixed-point cells)
	and horizontal (for operation)
Housing Diameter, mm	200
Total length, mm.	460
Recommended water consumption, liter/min. (at 15 °C)	10
Purge gas consumption (main line), liter/m.	3
(gas curtain line), liter/min	0.4

#### DELIVERY SET (BASIC COMPONENTS FOR BB-PyroG3000):

PyroGraphite high-temperature blackbody (BB) model BB-PyroG3000, basic set including:

- BB-PyroG3000 optical source, 1 set;
- DC Power supply PS-400pu (max 400 A @ 36 V), 1 set;
- with 3-phase input at 380V, with electrical input/output cables and interface cables;
- Temperature-control system, including optical feedback detector (with fiber optical cable), current/voltage converter-amplifier FB-2pu with cables, digital multimeter Agilent 34401A (or Keithley 2000), with accessories;
- Vacuum pump with valves, tubing and other accessories;
- Ar gas flow meters with valves and tubing;
- Water tubing for plant water supply;
- BB and PS Technical documentation /operation manuals

#### **SAFETY MEASURES:**

- ♦ Water flow meter alarm.
- No welded seams on the inside BB water-cooled housing including flanges.
- •No water boiling inside cooled housing.

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