



SATURN CYCLOP 878

High temperature primary spherical
Blackbody source, 100°C to 1300°C

The Saturn Cyclop R 878 is a spherical Blackbody source. It consists of an inner black sphere that sits inside a spherical furnace and is suitable for use as a radiation source for infrared thermometers. The furnace can be adapted for thermocouple calibration.

Description

The Saturn Cyclop R 878 is a spherical Blackbody source. It consists of an inner black sphere that sits inside a spherical furnace and is suitable for use as a radiation source for infrared thermometers over the range 100°C to 1300°C.

The inner sphere has a nominal diameter of 230 mm and is accessed by an optical sighting tube. The furnace can be supplied in two different constructions, one providing an aperture size of 17 mm, one of 45 mm.

The furnace can be adapted for thermocouple operation by replacing the inner sphere with an equalizing block and using a different control sensor.

Key features:

- High temperature spherical Blackbody source: 100°C to 1300°C
- Can be adapted for thermocouple calibration

Specifications

Temperature range	100°C to 1300°C
Target size	230 mm diameter
Stability	$\pm 0.1^{\circ}\text{C}$
Emissivity	> 0.999
Heating time	To 700°C: 90 min To 1300°C: 4 h

General specifications

Size	425 mm diameter
Weight	25 kg
Display	Resolution: 0.1°C at 999.9 and 1°C at 1000 / 1300
Power supply	100 / 130 V or 208 / 240 VAC (50/60 Hz) 3000 Watts

Models and accessories

Instrument:

Saturn Cyclop 878-1 High temperature primary spherical Blackbody source, 100°C to 1300°C

Delivered in standard with:

- Control thermocouple 935-14-22
- Cal Notepad software
- Serial communication cable
- User manual
- Traceable certificate
- Voltage supply 208 / 240 V (50/60 Hz)

Saturn Cyclop 878-2 High temperature primary spherical Blackbody source, 100°C to 1300°C

Delivered in standard with:

- Control thermocouple 935-14-22
- Cal Notepad software
- Serial communication cable
- User manual
- Traceable certificate
- Voltage supply 100 / 130 V (50/60 Hz)

Accessories:

ACC-A-R Specific inner sphere, aperture size: 45 mm

878-02-08 Ceramic equalising bloc and tubes for thermocouple calibration, 8 tubes of diameter: 4x 8 mm / 4x 6 mm, length: 180 mm

878 Replacement Blackbody source

935-14-21 Replacement control thermocouple for equalising bloc

935-14-22 Replacement control thermocouple

Packing information:

Size 425 mm diameter

Weight without packing 25 kg