

Large-area Reference Cell BigRef-IV-03 / BigRef-mV-03



Safety Instructions

The installation and assembly of electrical equipment must be carried out by electrically qualified persons. The sensor may not be used with equipment whose direct or indirect purpose is to prevent human death or injury, or whose operation poses a risk to humans, animals or property.

Warranty and Liability

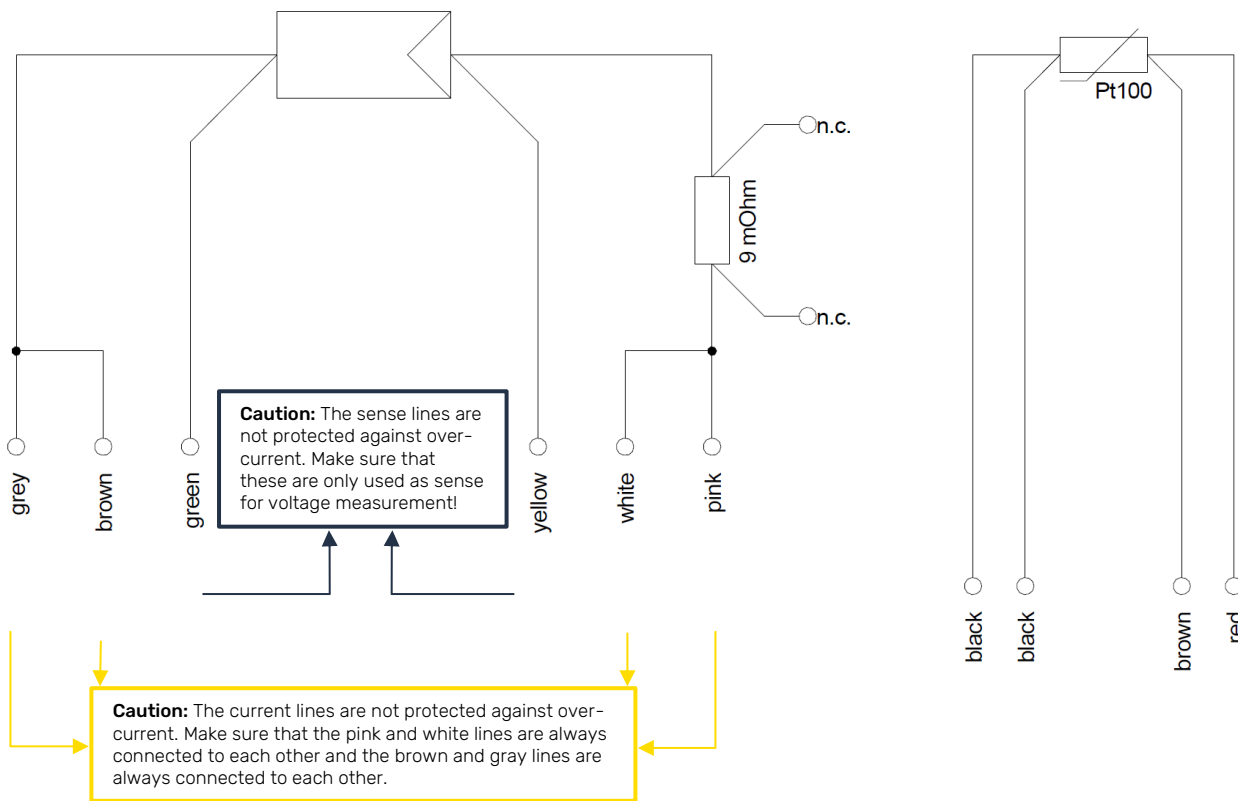
The BigRef is designed for the measurement of artificial sun light. The warranty is for 1 year from the date of the invoice for the intended use. IMT Technology does not accept any liability for possible losses or damage due to the incorrect usage of the sensor. Liability for consequential damages is excluded.

Mounting Instructions

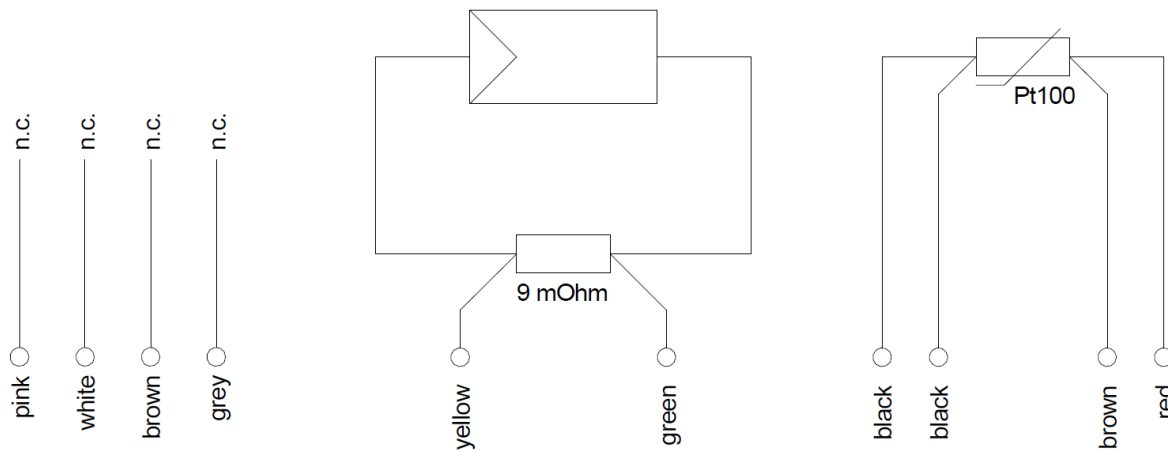
The mechanical assembly is carried out via the four mounting holes in the housing. In order to operate the BigRef within the permissible operating temperature, the sensor must be cooled via the rear side when using continuous light.

Electrical Connection

BigRef-IV-03:



BigRef-mV-03:



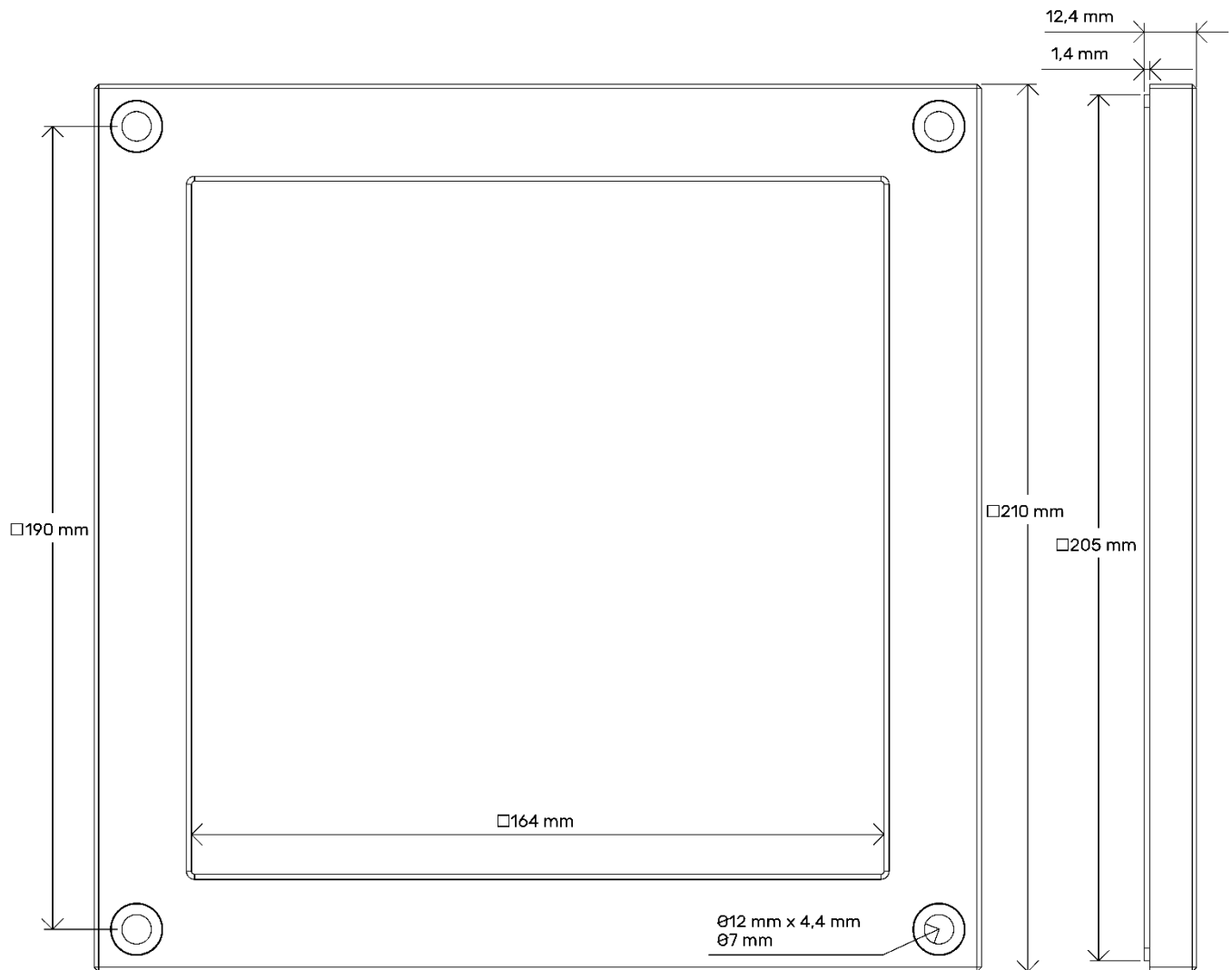
Maintenance

Scope of the regularly check (at least once a year): Cleaning, external damage, mechanical fastening, cable laying and any damage to the cable.
 Should damage be found that degrades the function or safety, the sensor is to be replaced.

Technical Data

Type	BigRef-IV-03	BigRef-mV-03
Signal	IV curve (4-Wire)	Shunt voltage approx. 80 mV @ STC
Shunt nominal value / TC	–	9 mOhm / 15 ppm/K
Sensor element	Mono crystalline PV Cell 156.75 x 156.75 mm ² , pseudo-square Vendor: BigSun, type: B156X1D4A-2020	
Temperature measurement PV cell	Pt100 class A as per IEC 60751	
Case size / protection level	210 mm x 210 mm x 12.4 mm / IP 50	
Case material	Black anodised aluminium	
Cable PV cell	Length: 2 m, shielded, red, ASS 3x2x0.5 mm ²	
Cable Pt100	Length: 2 m, shielded, black, LiYCY 2x2x0.14 mm ²	
Operating temperature	+5 to +70°C	

Dimensions



Scope of Delivery

- Sensor incl. pre-assembled connecting cable
- Instruction sheet

Intelligent Measurement & Testing