Email : sales@scilabexport.com
Phone: +91-7082934803

Product Name :

Teltron Electron Diffraction Tube S

Product Code :

SLE/PHY/54



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Description :

Teltron Electron Diffraction Tube S (Product Code: SLE/PHY/54) is a highly evacuated Teltron S-series electron tube used to make electron interference visible as Debye–Scherrer rings on a fluorescent screen in physics laboratories. Students measure the rings produced by a polycrystalline graphite lattice and use the lattice spacing to find the electron wavelength atanode voltages up to 5 kV. It is supplied by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**,Ambala, India.

Specifications

Parameter	Detail
Series	Teltron S series
Diffracting lattice	Polycrystalline graphite (Debye–Scherrer diffraction)
Lattice constant d10	0.213 nm
Lattice constant d11	0.123 nm
Max. anode voltage	5 kV
Anode current	Approx. 0.1 mA at 4 kV
Max. filament voltage	6.3 V AC
Documentation	Instructions included
Product code	SLE/PHY/54
Supplied by	Jain Scientific Equipments Pvt Ltd (ScienceLab), Ambala, India

What Is the Electron Diffraction Tube S Used For?

In the lab, the Teltron Electron Diffraction Tube S turns an abstract idea — electrons behaving as waves — into bright rings that students can measure. The inner and outer rings correspond to the two graphite lattice plane spacings, d10 = 0.213 nm and d11 = 0.123 nm, so each ring gives its own estimate of the electron wavelength.

A typical run records ring diameters at a series of anode voltages and then compares the measured wavelength with the de Broglie value calculated from each voltage. For departments buying from a physics instruments supplier in India, the tube slots into an existing S-series set-up and needs a filament supply of up to 6.3 V AC plus a high-voltage anode supply.

What to Specify When Ordering

- Whether you need the Teltron Tube Holder S to mount the tube.
- A power supply covering 6.3 V AC filament and up to 5 kV anode voltage.
- Number of tubes for demonstration or student groups.

Supplier

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