

Product Name :

Teltron Electron Diffraction Tube S

Product Code :

SLE/PHY/54

**Description :**

Highly evacuated electron tube for demonstrating the wave nature of electrons through the observation of interference caused by passage of electrons through a poly crystalline graphite lattice (Debye-Scherrer diffraction) and rendered visible on a fluorescent screen. Also intended for determining the wavelength as a function of the anode voltage from the radii of the diffraction rings and the lattice plane spacing of graphite, as well as confirming de Broglie's hypothesis. Instructions included

Specification :**Max. filament voltage:** 6.3 V AC**Lattice constant of graphite :** $d_{10} = 0.213$ nm; $d_{11} = 0.123$ nm.**Max. anode voltage :** 5 kV**Anode current :** approx. 0.1 mA at 4 kV