



**OMEGA TYPE ES-275** Experimental Set-Up has been designed specifically for the study of Hydrogen spectrum and determination of Rydberg's constant with the help of Spectrometer, Diffraction grating and a Hydrogen spectrum tube. The set-up consists of Spectrometer, Diffraction grating, Hydrogen spectrum tube, Transformer etc.

The set up is complete in all respect and requires no other apparatus.

Practical experience on this set up carries great educative value for Science and Engineering Students.

#### OBJECT

To study of Hydrogen Spectrum and determination of Rydberg's constant with the help of Spectrometer Diffraction grating and a Hydrogen spectrum tube.

#### FEATURES

The complete Experimental Set-up consists of the followings :

##### 01 SPECTROMETER STANDARD:

6" dia circle reading 30 seconds. The objectives used in telescope and collimator are achromatic and provided with rack and pinion focusing arrangement. Telescope arm and prism table are provided with fine and coarse adjustment. The

prism table is provided with three leveling screws and is engraved with concentric rings & lines. The scales and verniers are of stainless steel and are machine divided. Clamping devices are also provided to lock telescope and collimator after adjustment with prism clamping device and diffraction grating stand.

**02 DIFFRACTION GRATING:** Hilger & Watts Type, 15000 line per inch/6000 lines per cm.

**03 HYDROGEN SPECTRUM TUBE:** High intensity, with stand having back reflecting surface.

##### 04 TRANSFORMER :

High voltage, for Hydrogen spectrum tube.

05 Reading Lens : 50 mm diameter with handle.

06 Spirit Level : 60/80mm length

07 Weight : 13.4 Kg. (Approx.)

08 Dimension : W 145 x H 140 x D 200

09 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

## OMEGA ELECTRONICS

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