

Date d'édition : 22.05.2026



**Ref : 4747119**

**Manuel pédagogique fibres optiques en verre (en anglais)**

The manual for the glass fibre experimental kit provides the comprehensive theoretical treatment based on Maxwell's equation adapted for the light conductors. The resulting wave equations are solved with Bessel and Hankel functions. The numerical aperture, cut off wavelength and fibre modes are derived from these calculations. In a next part laser diodes are described in detail and their application in telecommunication introduced. Finally photodetectors are briefly introduced. Within the practical part the setup and measurements are explained step by step.