

Fun with optics: an education kit with a difference

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Abstract

Optics kit as traditionally developed comprises of a light source, typically an LED and various optical components such as lenses, mirrors, diffractive elements and filters which demonstrate basic concepts of optics such as reflection, refraction, diffraction and light. While they do provide basic concepts of optics – they do not generally show how these are used in actual engineering systems. With this in mind, the current OpticsKit is developed which gets the students starting in primary school to appreciate what optics can do for you by allowing them to ‘play’ with some well know optical devices. This helps them appreciate the capabilities of the system and as they progress to secondary schools and Universities the same kit can be extended to not only pique their interests in optics but more broadly in optical engineering systems. In this paper, we will discuss the basis of this kit and how it can be used at different levels of study.