

## DETECTORS FOR IMAGING IN RADIATION THERAPY

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**Abstract.** *Despite the many advances in patient positioning, dose deliverance as intended remains a difficult practical issue due to a number of complicating factors. Various techniques and methods have been developed over the years for accurate patient positioning. It has long been recognized that the use of the therapy x-ray beam itself to create portal images can be of significant benefit in assuring correct delivery of the radiation dose. The present study is a brief overview of the detectors incorporated on electronic portal imaging devices imposed by the nature of the application and the physics of the imaging source. It is a summary of the challenges and constraints inherent to portal imaging along with a concise, historical review of the technologies that have been explored and developed. This is followed by a detailed description of a new, high performance, portal imaging technology, which is presently undergoing commercial introduction.*

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