

TELEDYNE HASTINGS

INSTRUMENTS

APPLICATION NOTES

Goal: High Resolution Medical Diagnostic Imaging

Solution: The Hastings HPM-760S, Vacuum Sensor



High resolution is critical to the efficacy of medical diagnostic imaging. Portability is an important feature for system efficiency. Hastings Instruments supports both of these needs. The HPM-760S, Vacuum Sensor, with its Piezo sensor provides a stable, accurate and repeatable vacuum measurement. Its compact size and ability to operate as a stand-alone device aids in system development.

In general, a system produces a diagnostic image by maintaining a vacuum state in a magnetic chamber where Helium molecules are excited and made to rotate in a unidirectional path. The quality, or resolution, of the resulting image is dependent upon the vacuum state in which the Helium atoms are contained.

With its linear output, the Hastings' sensor allows the user to accurately correlate image resolution throughout the material density within the chamber vacuum. In addition, the compact nature of the HPM-760S Vacuum Sensor, provides exceptional portability.