

"Gheorghe Asachi" Technical University of Iasi, Romania



CHARACTERIZATION OF ELECTROMAGNETIC RADIATION FROM A PATIENT MONITOR

Ionuţ Nica*, Valeriu David, Vlad Dafinescu, Alexandru Salceanu, Cristian-Győző Haba

"Gheorghe Asachi" Technical University of Iasi, Faculty of Electrical Engineering, 23 Dimitrie Mangeron Street, 700050 Iași, Romania

Abstract

The paper is focused on the measurement of the electromagnetic fields emitted by a health-monitoring equipment. The research plan addressed some representative points surrounding the medical device. Both time and frequency domain measurements were made for three frequency range covering $30~{\rm Hz} \div 3~{\rm GHz}$ frequency domain. For every frequency range, two different measurements systems were used, allowing the possibility of a comparison, in order to obtain a better field source characterization and to identify the most adequate measurement methods.

Key words: electric field measurement, electromagnetic interference, magnetic field measurement

Received: December, 2010; Revised final: March, 2011; Accepted: April, 2011

_

^{*} Author to whom all correspondence should be addressed: e-mail: inica@ee.tuiasi.ro; Phone: +40-728-313498; Fax: +40-232-237627