

Optical Systems and Applications

Department

Electronics, Computers, Telecommunications and Control

Main Team Members

- Konstantinos Aidinis, Associate Professor
- Dimitrios Marinos, Research Student
- Manolis Kyriakos, Postgraduate Associate

Short Description

Implementation, Optimization and Application of Optical Systems in Communications, and Measurements

Selected Publications

- D. Marinos, F. Leonidas, N. Vlissidis, C. Giovanis, G. Pagiatakis, C. Aidinis, C. Vassilopoulos, T. Pistner, N. Schmitt, J. Klaue, "Medical and Safety monitoring system over an in-cabin Optical wireless network", International Journal of Electronics June 2010
- D. Marinos, C. Aidinis, N. Schmitt, J. Klaue, J. Schalk, T. Pistner, C. Vassilopoulos, P. Kouros, "Performance Analysis of Modulation Schemes for Wireless Optical In-Cabin Aircraft Networks", IEEE - International Telecommunications and Informations Symposium, Kuala Lumpur, Malaysia, June 2010.
- D. Marinos, K. Karras, P. Kouris, C. Vassilopoulos, C. Aidinis, G. Pagiatakis, P. Kouros, N. Schmitt, T. Pistner, J. Klaue "Portable medical monitoring device for indoor environments with wireless optical communication capabilities", IEEE -DATE conference, Dresden Germany, March 2010
- D. Marinos, A. Katsiampa H. E. Nistazakis, C. Aidinis, E. Tsilis and G. S. Tombras "PN-Sequence Impulse Response Measurement for Wire-less Optical Communication Channels". Masam Journal of Computer Science (MJCS), ISSN 2224-3704, Vol 1, Issue 1, Jan 2012

Research Projects

- Mid-Term Networking Technologies In-Flight and Rig Validation for Avionic Applications, 6th Framework: Specific Targeted Research / Innovation (7/2007-7/2010)

Partners: Deutsches Zentrum für Luft- und Raumfahrt e. V. DE, EADS Deutschland GmbH - Corporate Research Center Germany, IN.SI.S. SpA, SAGEM Défense Sécurité, Technological Educational Institute of Piraeus, Thales Communications

Objectives: Validate on aircraft and in-flight free space optical communication technologies, both for intra-cabin and outside-aircraft communications.