Designing Miniature Wireless Video Sensors

Video wireless networking is already a reality. Miniature, low cost nodes with color camera, radio and power source are being readily deployed in the field - factories, stores, public buildings, home or business. The future holds even more promise as these continually shrinking nodes find applications in medicine, surveillance, covert operations and any number of yet to be discovered applications.

By Bar-Giora Goldberg

The natural evolution of environmental sensing, reflecting our need to know our indoor and outdoor environments, is progressing toward ubiquitous distributed wireless sensor networks. *Sight* is our most fundamental sense.

The underlying capability is of a large distributed network of small, low-power, low cost nodes, sensing the environment and then telemetering the information, wirelessly via the network, to a data or command center for further processing. However, this technology is still in the emerging stages of deployment. It is being deployed, initially to enable short messages from sensors that contain limited information files such as motion detection, temperature, pressure, seismic measurements and magnetic field indications along with visual networking.

Due to the equations in this article, we have made a PDF [1] available for you to download.

Links:
[1] http://www.wirelessdesignmag.com/pdfs/Feature3_0606.pdf