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Li-Fi: Concept, Use-cases and Progress

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Abstract

LiFi is high speed, bidirectional, networked and mobile wireless communications using light. It is a new and exciting area of research as well as a disruptive new technology for commercialization. LiFi promises quantum leaps in improving the data density of existing wireless systems. According to Dr. Preston Marshall, Principal Wireless Architect at Google, Data density is the new optimization metric for Small Cell deployments - Mbps/sqm. However, while solving the long term spectrum crunch was the initial spark to develop LiFi, the technology is incredibly versatile and cuts across multiple different market verticals.

Light is very directional, it does not penetrate opaque objects and is used everywhere. Therefore, LiFi leverages 4 key competitive advantages relative to existing wireless communication systems: (i) security, (ii) safety, (iii) localization and (iv) data density.

This talk will explore some of the key technology advancements that are driving LiFi development, the application areas of the technology, and the pivotal market trends that will result in the world wide adoption of LiFi solutions.