

Abstract

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Visible Light Communications for Healthcare Applications

Visible Light Communications (VLC) is fast becoming an attractive alternative communications platform to both optical fiber and radio frequency (RF) implementations, because of its low cost, ease of deployment, license free spectrum operation and freedom from interference. With VLC system, lighting used for illumination is overlaid with a wireless communications capability. Radio frequency communications in the licensed band can provide higher capacity but spectrum licenses are expensive while RF in the unlicensed band is limited in bandwidth both licensed and unlicensed band interferes with existing networking and indeed sensing infrastructures.