

A small 915mhz receiving antenna for wireless power transmission aimed at medical applications

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Abstrak

Wireless power transmission is being investigated as a means to operate tiny medical devices such as the capsular endoscope, which is able to exist for a long period during diagnostic procedures within the body. In this paper, we examine the wireless power transmission to a capsular endoscope by electromagnetic waves to show its usability for medical applications. A modified helical antenna inside the endoscope is proposed as a power receiving antenna, operating at 915 MHz. By calculating a maximum received power in the stomach using such antenna, the results show that adequate power can be well received.