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# Arduino-Based Wireless Frequency Meter

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**Abstract:** *A wireless frequency meter is an essential tool used for the detection, measurement, and analysis of frequency signals in wireless communication system This device operates by capturing electromagnetic signals transmitted over the air and accurately determining their frequency. Traditional frequency meters require a wired connection, but wireless frequency meters eliminate the need for physical connections, improving convenience and mobility in various applications, including telecommunications, signal processing, and spectrum management me. he development of a wireless frequency meter involves integrating a receiver with signal processing components, capable of analyzing and displaying the measured frequencies in real-time. Advances in digital technology allow these devices to cover a wide range of frequencies, from low-frequency bands to gigahertz ranges used in modern wireless communication. Key features often include high precision, low power consumption, and the ability to operate in environments where interference and noise are common*

**Keywords:** wireless frequency meter



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