

Self-oscillating magnetic field converter for wireless sensor networks comprises a DC voltage source, the first terminal of which is connected to the first terminal of the first capacitor and the first terminal of an inductor, the second terminal of which is connected to the collector of a bipolar transistor, as well as a first resistor. It includes a magnetically sensitive field-effect transistor, a second resistor, a second capacitor, and an output capacitor. The first terminal of the DC voltage source is connected to the first terminal of the second capacitor, the first terminal of the output capacitor, and the drain of the magnetically sensitive field-effect transistor. The second terminal of the first capacitor is connected to the first terminal of the first resistor and the first terminal of the second resistor, the second terminal of which is connected to the common wire. The first terminal of the first resistor is connected to the base of a bipolar transistor, whose collector is connected to the drain of the magnetically sensitive field-effect transistor and to the first terminal of the output capacitor, the second terminal of which is the output terminal, as well as to the first terminal of an inductor, the second terminal of which is connected to a common wire.