

Title (en)  
CONSUMPTION METER WITH INTEGRATED DUAL BAND ANTENNA

Title (de)  
VERBRAUCHSMESS MIT INTEGRIERTER DUALBANDANTENNE

Title (fr)  
COMPTEUR DE CONSOMMATION EQUIPE D'UNE ANTENNE DOUBLE BANDE

Publication  
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Application  
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Abstract (en)  
[origin: WO2005091433A1] The invention relates to a wireless readable consumption meter with an integrated microstrip dual band antenna. A resonator of the antenna exhibits a 1/4-wavelength first resonance within the frequency interval 400-500 MHz and exhibits a 3/4- wavelength second resonance within the frequency interval 800-1000 MHz. Preferably, the microstrip antenna part is formed on a printed circuit board that also forms an integral part with transmitting electronics and optionally other electronics parts of the meter so as to enable a compact design. The antenna is capable of for example a lower frequency of 434 MHz (ISM) and a higher frequency of 910 MHz (GSM) or 868 MHz (ISM). Preferably, the consumption meter is mounted within a protection casing also serving to provide a predetermined distance between the antenna and a surface on which the consumption meter is mounted. The casing may in addition have one or more electrically conductive surfaces which may form together with the antenna a resonator near the operating frequencies of the dual band antenna. The invention relates in addition to a system of consumption meters of the above type comprising wireless receiving means enabling the meters to wirelessly interchange measured quantity values.

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