

A log-periodic antenna relates to microwave antenna technique and may be used in VHF and UHF radio systems for radiation or absorption of electromagnetic waves over wide range with different orthogonal polarization in telecommunication radio access systems, television systems etc. The log-periodic antenna comprises a support, a power supply unit, a coaxial two-wire line with mutual perpendicular orthogonal low- and high-frequency log-periodic structures of main dipoles fixed to it, close to that complementary dipoles with Z-shaped bend angle of  $80-100^\circ$  at the ends of adjacent main dipoles are installed, in the plane being orthogonal to the coaxial two-wire line. Each of complementary dipoles is secured on the coaxial two-wire line in parallel to the correspondent main dipole at the distance of  $(0,001-0,01) \lambda_2$  to the said dipole. In Z-shaped bent parts of complementary dipoles, variable inductance elements are connected. The technical result is provision of improvement and independence of directional diagrams and antenna impedance from any ratio of resonant frequencies of main and complimentary dipoles, reduction of complimentary dipoles length and provision of slow adjustment of the antenna in VHF range.