Low Level RF System for the ANKA Storage Ring, A. FABRIS, M. SVANDRLIK, Sincrotrone Trieste; D. EINFELD, F. PEREZ, S. VOIGT, FZK - For the storage ring of the synchrotron light source ANKA, under construction at FZK Karlsruhe, Germany, an RF system composed of two 250 kW power plants, each one powering two 500 MHz ELETTRA type cavities is foreseen. The low level system, based on ELETTRA experience, will include a frequency loop for each of the four cavities, an amplitude loop and a phase loop for each RF plant. The frequency loop will keep each cavity tuned with a precision which can be set either to 100 or 500 Hz. The cavity resonant frequency can be offsetted in comparison to the generator frequency to prevent Robinson instabilities. The amplitude loop will keep the sum of the two cavity gap voltages stable in 1% acting on the driving power of the plant. Finally, the phase loop will keep the phase stability of the output power of the RF plant within 0.5 degrees at any power level. A general description of the system and the status of the design and construction is reported in this paper together with some considerations on the effects of the beam-cavity interaction on the whole RF control electronics.