

New Features of the Elettra BPM System,
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The detector for the ELETTRA Beam Position Monitor (BPM) system is based on a multiplexed receiver which demodulates the beam induced signals at 500 MHz. During routine operation a strong dependence of the single BPM readings on the actual beam conditions has been observed particularly when low frequency oscillations (LFOs) are present in the longitudinal plane. In this paper the observed data are presented and the proposed solution is described. The method consists of measuring the LFOs with the already installed anular electrode and applying a correction signal to the newly developed IF stage of the BPM receivers. To allow a more flexible commissioning and operation of this system, a dedicated micro-processor based board has been developed. This newly designed unit manages the anular electrode receiver as well as its communication with the BPM Equipment Interface Units (EIUs). Preliminary results of the new system are also presented.