



METHODOLOGY DEVELOPMENT FOR COSTS REDUCTION OF ELECTRONIC MEASURERS OF ELECTRIC ENERGY – MACAF

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Abstract — This work treats on the development of a software calibration methodology called MACAF – Phase and Amplitude Correction Adaptative Methodology – developed and applied in an electronic power meter prototype to decrease its production costs. The prototype is based on simple and consistent hardware architecture, with the utilization of cheap sensors, being developed and tested at IEE/USP laboratory in order to validate the MACAF methodology over the range of nominal current and voltage parameters where the prototype is indicated to operate. This methodology allowed the energy meter prototype to be typed as 0.5% class.