

Introduction of a digital LLRF system at the STF vertical test stand at KEK

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The main goal of the superconducting radio frequency (SRF) group at KEK is the development and research of 1.3 GHz SRF cavities. The performance of the prepared cavities is measured within a vertical cryostat, which is operated at the Superconducting RF Test Facility (STF) at KEK. Until now the required RF is controlled by an about 30-year-old analog system. We are in the process of replacing it in collaboration with DESY with a state-of-the-art MicroTCA.4-based LLRF system, which allows continuous wave (CW) operation controlled by a self-excited loop (SEL).

Keyword

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