

Title: Single-phase inverter dual-loop control

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**Abstract:** This letter proposes an adaptive Lyapunov-based control strategy for a single-phase uninterruptible power supply inverter with inherent dual control loops.

In this paper, a modified multi-loop control method with the minimal sensors is proposed for the single phase stand-alone inverter. The multi-loop control scheme uses two estimated variables ...

This paper presents a simplified hybrid modulation method for operating dual-active-bridge (DAB) converters that power inverters by integrating single-phase shift (SPS) and triple-phase shift (TPS) ...

In this paper, a novel dual closed-loop repetitive control strategy based on grid current feedback is proposed for single-phase grid-connected inverters with LCL filters.

A new approach of dual closed-loop control strategy is proposed, and the internal cause of the inverter output voltage waveform distortion is analyzed in this paper.

This paper presents a double-closed-loop PWM design and control method for single-phase inverter current inner loop and voltage outer loop. By establishing the mathematical model of the single ...

The utility model adopts a double-closed-loop control method, which has higher steady-state precision than the general digital closed-loop, has high-quality output waveforms, and has good...

In this paper the design of synchronous frame DQ control based double loop control for single phase inverter in distributed generation system is proposed. For synchronous frame...

This article presents a comprehensive analysis and design of a dual-loop plus time-delay hybrid control strategy for single phase inverters, addressing these limitations through a novel ...

The control of single phase inverter for distributed generation is proposed in this paper. The Dual loop control



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with synchronous frame control for single phase inverter is analysed in the ...

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