

MEDIA ARTICLE

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PCD: Pockels Cell Driver

DRIVER

... for Pockels cells

The 10 kV and 3 kV Pockels cell drivers are EOS Optronics's latest development in high voltage, high frequency and fast switching power supplies. The driver modules are developed to safely and reliably provide the fast and high voltage switching required to drive the latest Pockels cells in high power laser applications. Pockels cells can be used for regenerative amplifiers, pulse slicers (pulse picker), and other fast optical switching systems in laser systems. The devised driver electronics for the actual Pockels cell is specifically characterized such that even two Pockels cells with total load up to 12 pF can be connected and simultaneously driven with a fast slope of 9.5 kV in less than 11 ns, even at high laser repetition rates of up to 2 kHz. A variable and low jitter impulse width from 80 ns to 2.3 μ s is attainable for the 10 kV unit. For the 3 kV driver, the typical pulse width is 8 ns for a load of up to 12 pF.

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