

# ZGX — Fast Dynamic Performance, Meets Aviation Test Requirements.

The China national aviation industry standard HB 20326.7-2016, "Test Methods for Power Supply Adaptability of Aircraft Electrical Equipment, Part 7: DC 270V," details the verification test methods for the adaptability of DC 270V electrical equipment for aircraft. It is applicable to the power adaptability tests of DC 270V electrical equipment in aircraft systems that comply with the GJB 181B-212 regulation. The "HDC201 power supply conversion interruption" in the standard sets high requirements for the dynamics of the DC simulation power source, where the input DC voltage of the device under test must fall from a steady-state value to 0V and rise from 0V to a steady-state value in a time  $\leq 250\mu\text{s}$ .

Similar requirements are also seen in MIL-STD-704 and related other standards.

BriPower's ZGX and KGS AC/DC power sources, based on SiC power devices, have a wide output frequency range and fast dynamic performance. They fully meet the requirements of the relevant aviation standards for simulation power sources.

The output waveforms are shown in the figures below.



Figure 1: ZGX DC Mode Voltage Rise

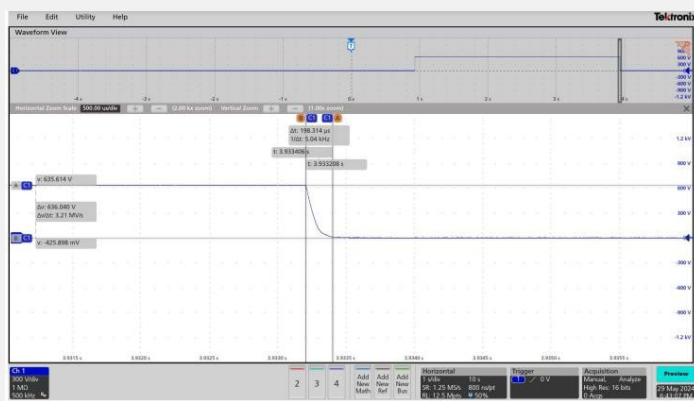


Figure 2: ZGX DC Mode Voltage Fall

**Taking the ZGX DC mode voltage dynamics as an example, under open circuit output conditions, the DC voltage rise time from 0 to 636V is less than 190 $\mu\text{s}$ , and the fall time from 636V to 0 is less than 200 $\mu\text{s}$ .**