

Your power testing solution.

ITECH

Everything can be in the ring

Q: What is hardware-in-the-loop simulation?

Hardware-in-the-Loop, also known as hardware-in-the-loop simulation, is a simulation system that puts part of the system hardware to be tested into the simulation loop.

Q: What are the advantages of this emulation?

This kind of simulation not only makes up for many defects in pure digital simulation, improves the confidence of the whole model, but also can greatly reduce the workload of programming. Another advantage is that it realizes real-time data interaction between the simulation model and the actual system, making the verification process of the simulation results very intuitive and greatly shortening the product development cycle.

Q: What is the rationale for simulation?

Output 0-10V analog quantity through high-speed analog board programming or signal generator programming, pour it into the input terminal of digital amplifier or linear amplifier, make it output controllable waveform in equal proportion, high-efficiency simulation test.

With the rapid development of the new energy industry, users are constantly looking for amplifiers with higher power and higher voltage to complete high-power testing.

ITECH's new generation of high-performance AC power supply IT7900P family provides a high-efficiency, small-sized hardware-in-the-loop simulation solution. The core parameters are as follows:

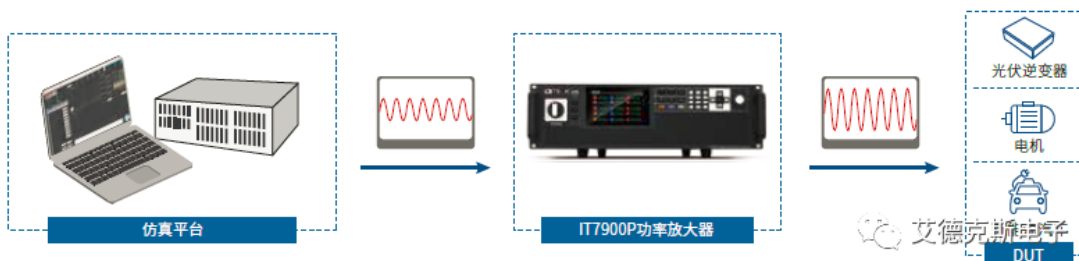
High power density: 3U@15kVA supports four-quadrant operation

Bandwidth: 2400Hz

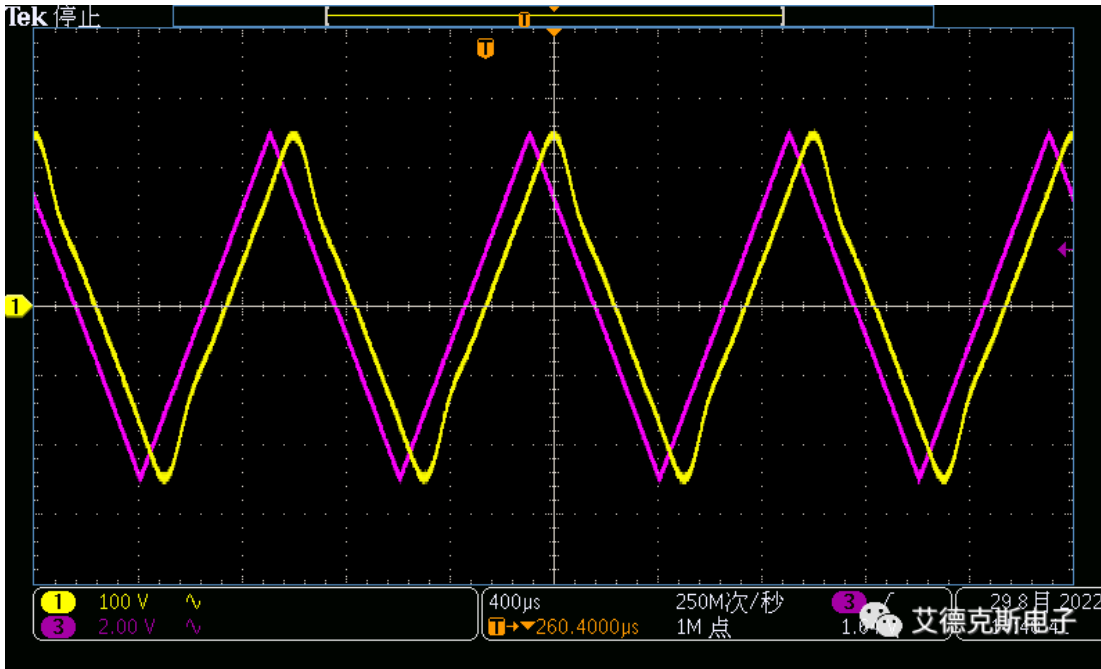
Delay time: 65us

Typical waveform rising and falling speed: 2.5V/us

ITECH power hardware-in-the-loop simulation test structure:



1kHz triangle wave measured:



1kHz sine wave measured:



With the rapid iterative development of electronic technology, IT7900P/IT7900 series power grid simulator launched by ITECH has high power and small size, rich working modes and ultra-fast response speed, which can meet the testing requirements of new energy and other scenarios.

