

Power Supply Test Solutions

Agilent Technologies and FineTest

Reliable, repeatable and automated measurements on your power supplies

A reliable power supply is fundamental to the operation of all electronic products. When specifying a test system for your power supplies you have to make the decision of whether to design and build in-house or use an external supplier. With today's resource limitations and cost constraints the decision is more often to go outside.

FineTest has over 35 years experience designing power supply test systems. The company has numerous systems installed in military and commercial organizations, in production and repair environments. In creating its power supply test solutions, FineTest uses a

proven design that is easily configured for different input and output needs. The FineTest FT600 design uses an open architecture and standard control buses that facilitate the creation of the power supply tester, supports custom requirements and allows for future expansion. Systems can be designed to meet all of your standard and custom testing needs.



Standard Power Supply Tests

FineTest power supply test systems can be designed to include a comprehensive set of standard power supply tests including,

- Inrush current amplitude and duration
- Output voltage
- Input power
- Efficiency and power factor
- Current distortion and harmonics
- Line and load regulation
- Ripple and noise
- Over-voltage protection (OVP)
- Current limit
- AC drop-out, sag and surge, phase drops
- Timing tests: Power-on time, hold-up time, signal to signal timing (ex. output off to power fail hi)
- Current share
- Hot swap and redundancy
- EEPROM programming and verification
- JTAG, RS-232/422/485 and I²C communications to the UUT
- Integrated thermal stress and temperature cycling

Power Supply Test Solutions

FineTest uses standard lab quality instrumentation in their designs. This gives the advantages of reliability, worldwide support, ease of calibration and correlation with bench instruments. The systems can use a wide variety of Agilent test equipment including the 3499A and 34980A switches, 33220A function generator, 34401A DMM, DSO5000 series oscilloscope, 6800 Series AC power sources, N33000A electronic loads, and programmable DC power supplies.

Test systems are available on a variety of different language platforms including Agilent Technologies VEE Pro. Agilent VEE Pro in conjunction with FineTest's FineSoft software is used to fully automate the testing procedures. VEE Pro provides a powerful industry standard graphical test programming language while FineSoft provides a package of instrument drivers, program shell and test library tailored to power supply testing.

With FineTest's test systems built around Agilent's instrumentation and software you can now make reliable, repeatable and automated measurements on all your power supplies.



Typical FT600 system

www.agilent.com

For more information on Agilent Technologies' products, applications or services, please contact your local Agilent office. The complete list is available at:

www.agilent.com/find/contactus.



FineTest has over 35 years experience of designing and producing test systems for power supplies and electronic sub-assemblies.

www.finetest.com

Product specifications and descriptions in this document subject to change without notice.

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Ordering Information

Agilent Technologies

3499A	Switch family
34980A	Multi-function switch/measure unit
33220A	Function/arbitrary waveform generator
34401A	Digital multimeter
DSO5000 series	Oscilloscopes
68xx series	AC power sources
N33000A	Electronic loads
VEE Pro	Graphical language environment

FineTest

FT600

FineTest power supply test system



Agilent Technologies