



FineTest

www.finetest.com

Power Supply Test Systems
Military/Aerospace and Commercial



Functional ATE & Power Supply Testers



Military and Aerospace Test Systems

Functional ATE Systems

Power Supply Test Systems

Hi-Pot Test Systems

ESS / Burn-In / Vibration Monitoring Systems

Manual Test Systems

Test Fixtures and ITAs

Box Builds and Sub-Assemblies

Switching and I/O Cards

Custom Cabinets and Accessories



FineTest 1 Industry Drive, Palm Coast, FL 32137 Tel: (386) 569-6189 Fax: (386) 446-0463 email: sales@finetest.com

Functional ATE & Power Supply Test Systems



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Military and Aerospace Test Systems



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Military and Aerospace Test Systems

FineTest Test Systems are used in support of projects for direct Military/Aerospace and subcontractors including the following:

US Air Force

US Navy

Raytheon

Lockheed-Martin

Harris

BAE Systems

DRS Technologies

GE Aviation

Boeing

Honeywell Flight Division

North Atlantic Industries

Motorola Satellite

Israel Aircraft Industries

Aselsan

Sandia National Labs



Power Supply Testers

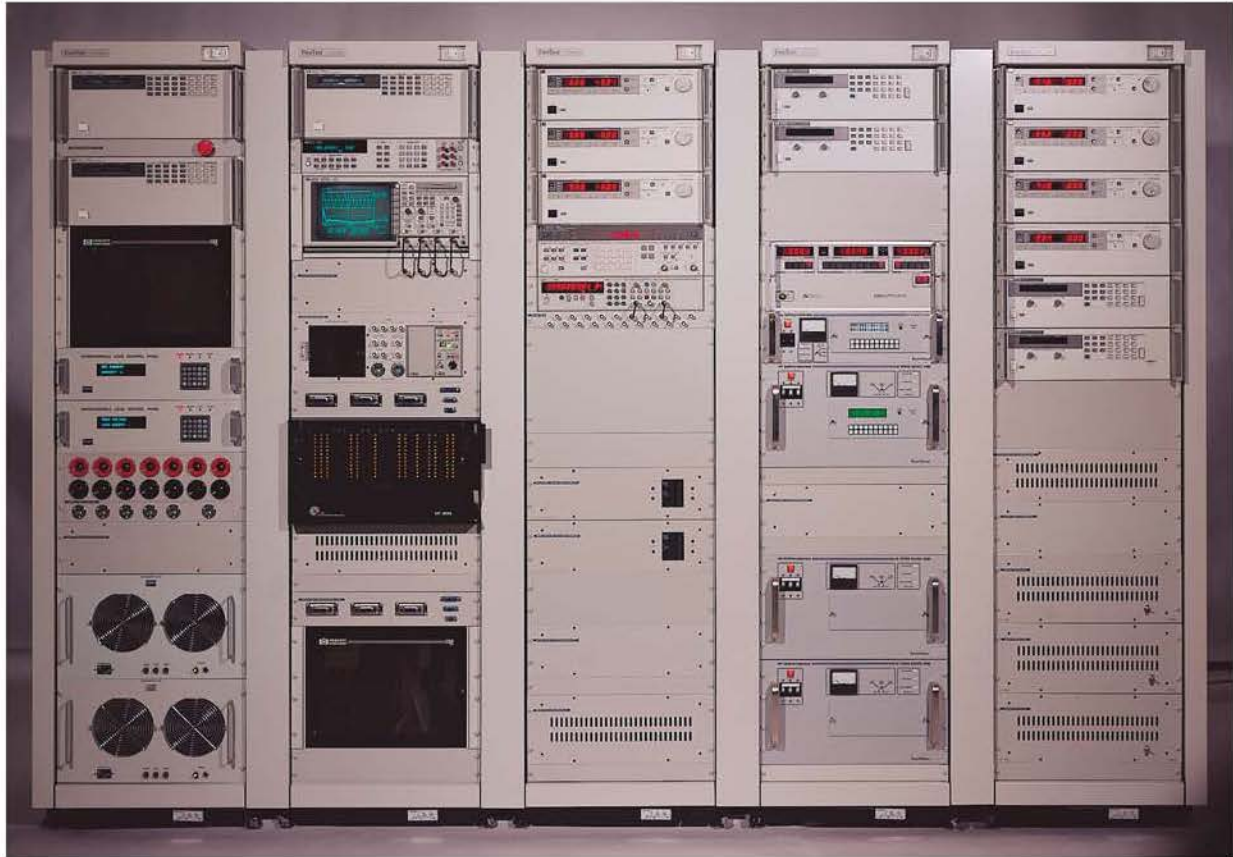
MILITARY & AEROSPACE TEST SYSTEMS



Front view of Tester

Application: Military AC/DC and DC/DC Power Supplies and Sub-Assemblies
Repair and Test Depot

Features: FineSoft on LabWindows CVI platform
2 Testers connected with Ethernet Hub to Dedicated Server
GPIB Test
128 x 8 Bus Matrix System
Turn-key Multiple Testers including:
ATE, Interface Test Adapters (ITAs), and Test Program Software (TPS)



MILITARY & AEROSPACE TEST SYSTEMS

Full front view of Tester without Table

Equipment: Function Generator
Timer Counter
Current Probe
Valhalla Power Meter
8 1/2 Digit Multimeter
3 Phase AC Source 4.5 kVA per Phase
Single Phase AC Source 1.5 kVA
12 Programmable DC Power Supplies
15 Electronic Loads
2 C Size VXI Mainframes for switching
User Selectable High Frequency Filter

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Power Supply Testers

MILITARY & AEROSPACE TEST SYSTEMS



Front view of duplicate Tester #2



Tester #2 without Table



Close-Up of Differential and Current Probes



System Calibration ITA



System Self-Test ITA
with Cover open
showing wiring

**San Antonio Air Logistics Center
Kelly AFB, Texas**



POWER SUPPLY TEST CENTER

The Advanced Power Supply Tester (APST) is the state-of-the-art system for testing most power supplies and low frequency analog assemblies. The APST is a commercial system produced by FineTest. The tester contains lab quality instrumentation and is programmed using GUI icon based software.



Facilities . . .

The Advanced Power Supply Tester is part of the Airborne/Engine Electronic Software section within the Mission Critical Computer Resources (MCCR) Software Division and it is located in building 178.

MILITARY & AEROSPACE TEST SYSTEMS

Flyer from Kelly AFB about the Testers



Acceptance Test and Training



Power Supply Tester

MILITARY & AEROSPACE TEST SYSTEMS



Full front view of Tester

Application: Military Power Supplies
Engineering & Production Test

Features: Dual Virginia Panel and ARINC front panel interface
FineSoft on NI LabWindows/CVI and TestStand platform
Spectrum Analyzer, Dual 20kW DC Input to UUT
FineTest Dual DC Interface Unit with
High Power Programmable Frequency
AC Insertion to test UUT AC Rejection





Front View showing ARINC Drop Down Interface

MILITARY & AEROSPACE TEST SYSTEMS



Rear View showing side doors open for easy access

 **FineTest**
www.finetest.com

Power Supply Tester

continued...

MILITARY & AEROSPACE TEST SYSTEMS



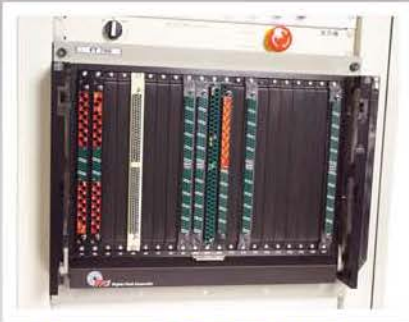
Front view of Tester showing all equipment on pull out shelves



Front view close-up of DC Interface on pullout shelf showing easy access



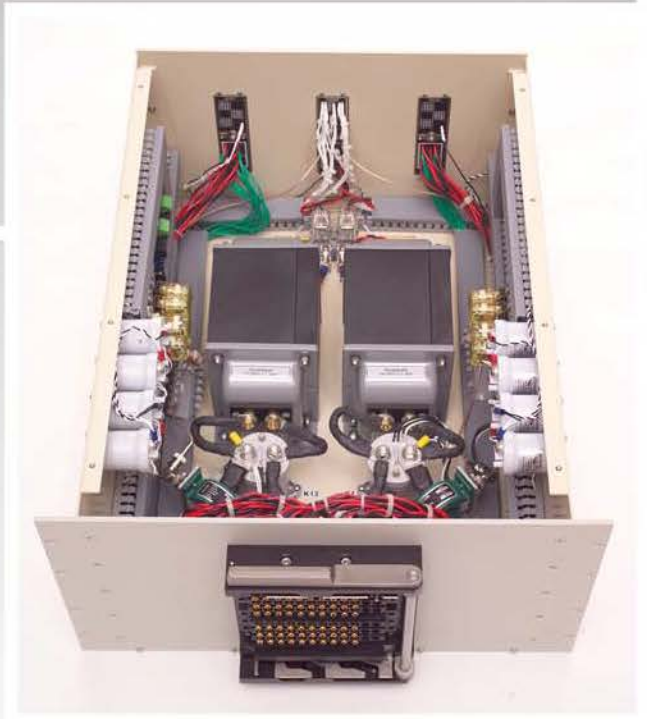
Acceptance Test and Training



Close-up ARINC Interface



*Close-Up ARINC Interface dropped down showing VXI Chassis and Cards
(All signals routed through Ferrite Cores)*



*FineTest Dual DC Interface Unit
with High Power Programmable Frequency
AC Insertion to test UUT AC Rejection*



MILITARY & AEROSPACE TEST SYSTEMS

Avionics Manual Test Stations

MILITARY & AEROSPACE TEST SYSTEMS



Front view of Avionics Manual Test Station #1

Application: Avionics Manual Test Station

Features: Manual Switches for UUT Digital I/O and Control,
Loads On/Off, Power On/Off,
Multiple Test Point Connections to Scope or DMMs
Computer Communication to UUT, Fixture with Safety Cover





Front view of Stations #1 and #2



Interface Unit is on Slide-Out Shelf,
with removable Top and Front Door

DC Monitoring Systems

MILITARY & AEROSPACE TEST SYSTEMS



Front view of two DC Monitoring Systems

Application: Military Design Verification Test

Features: Virginia Panel front panel interface
FineTest Monitoring Software





FineTest Software monitors all DC Inputs to UUTs with Data-Logging

MILITARY & AEROSPACE TEST SYSTEMS



Accessory Storage Drawer



Cable Access in Front for Clip-On Meter



Pull-out Keyboard Shelf for Data Entry



Side Doors for Easy Access



All Cabling through Ferrite Cores to minimize noise



Power Distribution DVT Tester

MILITARY & AEROSPACE TEST SYSTEMS



Front view of Design Verification Tester

Application: 100 Output Power Distribution Test

Features: Drop-Down Virginia Panel front panel interface
FineSoft on LabWindows CVI platform
CAN communications
100x1 High Power Electronic Load Mux





Acceptance Test and Training

MILITARY & AEROSPACE TEST SYSTEMS



Three Duplicate Testers for Production Test

Power Distribution DVT Tester

continued...

MILITARY & AEROSPACE TEST SYSTEMS



View of left-side door open showing Resistive Load Banks

Features:

Minimum Resistive Load for all outputs during multiplex testing of each output with electronic load

Side door access for easy maintenance/repair





MILITARY & AEROSPACE TEST SYSTEMS

View of right-side door open showing Load Mux and Control Relays

- Features:**
- 100x1 High Power Load Mux
 - Easy Debug/Maintenance/Repair including:
 - Drop-Down Virginia Panel Interface
 - Pull-out sliding shelves for Interface Units
 - All wires labeled and Relays with LEDs indicators

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Manual/Automatic Test Station

MILITARY & AEROSPACE TEST SYSTEMS



Front view of Test Station

Application: Military AC/DC Power Supplies

Features: Manual (Touchscreen) and Automatic Operation
FineSoft on LabWindows CVI platform
3 Phase Motor Driven Transformer and Power Meter





MILITARY & AEROSPACE TEST SYSTEMS

Close-Up showing Touchscreen Monitor for easy Manual Operation



Side View with Side Door Open showing Bus Bars, Control Relays, Resistive Loads Communications and Relay De-Bounce Cards easy access for service and maintenance



3 Phase 400 Hz Motor Driven Transformer

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ESS, Burn-In and Vibration Monitoring

MILITARY & AEROSPACE TEST SYSTEMS



Front view of ESS, Burn-In and Vibration Monitoring System

Application: ESS, Burn-In, and Vibration Monitoring System

Features: 12 Units at a time
FineTest Monitoring Software





FineTest Monitoring Software for 12 Units



Close-Up Opening Slide Out Unit



Slide Out Shelves for Easy Service

MILITARY & AEROSPACE TEST SYSTEMS



ESS, Burn-In and Vibration Monitoring continued...

MILITARY & AEROSPACE TEST SYSTEMS



Hinged ESS System Control Panel with Dual DC Input Voltage Monitors and Two Chamber Temperature Alarm Circuits



ESS UUT Interface for 2 Units with Dual Voltage and Current Monitors, individually controlled DC Input On/Off, Lighted Circuit Breaker and Output Load Pop-Out Fuse



*Rear System Interface Panel Close-Up showing
12 Unit Connections for Test Cables
from Chamber to System*



*Rear View showing
12 Thermally Rated and Color Coded
UUT Test Cables from Chamber to System*

MILITARY & AEROSPACE TEST SYSTEMS



Acceptance Test and Training



Simulator IO Racks

MILITARY & AEROSPACE TEST SYSTEMS



Front view of Simulator IO Racks #1 and #2

Application: Design Verification Test

Features: Drop-Down Virginia Panel front panel interface
Multiple connections for UUT Simulation/Stimulus
Build to Print





Front Panel Interface with VPC and High Power



Drop-Down Front Panel for easy service/repair



Close-Up of DC Bus Bars



Rear View showing clean wiring

Power Supply Testers

MILITARY & AEROSPACE TEST SYSTEMS



Front view of Tester

Application: Military AC/DC & DC/DC Power Supply/Sub-Assembly Production Test

Features: JTAG Programming and EEPROM Programming
RS485 Communications, Integrated Thermal Hood/Chamber
FineSoft on NI LabWindows CVI & TestStand platform
Turn-key Multiple Systems including:
ATE, Interface Test Adapters (ITAs), and Test Program Software (TPS)





Front view of Tester 4



Duplicate Tester 6 Acceptance Test and Training

Power Supply Testers

continued...

MILITARY & AEROSPACE TEST SYSTEMS

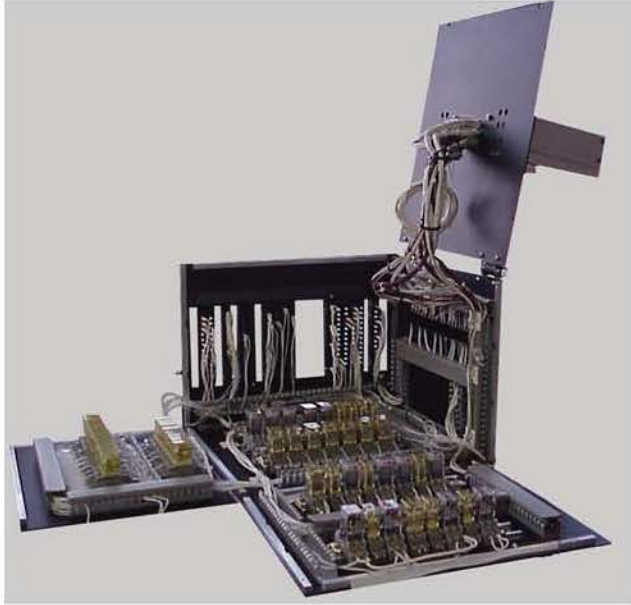


ITA with hookup for Thermal Hood on top where the UUT is plugged in

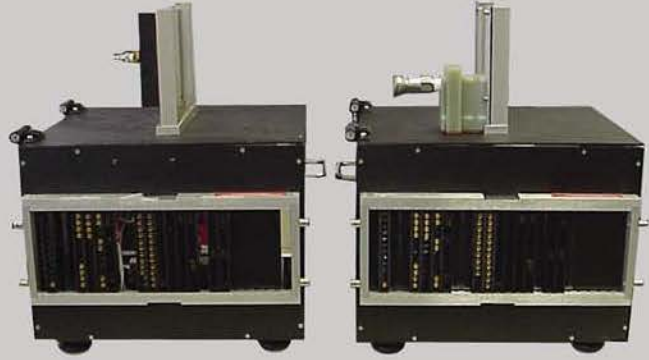
Duplicate Tester with ITA installed



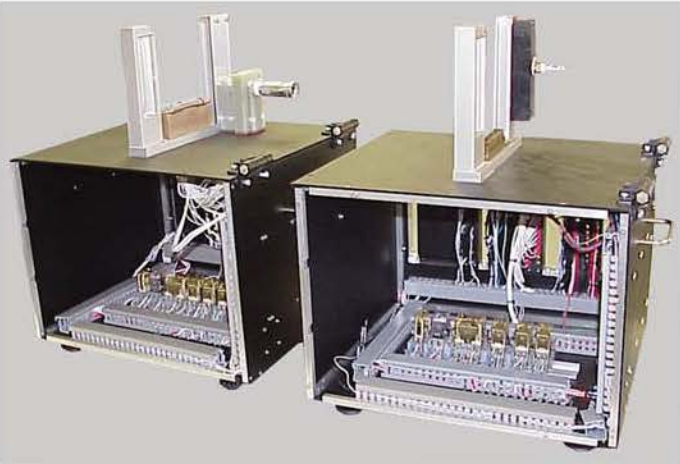
ITA with the Top Cover open and front panel removed to show wiring



ITA for multiple output supply with Top Cover and Side Panels open to show wiring and ease of maintenance



Rear view of duplicate ITAs with alternate Thermal Hood hookups



Front view of duplicate ITAs with front panels removed to show wiring

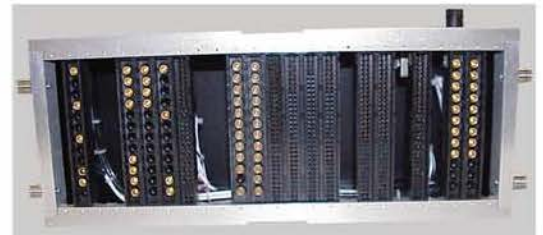
System Self-Test ITA



Self-Test ITA with cover open to show wiring



Front view of Self-Test ITA



Connector side of Self-Test ITA

Power Supply Tester

MILITARY & AEROSPACE TEST SYSTEMS



Front view of Tester

Application: Military Power Supplies Production Test

Features: FineSoft on NI LabVIEW and TestStand platforms

Integrated Hi-Pot Testing

DC Interface Unit with High Power Programmable Frequency

AC Insertion to test UUT AC Rejection



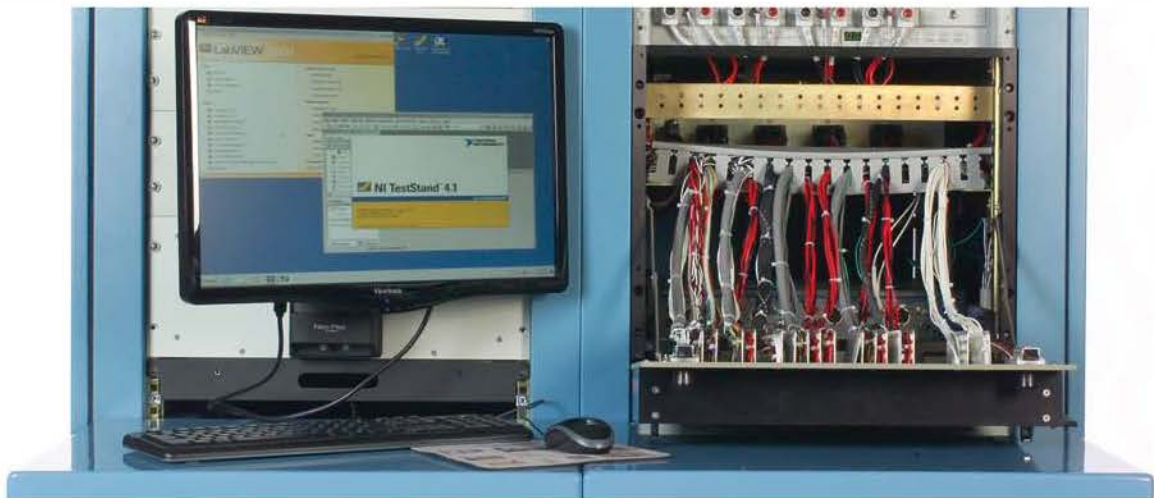


Front view of Tester with Interface Test Adapter installed



Front top view of Tester showing DC Interface box with sliding rails

MILITARY & AEROSPACE TEST SYSTEMS



Front view of Tester showing Drop-Down Virginia Panel Interface for easy troubleshooting/repair/maintenance

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Environmental Stress Screening

MILITARY & AEROSPACE TEST SYSTEMS



Application: Military Power Supplies
Environmental Stress Screening with Monitoring

Features: FineTest Monitoring Software
Thermal Chamber integration
FineSoft on LabWindows CVI platform





*Rear view of System showing
Color-Coded Temperature Rated Cables
that connect the System to the
UUTs inside the Thermal Chamber*



*Close-Up of Cable Connections
on Rear Panel of System*

MILITARY & AEROSPACE TEST SYSTEMS

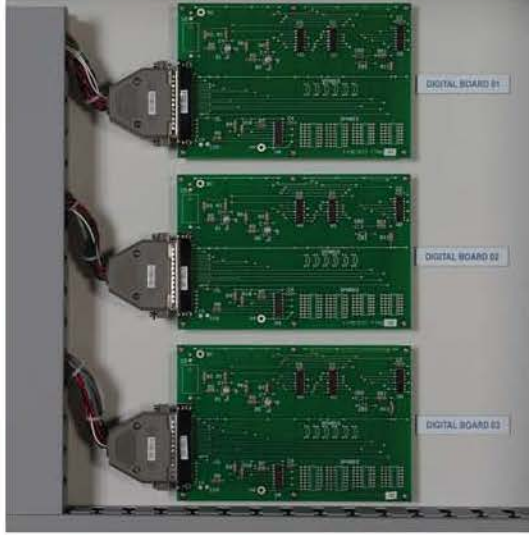
Environmental Stress Screening continued...

MILITARY & AEROSPACE TEST SYSTEMS



*Side view with Cabinet Side Door Open showing easy access to
Communication Boards, Thermocouple/Temperature Monitor,
400Hz Input AC Voltage Monitors, AC Cycling Relays*





*Close-Up of 3 Dual Port
Digital Communication Boards*



*Close-Up of 6 Relays to switch
AC Input Voltage On/Off
to the UUTs for AC Cycling Tests*



*Close-Up of Thermocouple/Temperature Monitor
to record temperature inside thermal chamber
and disconnect Input Power to the UUTs if out of limits*



*Close-Up of 3 Phase 400Hz
AC Input Voltage Monitor
to immediately disconnect
Input Power to the UUTs
if the Input Voltage is out of limits*

Power Supply Tester

MILITARY & AEROSPACE TEST SYSTEMS



Full front view of Tester

Application: Military Power Supplies
Engineering & Production Test

Features: Virginia Panel front panel interface
FineSoft on NI LabVIEW and TestStand platform

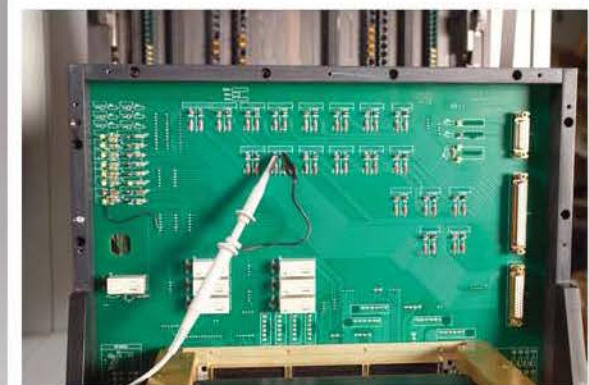




Tester during Acceptance Test and Training



Front View of Interface Test Adapter



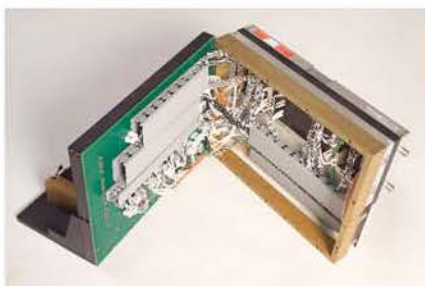
Front View of ITA with Cover Removed allows access to test points with clips for Scope and DMM Probes



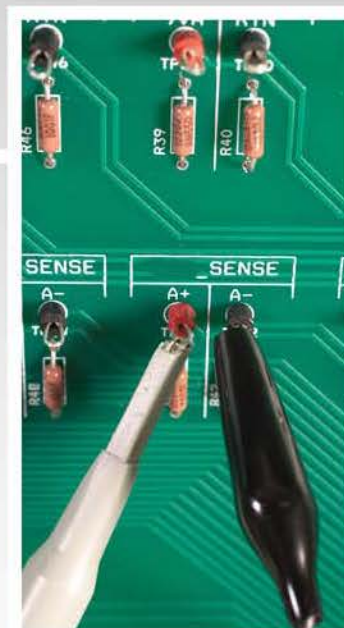
Side View



Rear View



Adapter Opens to allow easy access to wiring



Close-Up clips for Scope Probes

MILITARY & AEROSPACE TEST SYSTEMS

Power Supply Tester

MILITARY & AEROSPACE TEST SYSTEMS



Front view of Tester 4

Application: Military AC/DC and DC/DC Power Supplies
High Volume Production

Features: FineSoft on LabWindows CVI platform
Motor Driven Transformer
Tektronix TDS Oscilloscope





*Front view of an ITA showing
UUT Status Line LEDs*



Front view of roll-up ITA

MILITARY & AEROSPACE TEST SYSTEMS



Duplicate Tester 2

ESS, Burn-In and Vibration Monitoring

MILITARY & AEROSPACE TEST SYSTEMS

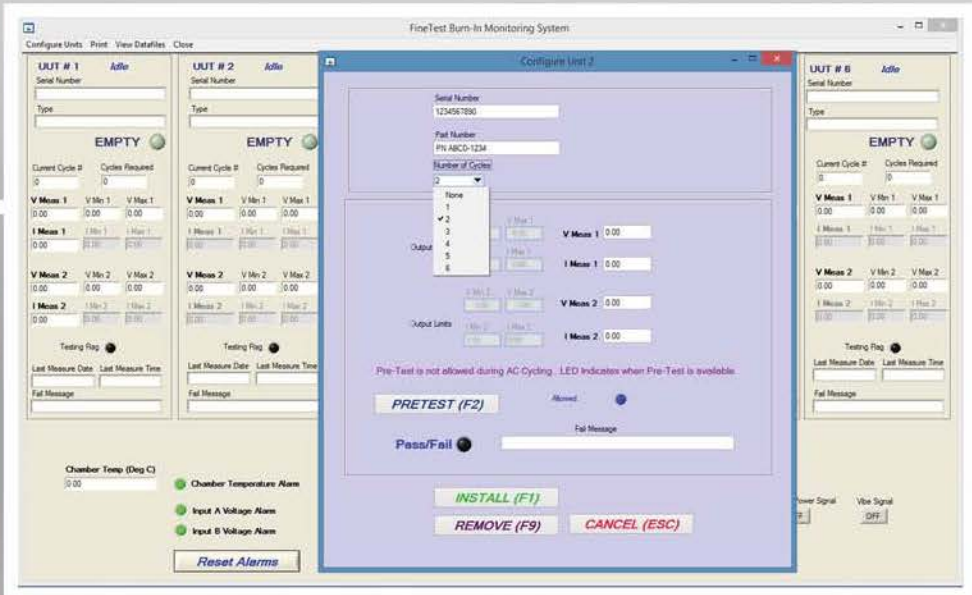


Front view of ESS, Burn-In and Vibration Monitoring System

Application: ESS, Burn-In, and Vibration Monitoring System

Features: 6 Units at a time
FineTest Monitoring Software





FineTest Monitoring Software with Unit Installation/Configuration



Close-Up Opening Slide Out Unit



Slide Out Shelves for Easy Service

MILITARY & AEROSPACE TEST SYSTEMS



ESS, Burn-In and Vibration Monitoring continued...

MILITARY & AEROSPACE TEST SYSTEMS



ESS System Interface Unit with Dual 3Phase 400Hz AC Input Monitors and Two Chamber Temperature Alarm Circuits



ESS UUT Interface Unit with Dual Voltage and Current Monitors and individually controlled AC Input On/Off with Circuit Breaker and Indicators



*Rear System Interface Panel Close-Up showing
Thermocouple Connections, AC Input Power Connections,
6 Unit Connections for Test Cables from Chamber to System,
Cable Hooks for Test Cables*



*Rear View with Door Open showing
Cable Arms for Each Pull-Out Box
6 Unit Test Cables from Chamber to System*



Rear View of System

MILITARY & AEROSPACE TEST SYSTEMS

Power Supply Tester

MILITARY & AEROSPACE TEST SYSTEMS



Duplicate Tester #3

Application: Military Power Supplies
Engineering & Production Test

Features: Virginia Panel front panel interface
FineSoft on Agilent VEE platform





Tester #1



Tester #2 Acceptance Test and Training



Tester #3 Acceptance Test and Training

MILITARY & AEROSPACE TEST SYSTEMS



Power Supply Testers

MILITARY & AEROSPACE TEST SYSTEMS



Front view of Tester 2

Application: Military AC/DC Power Supplies Production Test

Features: Virginia Panel front panel interface
Kikusui Electronic Loads
FineSoft on LabWindows CVI platform



MILITARY & AEROSPACE TEST SYSTEMS

Tester 1 and 2 on the Production Floor

Power Supply Tester

MILITARY & AEROSPACE TEST SYSTEMS



Front view of Tester # 2

Application: AC/DC Power Supplies
DC/DC Power Supplies
Production Test

Features: FineSoft on LabWindows CVI platform
Finesoft on HP Basic platform
FineTest PAD Command





Front view of Tester # 1
on the production floor



Tester #1 Installation and Training

Power Supply Tester

MILITARY & AEROSPACE TEST SYSTEMS



*Side view of Tester with
Interface Test Adapter and UUT*

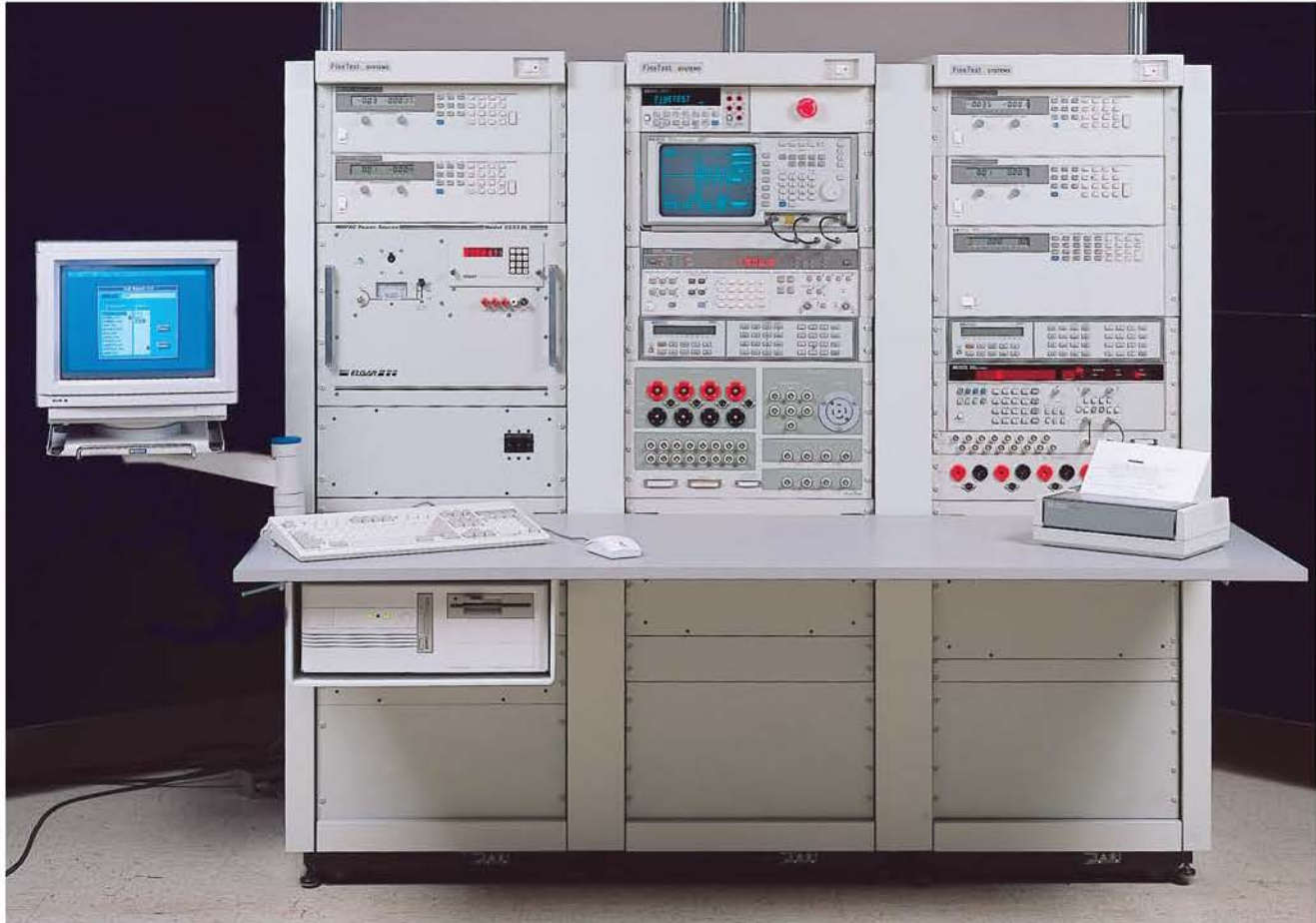
Application: Military: DC/DC Power Supplies
Production Test

Features: FineSoft on LabView platform
FineSoft on TestStand platform
Side-mount Computer and Monitor Arm



*Front view of Tester with
Interface Test Adapter and UUT*

Power Supply Tester



MILITARY & AEROSPACE TEST SYSTEMS

Front view of Tester

Application: AC/DC and DC/DC Power Supplies

Features:

- All High Frequency Matrix
- Timer/Counter and Function Generator
- Engineering Quick Connect front panel interface
- FineSoft on LabWindows DOS platform

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Power Supply Tester

MILITARY & AEROSPACE TEST SYSTEMS



Front view of Tester on the production floor

Application: Satellite DC/DC Power Supplies
Production Test

Features: Virginia Panel front panel interface
FineSoft on LabWindows CVI platform
Integrated with Production Line

Power Supply Tester



MILITARY & AEROSPACE TEST SYSTEMS

Front view of Tester

Application: Military AC/DC and DC/DC Power Supplies
Calibration, Repair and Test Depot

Features: FineSoft on LabWindows CVI
Finesoft on HP Basic platform
FineTest PAD Command
Engineering Quick Connect front panel interface
8 1/2 digit Multimeter

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FineTest Production Floor



FineTest Building at 1 Industry Drive

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Power Supply Test Systems



Functional ATE & Power Supply Testers



Military and Aerospace Test Systems

Functional ATE Systems

Power Supply Test Systems

Hi-Pot Test Systems

ESS / Burn-In / Vibration Monitoring Systems

Manual Test Systems

Test Fixtures and ITAs

Box Builds and Sub-Assemblies

Switching and I/O Cards

Custom Cabinets and Accessories



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*FineTest Commercial Test Systems
are used by many diverse manufacturers
and end users including the following:*

TDK/Lambda

S.A.F.T.

Jabil Circuits

Medtronics

ABB CEAG

Resonant Power

EOS Corporation

Nortel Networks

On-Line Power

Racal Datacom

P-Com

Alpha Technologies

Cherokee International

GE Medical Systems

American Radionics

Silicon Graphics

IBM

Avex

Magnetek

Tellabs

Xerox

Xantrex

Marconi

Alacrity

Compaq

CSS Power

GoldStar

Rockwell Automation

Sun Microsystems

Ascom Energy Systems

US Technologies

Emerson Network Power

AT&T Power Systems



Power Supply Test Systems

*FineTest Power Supply Test Systems
are used for many diverse applications
including the following:*

Automation Controllers

Mainframe Computers

Telecom Power Cabinets and Modules

Telecom High Volume Production

Telecom High Power Systems

Environmental Stress Screening (ESS)

Lap-Top Computer Power

Power Supply Repair

Photocopier Power

Design Verification Test

OEM Volume Production



Power Supply Testers for Automation Power *Brazil, Mexico*

POWER SUPPLY TEST SYSTEMS

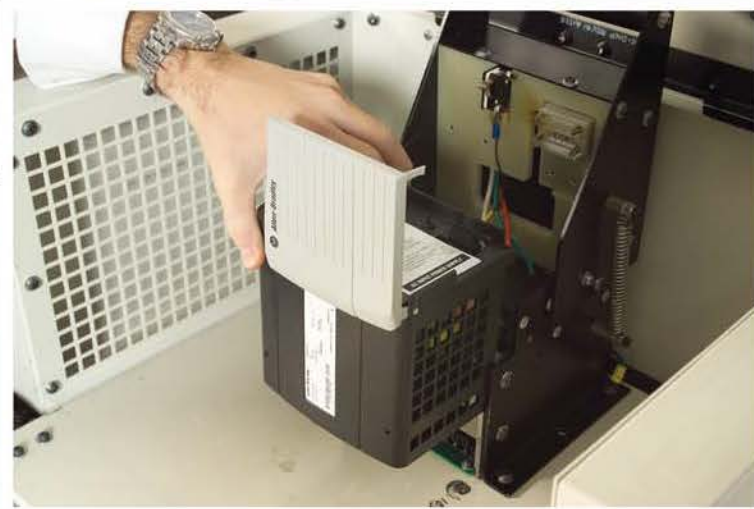


System #1 Acceptance Test and Training

Application: AC/DC and DC/DC Power Supplies
High Volume Production Testing

Features: Built-In Thermal Chamber
Direct replacement Hardware & Software for HPE3650/AB PS Test System
FineSoft on MicroSoft C# , NI LabWindows/CVI & TestStand platforms

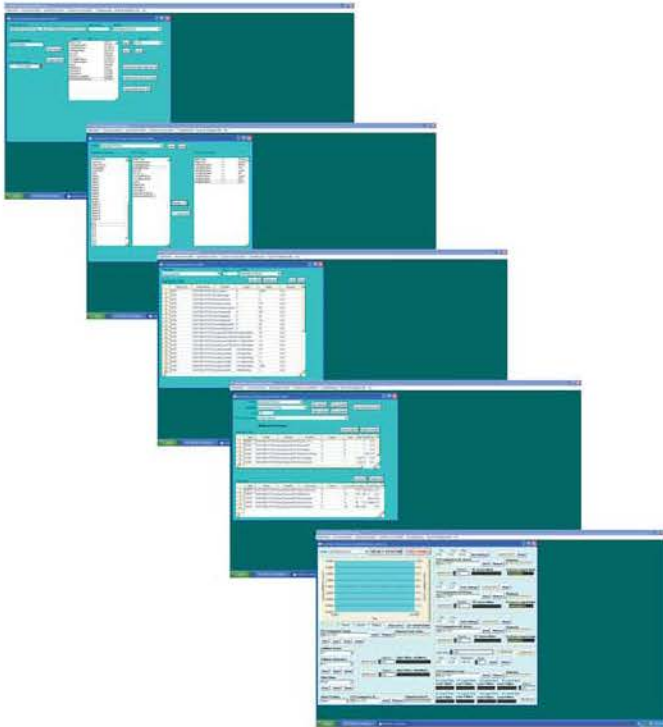




Installing a UUT into the Test Fixture



Test Fixture with UUT in Chamber



*FineTest Program Generator Software
reads all existing HPPTS DataBase Files
for direct software replcement of
HPE3650A Power Supply Test System*



Using Interactive Control Panel

Power Supply Testers for Mainframe Computers

POWER SUPPLY TEST SYSTEMS



Multiple duplicate Testers on the production floor

Application: 3kW DC/DC Converters
High Volume Production

Features: PCB Test Fixtures
EEPROM programming
Dual RS485 communications
FineSoft on LabWindows CVI platform



Duplicate Tester with third cabinet to mount computer in the tester

Power Supply Testers for Mainframe Computers



POWER SUPPLY TEST SYSTEMS

Front view of multiple systems on the production floor

Application: AC/DC Front End for Mainframe Computers
5kW 3 Phase AC/DC Bulk Power Regulators
High volume production environment

Features: PCB production test fixture and cart
FineSoft on LabWindows CVI platform
RS485 communication for EEPROM programming
3 Phase, 10kW/phase, motor driven transformer
Combined resistive and electronic loads
Voltech PM3000A 3 Phase Power Meter

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Power Supply Tester for Mainframe Computers

POWER SUPPLY TEST SYSTEMS



Test Program Development on Tester

Application: AC/DC Power Supplies
Engineering Characterization Test

Features: Engineering Quick Connect front panel interface
FineSoft on HP Basic platform
FineTest PAD Command



Power Supply Tester for Mainframe Computers



POWER SUPPLY TEST SYSTEMS

Front view of BPR Tester with Test Fixture and UUT on the production floor

Application: AC/DC Front End for Mainframe Computers
5kW 3 Phase AC/DC Bulk Power Regulators
High volume production test

Features: PCB production test fixture and cart
FineSoft on LabWindows CVI platform
RS485 communication for EEPROM programming
3 Phase, 10kW per phase, motor driven transformer
Combined resistive and electronic loads
Voltech PM3000A 3 Phase Power Meter

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Power Supply Tester for Mainframe Computers

POWER SUPPLY TEST SYSTEMS

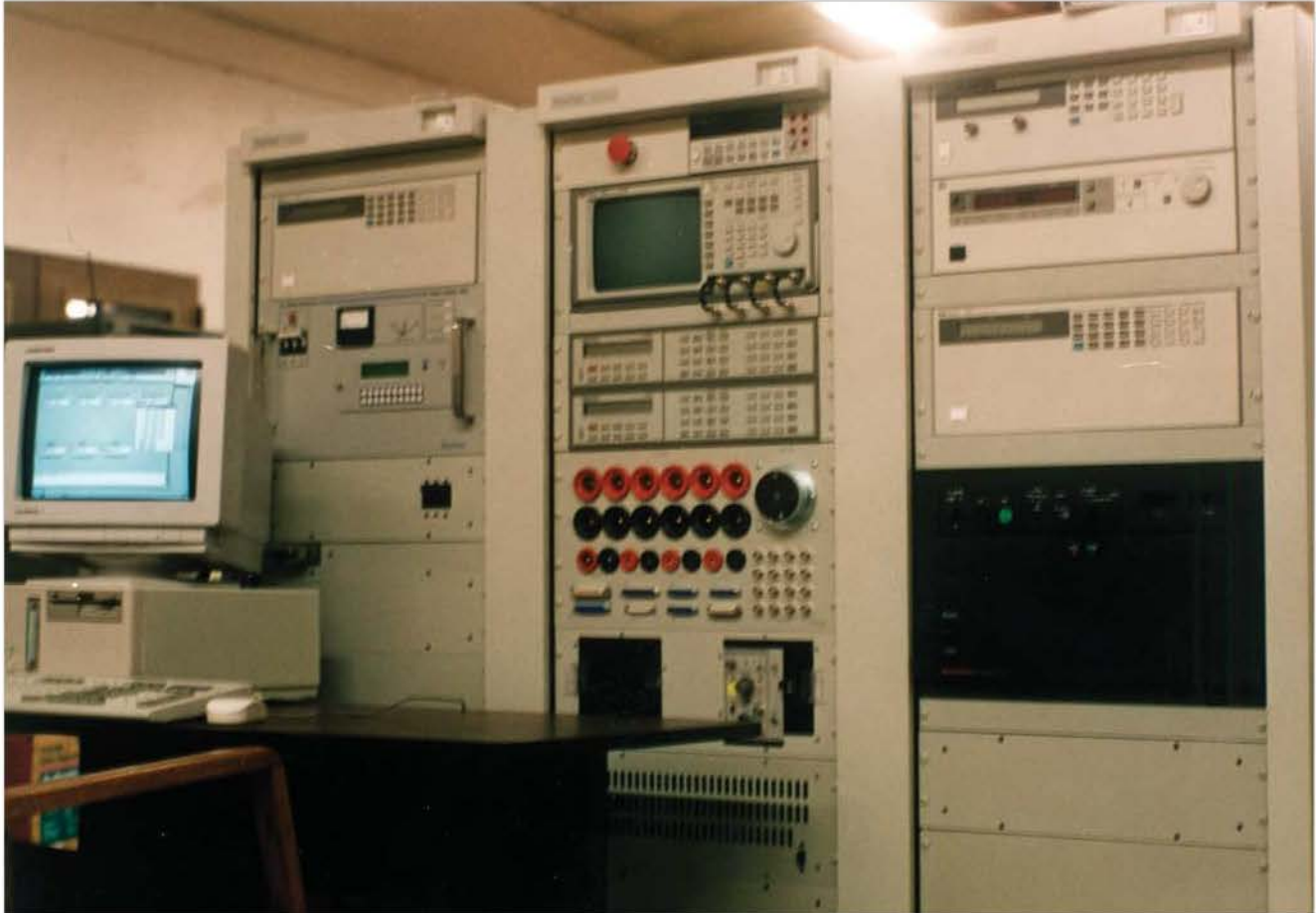


Front view of Tester

Application: High Power AC/DC and DC/DC Power Supplies
Engineering Characterization Test

Features: Engineering Quick Connect front panel interface
FineSoft on LabWindows CVI platform
3 Phase Electronic AC Source, 4.5 kVA per phase

Power Supply Tester for Mainframe Computers



POWER SUPPLY TEST SYSTEMS

Front view of Tester

Application: Engineering Prototype Characterization
Product Validation and Vendor Qualification
Production Test

Features: Quick Connect front panel interface
Tektronix Current Probe at front panel
High power Sorensen DC power supply
FineSoft on LabWindows CVI

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Power Supply Testers for Telecom Power

Canada/China

POWER SUPPLY TEST SYSTEMS



Front view of System #4

Application: AC-DC and DC-DC Power Supplies
High Volume Production Testing

Features: FineSoft on NI LabVIEW Platform
Cabinet Fixture with multiple power shelves for UUTs
Photo-Sensors to detect UUT LEDs

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Systems 3 and 4 Acceptance Test and Training



Fixture with Safety Door Closed



*Fixture with added
HV Loads and Scope*



Installing a UUT

Power Supply Testers for Telecom Power

POWER SUPPLY TEST SYSTEMS



Front view of duplicate Testers

Application: 2.5kW Telecom AC/DC Power Supplies
High Volume Production

Features: Motor driven transformer
dBRnC Meter
FineSoft on LabWindows CVI platform

Power Supply Testers for High Volume Telecom Power



POWER SUPPLY TEST SYSTEMS

Multiple Testers on contract manufacturing high volume production floor

Application: AC/DC and DC/DC Power Supplies
Sub-Assemblies and Board Test
High Volume Production

Features: Interchangeable Test Fixtures
FineSoft on LabWindows CVI platform

 **FineTest**
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Power Supply Testers for High Volume Telecom Power

POWER SUPPLY TEST SYSTEMS



Front view of multiple systems on the production floor

Application: Telecom AC/DC and DC/DC Power Supplies
High Volume Production

Features: Virginia Panel front panel interfaces
FineSoft on a LabWindows/CVI platform



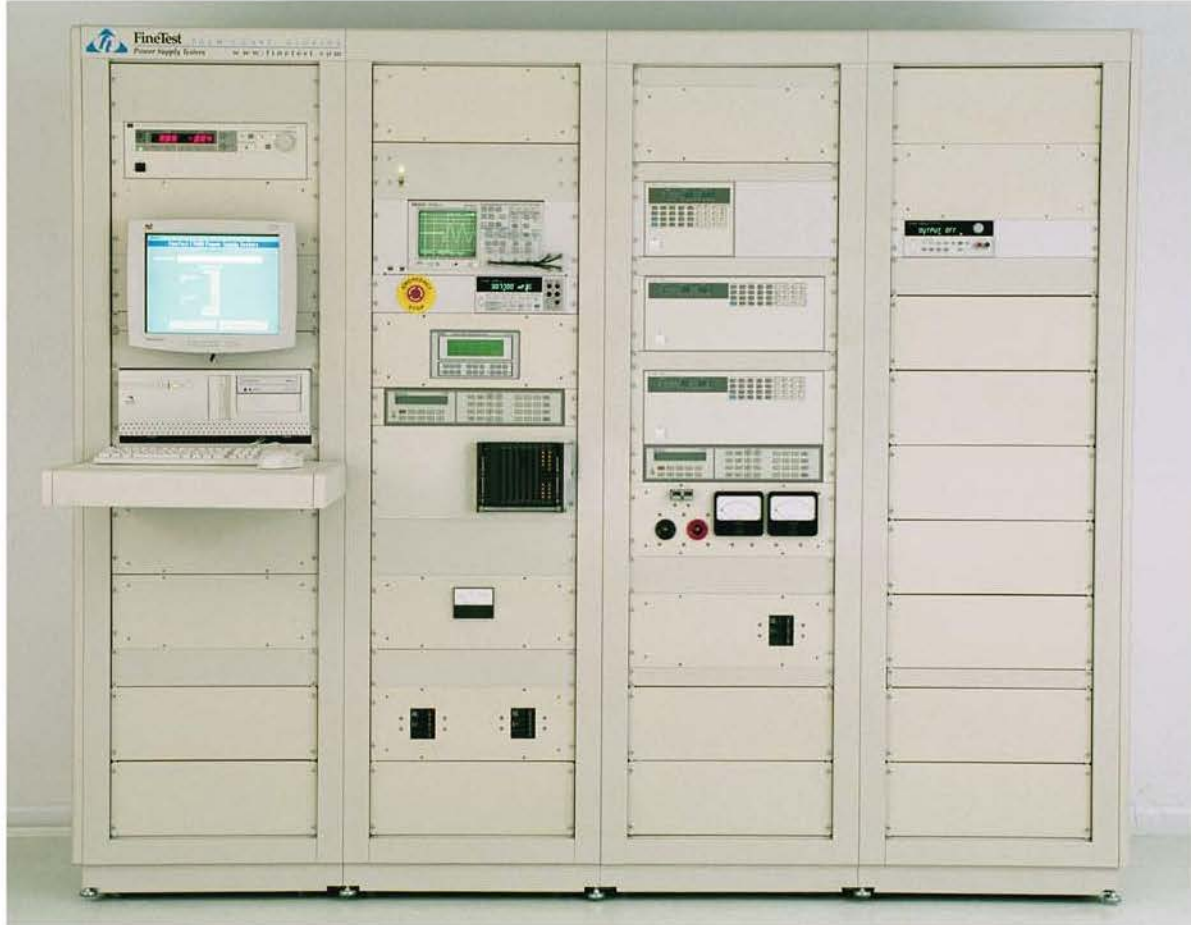
Front view of multiple systems on the production floor



Close-Up view of the systems on the production floor

Power Supply Tester for Telecom High Power

POWER SUPPLY TEST SYSTEMS



Front view of V200 Tester

Application: Telecom 48V, 200A 10kW AC/DC Power Supplies
High Volume Production

Features: RS485 Communications
EEPROM programming
Reduced system cost and test time by using:
Motor Driven Transformer
Combined resistive and electronic loads
FineSoft on LabWindows CVI platform



Rear View of V200 Tester

POWER SUPPLY TEST SYSTEMS



Tester # 4 with Test Fixture and UUT



Tester # 4 on production floor



Duplicate Tester # 5



Tester # 3 with Test Fixture



Tester # 3 in production

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Dual Power Supply Tester for Telecom Power

Belgium

POWER SUPPLY TEST SYSTEMS



Dual Tester with two UUTs installed in the Test Fixture

Application: Telecom Power Supplies
High volume production test

Features: i2c communications
RS485 communications
EEPROM programming
FineSoft on Agilent VEE platform
Reduced test time and cost by testing two units at once



Front view of Dual Tester

 **FineTest**
www.finetest.com



Operator adjusting one UUT while the other UUT is testing



Two UUTs in a dual Test Fixture

Power Supply Testers for Telecom Power *Belgium*

POWER SUPPLY TEST SYSTEMS



Angled front view of Tester

Application: Telecom Power Supplies
High Volume Production

Features: FineSoft on Agilent VEE
i2c communications
RS485 communications
EEPROM programming



Front view of Tester



Multiple duplicate Testers on the production floor



Inserting a UUT into Test Fixture



Units to be tested

Power Supply Tester for Telecom Power

POWER SUPPLY TEST SYSTEMS



Front view of Tester

Application: Power Supply High Volume Production

Features: Final and Sub-Assembly Functional Test
FineSoft on LabWindows CVI platform

Power Supply Tester for Telecom Power *Ireland*



POWER SUPPLY TEST SYSTEMS

Front view of Tester during Acceptance Test and Training

Application: Telecom AC/DC Power Supplies
Telecom Power Cabinet Test
High Volume Production

Features: RS485 communications
EEPROM programming
FineSoft on LabWindows CVI platform

 **FineTest**
www.finetest.com

Power Supply Testers for Telecom Power

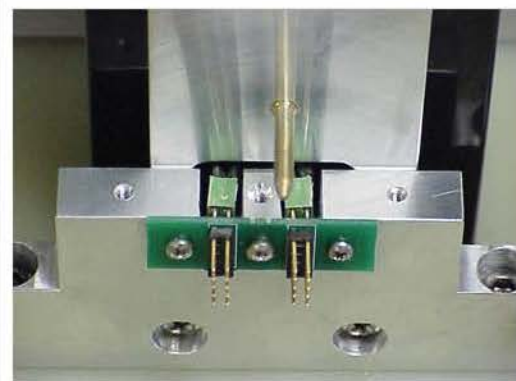
POWER SUPPLY TEST SYSTEMS



Front view of Tester #1



Test Fixture with UUT



Close-Up of Test Fixture
Mating Connectors and Guide Pin

Application: Telecom DC/DC Power Supplies
High Volume Production

Features: Sliding Plug-In Test Fixture
FineSoft on Agilent VEE platform



Front View of Tester #2

 **FineTest**
www.finetest.com

Power Supply Tester for Telecom Power



Acceptance Test and Training



Close-Up Test Fixture with UUT



Tester with Test Fixture and UUT

POWER SUPPLY TEST SYSTEMS

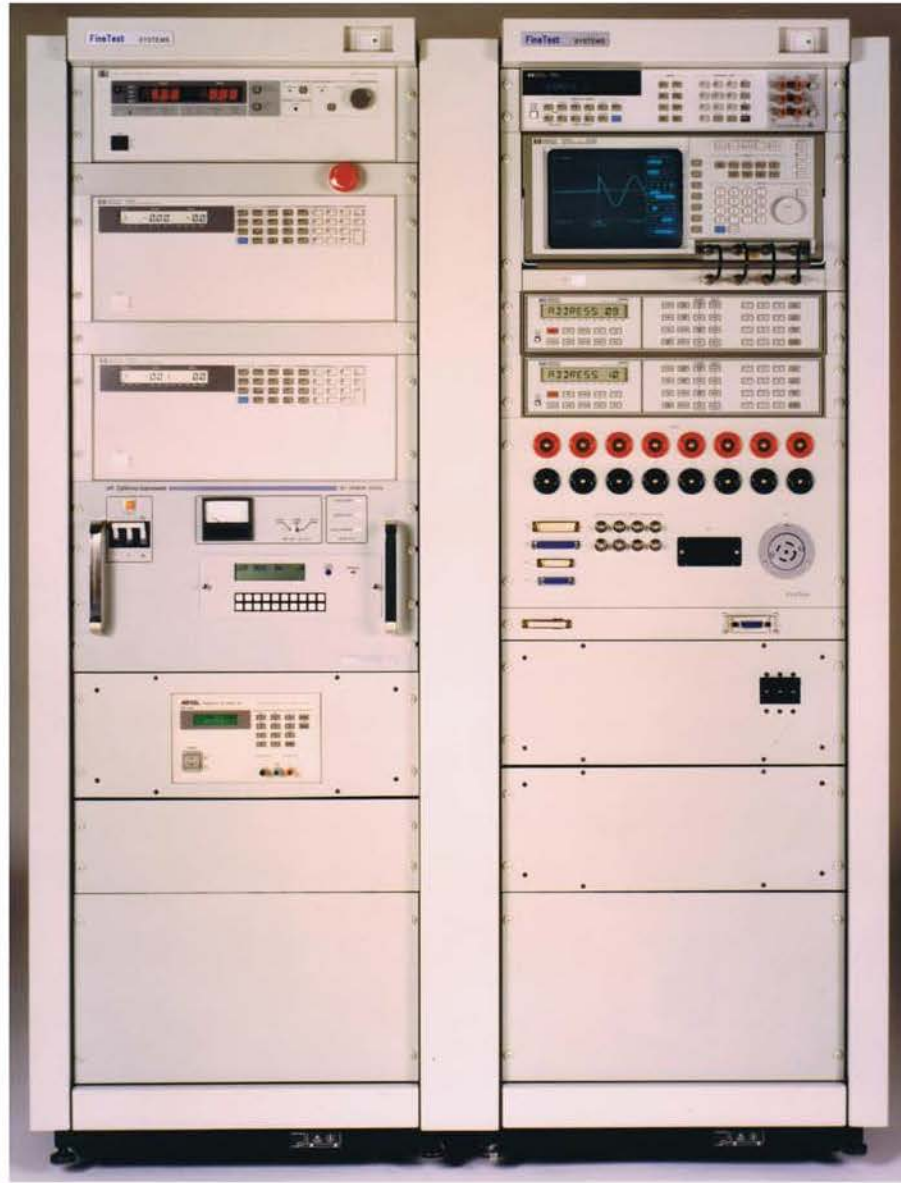
Application: Final and Sub-Assembly Test
High Volume Production Test

Features: DC/DC Power Supplies
FineSoft on NI LabWindows/CVI

 **FineTest**
www.finetest.com

Power Supply Tester for Telecom Power

POWER SUPPLY TEST SYSTEMS



Front view of Tester

Application: Telecom AC/DC and DC/DC Power Supplies
Engineering Prototype Characterization
High Volume Production

Features: Engineering Quick Connect Front Panel Interface
FineSoft on LabWindows CVI platform
8 ½ Digit Multimeter

Power Supply Tester for Telecom Power

Israel

POWER SUPPLY TEST SYSTEMS



Tester on the Production Floor



Hot-Swap Redundant Test Fixture

Application: Telecom Power Supplies
High Volume Production Test

Features: FineSoft on NI LabWindows
Test Fixtures for
Redundant Hot-Swap Test



Testing a UUT 2nd Hot-Swap Fixture

 **FineTest**
www.finetest.com

Environmental Stress Screening Tester and Burn-In for Telecom Power

POWER SUPPLY TEST SYSTEMS



Front view of Tester showing 20 Burn-In Loads, Power Switching Units, VXI Switching

Application:

Telecom AC/DC and DC/DC Power Supplies
Functional Test and Burn-In of 20 Power Supplies
Thermal chamber for accelerated temperature stress screening
Instrumental in customer winning Deming Award 1994

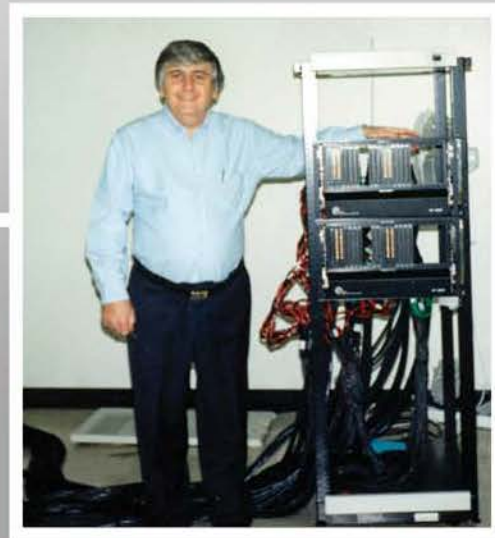
Features:

Dual 25 Module VP front panel interface inside thermal chamber
C size VXI mainframe for switching
20 plug in resistor load slots can accept different burn-in loads
Switches AC or DC Power to the 20 UUTs
Facility supplied AC, DC supplied by 20 DC Power Supplies
FineSoft on LabWindows CVI platform

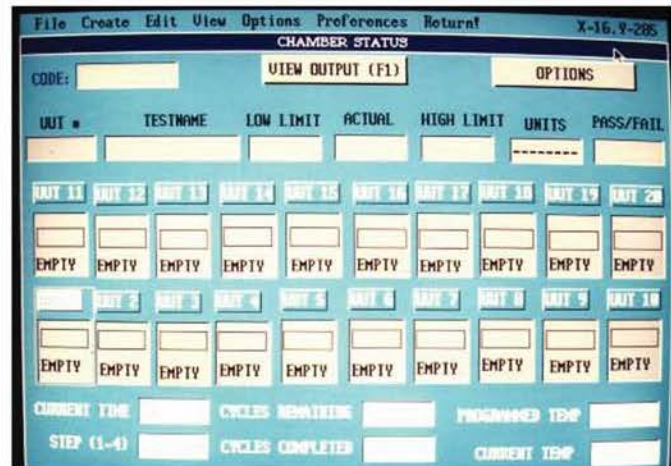




20 DC Power Supplies and fused AC Power Switching Units



Close-Up of dual 25 Module interface located inside the thermal chamber



FineTest Software to both functionally test and monitor burn-in of the 20 UUTs

How it works:

The system functionally tests one supply, while the other 19 supplies burn-in at full load.

After the first supply has finished its functional test, it is connected to its burn-in load.

The tester then switches to the next supply for functional testing.

The functional test cycles through all of the 20 supplies.

The Thermal Chamber moves the temperature and the test/burn-in cycle begins again.

The entire test time is 48 hours.

Power Supply Tester for Telecom Power

POWER SUPPLY TEST SYSTEMS



Front view of Tester



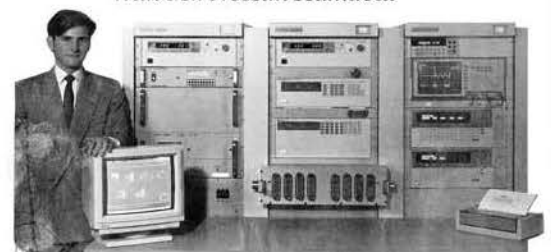
Close-Up of Hypertronics interface

Application: AC/DC and DC/DC Power Supplies

Features: Hypertronics front panel interface
 B size VXI mainframes for switching
 FineSoft on LabWindows CVI platform

FineTest Power Supply Testers

...The Next Generation
With Mr. Nessim Hamaoui



Q. How does this generation of testers differ

in Hardware?

A. Instead of using black boxes for the tests and proving the results with external lab instruments, we use the lab instruments in the tester. This is done at a very competitive price.

in Software?

A. The FineSoft package consisting of Instrument Drivers, Power Supply Tests and Statistics is offered on many platforms: HP Basic, HP VEE, Qu's Basic, LabWindows and LabVIEW. The option of one or several platforms in the same tester is a new flexibility.

in Maintenance?

A. Using Lab Quality Instruments such as HP's, our users benefit from high reliability and good documentation. This is enhanced by FineTest, which replaces a faulty unit while it is repaired by its original manufacturer.

Nessim implemented FineSoft on the LabWindows and LabVIEW Platforms.
For more information on our many interfaces and configurations contact:

FineTest 1289 Hammerwood Ave., Sunnyvale, CA 94089
Tel (408) 747-1792 Fax (408) 252-5763

See us at Westcon '92 in Anaheim, Booth 2555
CIRCLE 25 ON READER SERVICE CARD

EE-EVALUATION ENGINEERING - October 1992



EE Magazine Ad 1992

Power Supply Testers for Telecom Power



Tester and Test Fixture integrated with production line



Testers on the production line



Close-Up Tester #1



Close-Up Tester #2



Close-Up Tester #3

POWER SUPPLY TEST SYSTEMS

Application: 2.5kW Telecom AC/DC Power Supplies
High Volume Production

Features: FineSoft on LabWindows CVI platform
Combined resistive and electronic loads
Motor driven transformer
dBRnC Meter

 **FineTest**
www.finetest.com

Power Supply Tester for Telecom Power *Mexico*

POWER SUPPLY TEST SYSTEMS



Front view of Tester



Test Fixture with UUT



Close-Up of Test Fixture

Application: High Efficiency AC/DC Power Supplies
High Volume Production

Features: Pogo-Pin Test Fixture
FineSoft on Agilent VEE platform

Power Supply Tester for Telecom Power *Switzerland*



POWER SUPPLY TEST SYSTEMS

Front view of Tester

Application: Telecom AC/DC and DC/DC Power Supplies

Features: Custom connector front panel interface
B size VXI mainframe for switching
FineSoft on LabWindows CVI platform

 **FineTest**
www.finetest.com

Power Supply Tester for Telecom Power

POWER SUPPLY TEST SYSTEMS



Front view of 3kW Tester

Application: Telecom 3kW AC/DC Power Supplies
High volume production test

Features: FineSoft on LabWindows CVI platform
i2c Communication for EEPROM programming
Reduced system cost and test time by using:
Fixed multi-tap transformer for input voltage
Combined resistive and electronic loads

Power Supply Testers for Telecom and Military Power



Duplicate Tester with cart full of UUTs



Operator testing a UUT



Power Module Test Fixture



Quick Connect Test Fixture



Tester #3 with Test Fixture

Application: AC/DC and DC/DC Power Supplies
Telecom and Military Supplies
High Volume Production

Features: FineSoft on LabWindows CVI
Quick Connect Test Fixture

 **FineTest**
www.finetest.com

Power Supply Tester for Telecom Power

Brazil

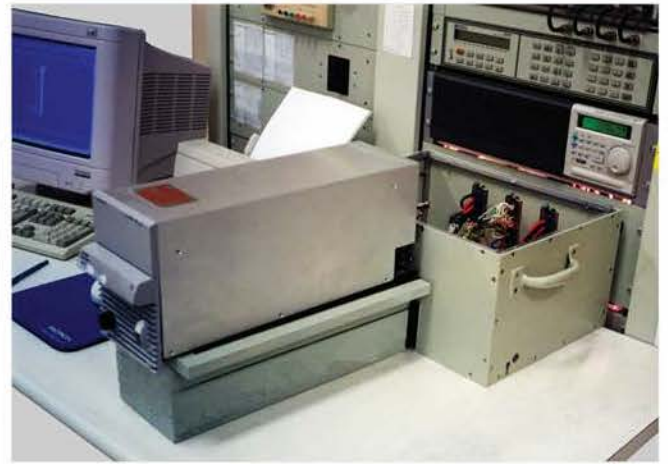
POWER SUPPLY TEST SYSTEMS



Front view of Tester and Test Fixture

Application: Telecom Power Supplies
High Volume Production

Features: Motor Driven Transformer
Kikusui Electronic Load
Hypertronics front panel interface
FineSoft on LabWindows CVI platform



UUT installed in the Test Fixture

Power Supply Tester for Telecom Power

China



POWER SUPPLY TEST SYSTEMS

Front view of Tester on the production floor

Application: Telecom AC/DC Power Supplies
Telecom Power Cabinet Test
High Volume Production

Features: RS485 communications
EEPROM programming
FineSoft on LabWindows CVI platform

 **FineTest**
www.finetest.com

Power Supply Tester for Telecom Power

POWER SUPPLY TEST SYSTEMS



Front view of Tester

Application: Telecom AC/DC and DC/DC Power Supplies
Engineering Prototype Characterization
Vendor Qualification
Incoming Inspection

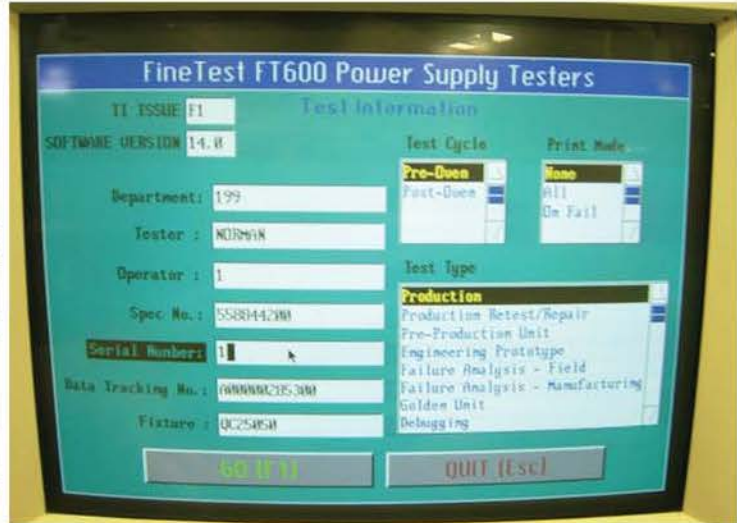
Features: Hypertronics front panel interface
FineSoft on LabWindows CVI platform



Power Supply Tester for Telecom Power



Tester on Production Floor



*FineSoft Software
with all
Test Information
on one
Graphical User Interface (GUI)*

POWER SUPPLY TEST SYSTEMS

Application: Final and Sub-Assembly Test
High Volume Production Test

Features: AC/DC and DC/DC Power Supplies
Integration of Lorain Switching Mainframe and Cards
FineSoft on LabWindows

 **FineTest**
www.finetest.com

Power Supply Tester for Telecom Power *France*

POWER SUPPLY TEST SYSTEMS



Front view of Tester at Nepcon Show, Boston 1990

Application: Telecom AC/DC Power Supplies

Features: Quick Connect front panel interface
FineSoft on HP Basic platform



Front view of Tester

 **FineTest**
www.finetest.com

Power Supply Tester for Telecom Power DVT

POWER SUPPLY TEST SYSTEMS



Front view of Tester with UUT and Thermal Chamber



Full view of Tester

Application: Telecom AC/DC Power Supplies
Design Verification Test (DVT)

Features: Integrated Thermal Chamber
FineSoft on LabWindows CVI

 **FineTest**
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Power Supply Tester for Telecom Power

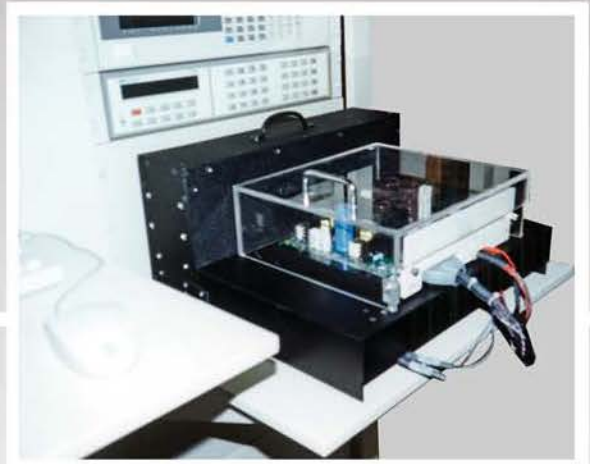
POWER SUPPLY TEST SYSTEMS



Front view of Tester with Test Fixture and UUT



Close-up front view of Test Fixture with safety cover open



Close-up side view of Test Fixture

Application: DC/DC Telecom Power Supplies
High volume production environment

Features: Virginia Panel front panel interface
FineSoft on LabWindows CVI platform
RS485 for EEPROM programming

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Power Supply Tester for Telecom Power



Front view of Fat-1 Tester



Quick Connect front panel interface



Quick Connect Test Cable

POWER SUPPLY TEST SYSTEMS

Application: Telecom AC/DC Power Supplies
First Functional Acceptance Test (FAT-1)

Features: Quick connect cable front panel interface
FineSoft on LabWindows CVI platform

 **FineTest**
www.finetest.com

Power Supply Tester for Laptop Computer Power

POWER SUPPLY TEST SYSTEMS



Front view of Tester

Application: AC/DC Laptop Computer Power Supplies
High Volume Production

Features: Hypertronics front panel interface
All equipment in a single cabinet

Power Supply Tester for Power Supply Repair



POWER SUPPLY TEST SYSTEMS

System at joint US Technologies/FineTest Booth at Nepcon

Application: Commercial and Military Power Supply Repair
Re-Design and End Of Life Manufacturing Test Service

Features: Full Functional Test of Repaired Power Supplies
Easy configuration for different models
FineSoft on NI LabWindows Platform

 **FineTest**
www.finetest.com

Power Supply Tester for OEM Power *South Korea*

POWER SUPPLY TEST SYSTEMS

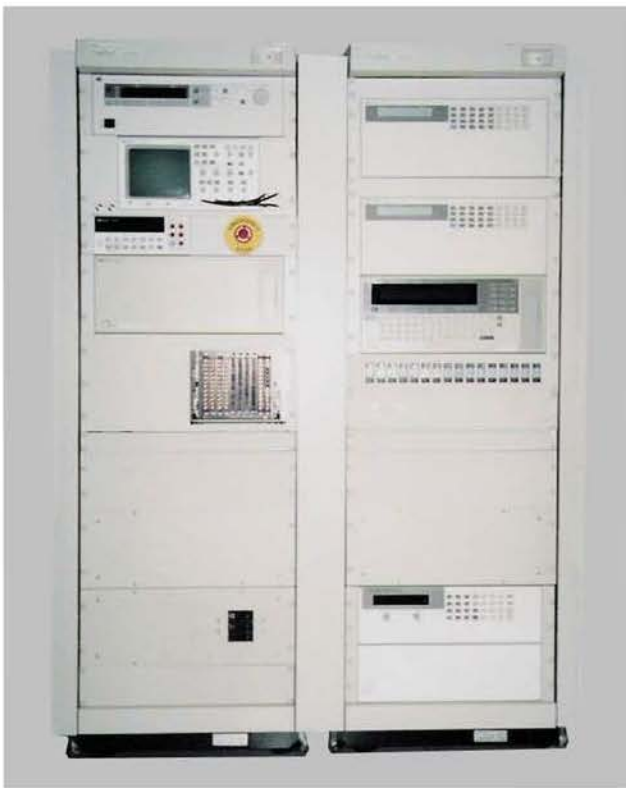


Front view of Tester during Acceptance Test and Training

Application: AC/DC and DC/DC Power Supplies
Engineering Characterization and Test
High Volume Production

Features: Engineering Quick Connect front panel interface
FineSoft on LabWindows DOS platform

Power Supply Tester for Photocopier Power *Holland*



Front view of Tester



Close-Up front view of Tester

POWER SUPPLY TEST SYSTEMS

Application: AC/DC and DC/DC Power Supplies
High Volume Production

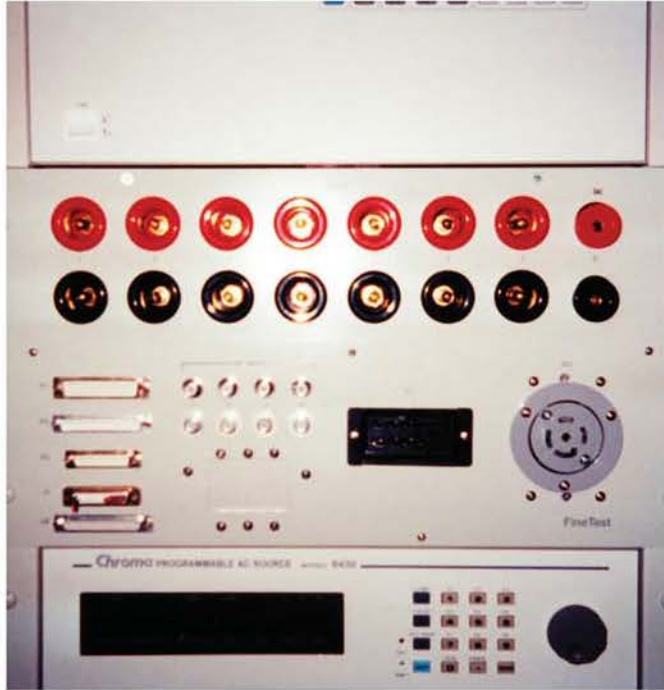
Features: FineSoft on Agilent VEE platform
Thermocouple Interface Panel
B Size VXI Mainframe for switching

 **FineTest**
www.finetest.com

Power Supply Tester for OEM Power

Mexico

POWER SUPPLY TEST SYSTEMS



*Close-Up Quick Connect front panel interface
and Chroma Electronic AC Source*



Front view of Tester

Application: AC/DC Power Supplies
DC/DC Power Supplies
High Volume Production

Features: Quick Connect front panel interface
Chroma Electronic AC Source
FineSoft on LabWindows CVI

 **FineTest**
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Power Supply Tester for OEM Power



POWER SUPPLY TEST SYSTEMS

Front view of Tester

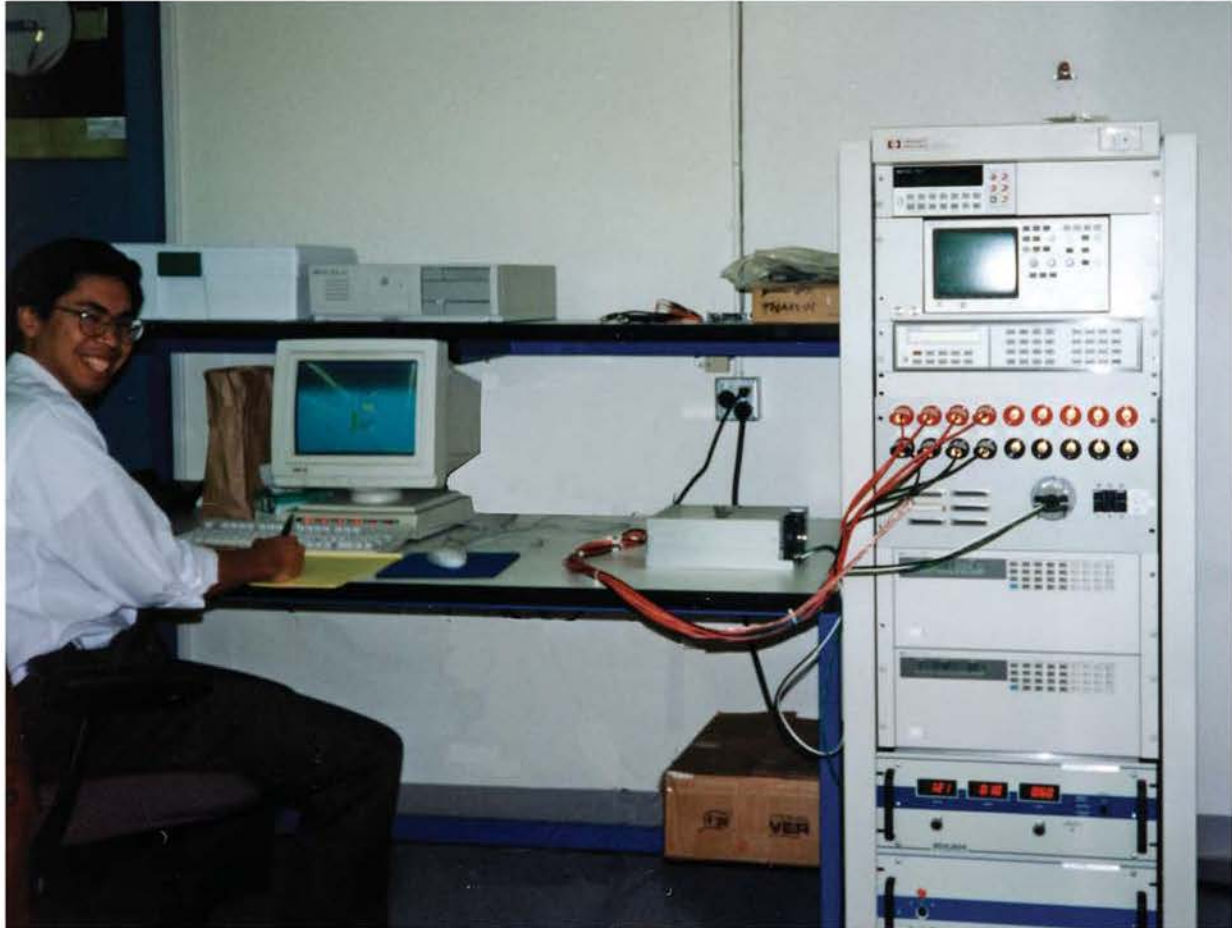
Application: Off-The-Shelf Power Supplies
GPIB Test
Production Test

Features: FineSoft on LabWindows CVI
Kikusui Electronic Load

 **FineTest**
www.finetest.com

Power Supply Tester for OEM Power Supplies

POWER SUPPLY TEST SYSTEMS



Front view of Tester

Application: Off-The-Shelf Power Supplies
Custom configured power systems
Production Test

Features: FineSoft on LabWindows CVI
Engineering Quick Connect Front Panel Interface
Behlman AC Source

Power Supply Tester for Telecom Power



POWER SUPPLY TEST SYSTEMS

Front view of system on the production floor



*Close-Up view of Quick Connect to
Production Interface Adapter
with a Test Fixture and UUT*

Application: Telecom AC/DC and DC/DC Power Supplies
High Volume Production

Features: Quick Connect to Production Interface Adapter
FineSoft on LabWindows CVI platform
8 ½ Digit Multimeter

 **FineTest**
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FineTest Production Floor



FineTest Building at 1 Industry Drive

FineTest
www.finetest.com



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