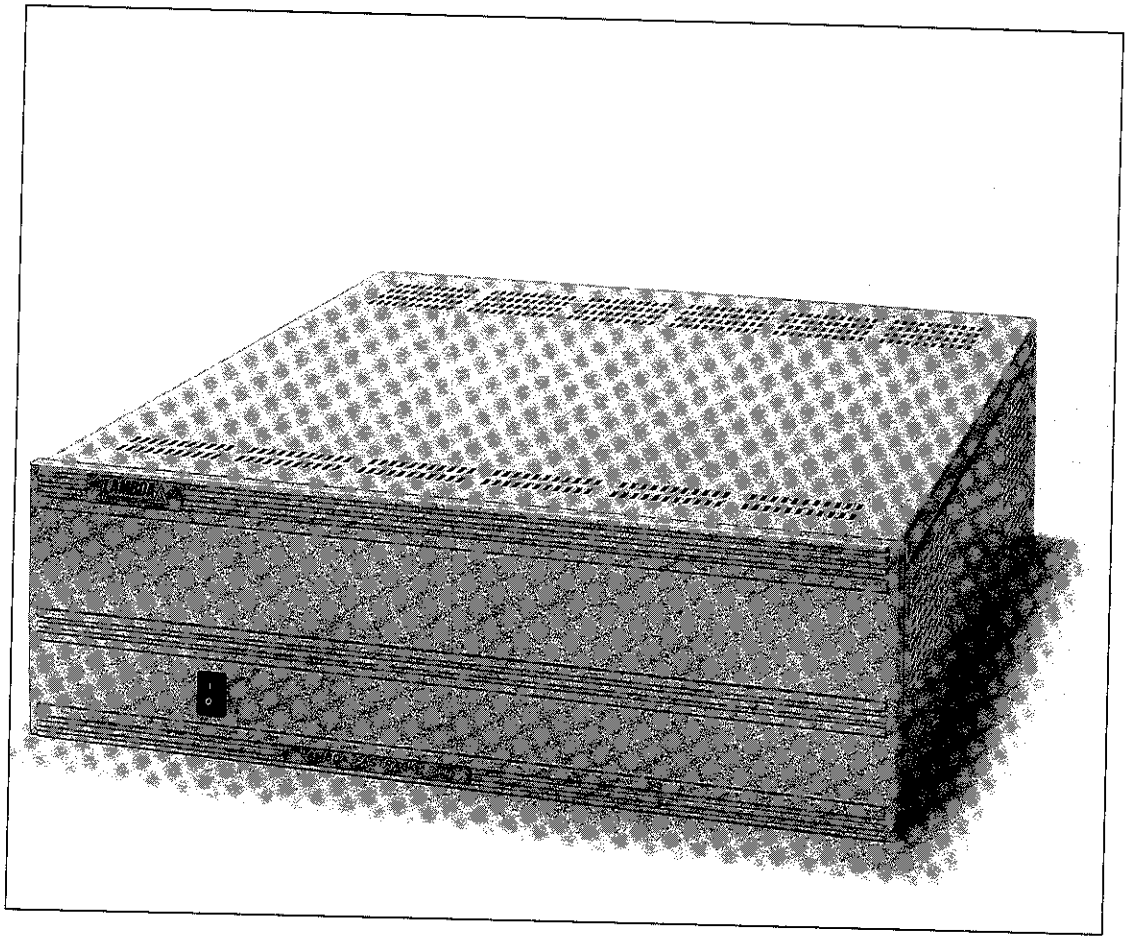
LAMBDA'S FASTRACK™



Low Cost Computer-Programmable ATE Power Supplies

The Lambda FastRack™ IEEE-488-programmable ATE power supplies are the lowest priced power solutions which excel at the six basic measures of ATE equipment: speed, flexibility, accuracy, reliability, ease-of-use, and price.

Lambda's modular approach provides flexibility in initial system configuration and allows the designer to modify the system as requirements change. Each Lambda FastRack™ can provide 1 to 4 outputs up to 240VDC, up to 40.0A. Multiple racks can be combined for requirements up to 30 outputs using a single primary address.

The Lambda FastRack™ is easy to use, featuring electronic calibration, full program and monitoring capabilities via the SCPI Command Set (Standard Commands for Programmable Instruments) using either the IEEE-488 Bus or RS-232 Serial Port. In addition, it features command processing as low as 7.0 msec. And the output programming and monitoring accuracy is suitable for virtually any ATE application.

The Lambda FastRack™ is priced from $2320 (single output system). Quad output systems are priced from $4600 – less than the closest flexible IEEE system, and the leading fixed system on the market today.

LAMBDA FASTRACK™ SPECIFICATIONS

Price
Lambda offers the speed, reliability, flexibility and accuracy for virtually any ATE application. Lambda FastRacks start at:
- $2,320 for a single output system.
- $3,080 for a dual output system.
- $3,840 for a triple output system.
- $4,600 for a quad output system.

Reliability
Lambda's ISO 9001 certification and Total Quality Management programs ensure that Lambda will continue to be the standard bearer in quality and reliability for years to come.

Flexibility
There are 14 models in stock – all are field upgradeable. Whatever the needs, Lambda can configure a FastRack for your specific requirements. A Lambda FastRack can be purchased in field-configurable form and assembled at your facility, or we'll send it fully assembled.

General Specifications
operating temperature .....0 to +50°C with derating above +30°C.
cooling .....fan cooled.
maximum number of outputs .....4 per rack, 30 per system.
size .....5.25" x 19" x 20" (H x W x D)
mechanical options .....chassis slides, front-panel handles, feet (contact factory).

Programming Specifications
command set .....SCPI.
command processing times .....as low as 7mS for basic commands.

	Voltage	Current
Programming Resolution	0.040% V_o max	0.040% I_o max
Programming Accuracy	0.080% V_o max +5mV	0.180% I_o max +5mA
Readback Accuracy	0.15% V_o max +5mV	0.35% I_o max +5mA
	Overvoltage Protection	**Overcurrent Protection**
Programming Accuracy	2.0% OVP max	2.0% OCP max

Input Specifications
input voltage 95-132/190-264VAC, 47-63Hz
User selectable via rear panel switch.

Output Specifications
load isolation/ polarity relays .....optional on any or all outputs.

Output Ratings	Voltage	Current*	Voltage Slew Rate (0-Vo max at No-Load)
Module A	0-8V	0-10A	16 V/mS
Module B	0-18V	0-4.5A	36 V/mS
Module C	0-40V	0-2A	50 V/mS
Module D	0-60V	0-1.4A	30 V/mS
Module E	0-120V	0-0.7A	60 V/mS

Regulation	Voltage	Current
Line	0.01% V_o max +2.5mV	0.05% I_o max +2.5mA
Load	0.01% V_o max +2.5mV	0.05% I_o max +2.5mA
Cross	0.005% V_o max +1.0mV	0.025% I_o max +1.0mA
Output Noise	5mV pk-pk, 1mV RMS 10mV pk-pk, 2mV RMS on 60V and 120V models.	2.5mA RMS 5.0mA RMS on 8V, 18V and 40V models.

*Ratings are at 30°C. Any combination of up to four modules can be placed in a single rack and up to 30 outputs can be configured per primary address. Contact the factory for systems with more than four outputs and for derating above 30°C.

Part III – Test, Systems and Laboratory Power Supplies

LAMBDA FASTRACK™ ORDER INFORMATION

1 Fully Assembled Lambda FastRack, Delivered Completely Assembled and Ready to Program.

The 14 models in the Fully Assembled Lambda FastRack Selector Guide are delivered to you fully assembled and ready to program. The models shown below do not include relays, so if you require this option or you don't see a model that meets your requirements, contact the Lambda factory and we'll configure a FastRack specifically for your application – without NRE charges. And we'll deliver it in less than two weeks.

Fully Assembled Lambda FastRack Selector Guide*

MODEL	OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4	PRICE
SINGLE OUTPUT					
FA-A000-00-000	0 - 8V/10.0A	–	–	–	$2,320
FA-B000-00-000	0 - 18V/4.5A	–	–	–	2,320
FA-C000-00-000	0 - 40V/2.0A	–	–	–	2,320
FA-D000-00-000	0 - 60V/1.4A	–	–	–	2,320
FA-E000-00-000	0 - 120V/0.7A	–	–	–	2,320
DUAL OUTPUT					
FA-AA00-00-000	0 - 8V/10.0A	0 - 8V/10.0A	–	–	3,080
FA-AB00-00-000	0 - 8V/10.0A	0 - 18V/4.5A	–	–	3,080
FA-AD00-00-000	0 - 8V/10.0A	0 - 60V/1.4A	–	–	3,080
FA-BB00-00-000	0 - 18V/4.5A	0 - 18V/4.5A	–	–	3,080
FA-DD00-00-000	0 - 60V/1.4A	0 - 60V/1.4A	–	–	3,080
TRIPLE OUTPUT					
FA-ABB0-00-000	0 - 8V/10.0A	0 - 18V/4.5A	0 - 18V/4.5A	–	3,840
FA-ABD0-00-000	0 - 8V/10.0A	0 - 18V/4.5A	0 - 60V/1.4A	–	3,840
QUAD OUTPUT					
FA-ABBC-00-000	0 - 8V/10.0A	0 - 18V/4.5A	0 - 18V/4.5A	0 - 40V/2.0A	4,600
FA-ABBD-00-000	0 - 8V/10.0A	0 - 18V/4.5A	0 - 18V/4.5A	0 - 60V/1.4A	4,600

*All outputs are at 30°C, contact factory for derating information.

2 Field-Configurable Form Designed for Your Changing Needs.

You can also purchase the Lambda FastRack in field-configurable form (see the photo on p. 139). Simply start with an FA-0000-00-000 enclosure, then pick your FZLS power modules and optional FT-01 output panels or FR-01 relays (don't forget an FB-02 relay bias if you're ordering relays). Then just assemble the FastRack in your own facility... configurable to your changing requirements. In addition, you can upgrade and change the configuration of an existing FastRack with components from the FastRack Field-Configurable Component Selector Guide.

Lambda FastRack Field-Configurable Component Selector Guide*

PART NUMBER	DESCRIPTION		PRICE
FA-0000-00-000	Lambda FastRack Assembly Enclosure (without Power Modules)		$1,500
FZLS080-008	Output Power Module	0 - 8V/0 - 10.0A	750
FZLS080-018	Output Power Module	0 - 18V/0 - 4.5A	750
FZLS080-040	Output Power Module	0 - 40V/0 - 2.0A	750
FZLS080-060	Output Power Module	0 - 60V/0 - 1.4A	750
FZLS080-120	Output Power Module	0 - 120V/0 - 0.7A	750
FT-01	FastRack Single Output Rear Panel Section		25
FR-01	FastRack Single Output Rear Panel Section with Relays		150
FB-02	FastRack Output Relay Bias Supply (1 FB-02 is required per rack where relays are used)		75
FN-01	FastRack Output Module Blank Panel Section		15
FN-02	FastRack Bias Module Blank Panel Section		30

*All outputs are at 30°C. Contact the factory for derating information.

Examples:

Single output system without relays

1 FA-000-00-00	$1,500
1 FZLS-080-XXX ...?.....	750
1 FT-01	25
3 FN-01...$15 ea	45
Total Price	$2,320

Quad output system without relays

1 FA-000-00-000	$1,500
4 FZLS-080-XXX .. $750 ea ...	3,000
4 FT-01 .....$25 ea	100
Total Price	$4,600

FASTRACK™ FIELD-CONFIGURABLE SYSTEM

The Lambda FastRack Field-Configurable System allows the test system designer to do two basic things:

1) Purchase the components and assemble the programmable system in your own facility – to your exact specifications. You can purchase Assembly Enclosures and Power Modules, and then assemble FastRacks specifically for each new requirement that arises.

2) Purchase a fully assembled system and upgrade the outputs or options after purchase. For example, if you originally purchase a system with two outputs you can purchase one or two additional output modules at a later date and install them in your existing system.

Either way the Lambda FastRack can adapt to your changing requirements.

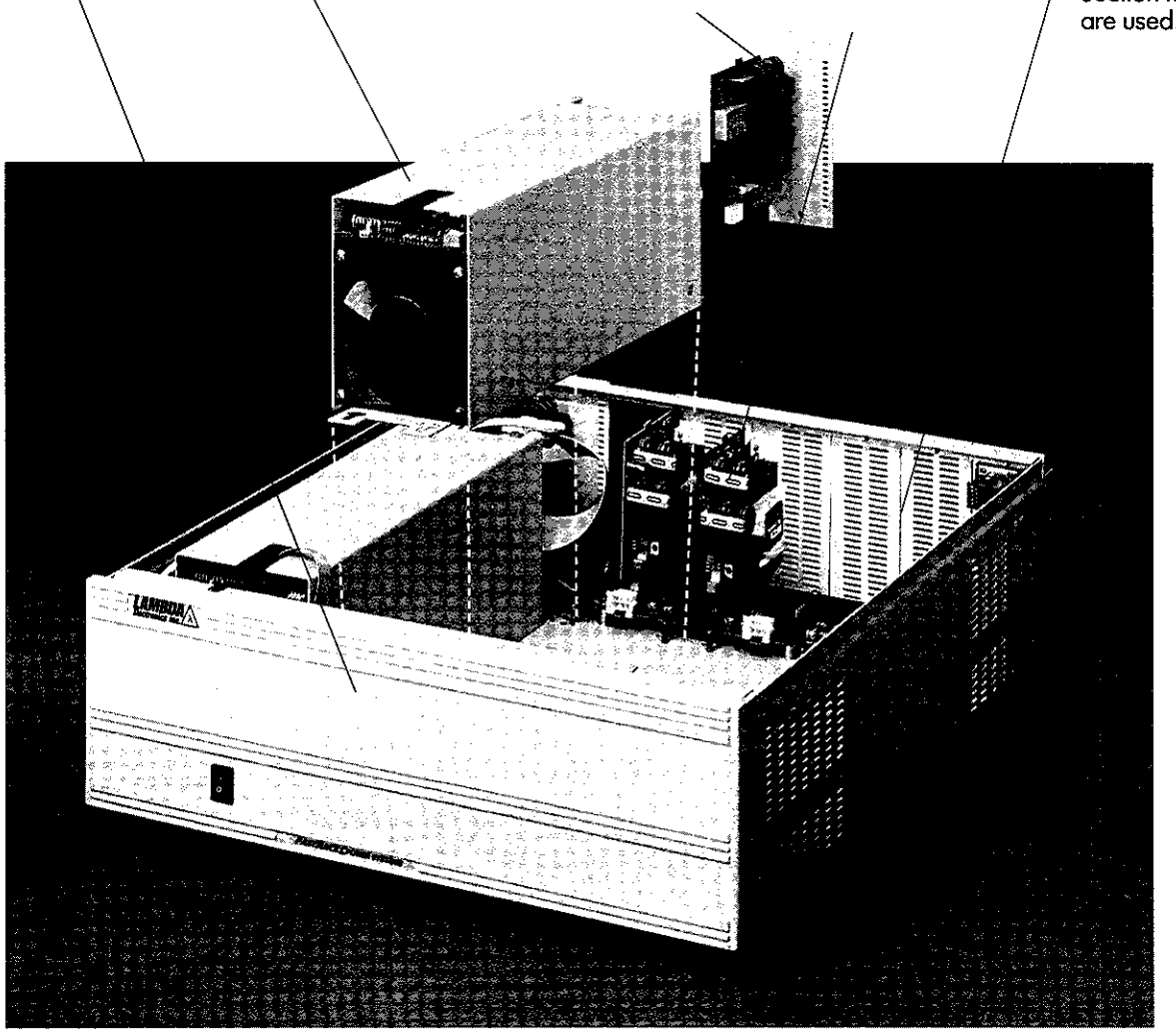
This is how easy it is to assemble a system with the FastRack Field-Configurable Components:

Step 1:
Start with an FA-0000-00-000 Lambda FastRack Assembly Enclosure.

Step 2:
Pick your outputs and insert FZLS080-XXX FastRack Power Modules (up to four per rack).

Step 3:
For outputs which don't require relays, select and install the FT-01 Lambda FastRack Single Output Rear Panel Section (use one per output where required).

Step 4:
If you need relays then select and install the FR-01 Lambda FastRack Single Output Rear Panel Section with Relays (use one per output where required).

Step 5:
If any outputs in the rack have relays, then select and install FB-02 Lambda FastRack Output Relay Bias Module (use one per rack when relays are used).

Step 6:
Fill out the remaining open rear panel sections with FN-01 Lambda FastRack Blank Panel Sections (use one per unused output) and an FN-02 Blank Panel Section if no relays are used.