

New From TDK-Lambda 2400W in 1U

Genesys™

**Programmable DC Power Supplies
2.4kW in 1U**

Built in RS-232 & RS-485 Interface

Advanced Parallel Standard

New: Auxiliary Outputs 5V & 15V

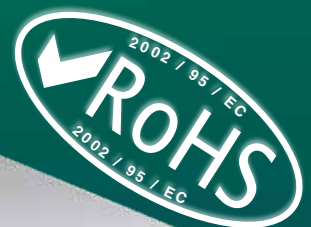
New: RoHS Compliant

Optional Interfaces:

IEEE488.2 SCPI (GPIB)

Isolated Analog Programming

LXI Compliant LAN



Genesys™ Family

GEN H 750W Half Rack

GEN 1U 750/1500W/2400W Full Rack

GEN 2U 3.3/5kW

GEN 3U 10/15kW

TDK-Lambda

www.us.tdk-lambda.com/hp

The Genesys™ family of programmable power supplies sets a new standard for flexible, reliable, AC/DC power systems in OEM, Industrial and Laboratory applications.

Features include:

- **New: Auxiliary Outputs, 5V, 0.2A; 15V, 0.2A For Increased System Control Functionality**
- **New: RoHS Compliant**
- **High Power Density 2.4kW in 1U**
- **Wide Range of popular worldwide AC inputs, 1Ø (230VAC) & 3Ø (208VAC)**
- **Active Power Factor Correction (Single-Phase & Three-Phase AC Input)**
- **Output Voltage up to 600V, Current up to 300A**
- **Built-in RS-232/RS-485 Interface Standard**
- **Global Commands for Serial RS-232/RS-485 Interface**
- **Auto-Re-Start / Safe-Start: user selectable**
- **Last-Setting Memory**
- High Resolution 16 bit ADCs & DACs
- Low Ripple & Noise
- Front Panel Lock selectable from Front Panel or Software
- Reliable Encoders for Voltage and Current Adjustment
- Constant Voltage/Constant Current auto-crossover
- Parallel Operation with Active Current Sharing; up to four identical units.
- Advanced Parallel Master / Slave. Total Current is Programmed and Measured via the Master.
- Independent Remote ON/OFF and Remote Enable/Disable
- External Analog Programming and Monitoring (user selectable 0-5V & 0-10V)
- Reliable Modular and SMT Design
- 19" Rack Mount capability for ATE and OEM applications
- Optional Interfaces
 - Isolated Analog Programming and Monitoring Interface (0-5V/0-10V & 4-20mA)
 - IEEE 488.2 SCPI (GPIB) Multi-Drop
 - LXI** Compliant LAN
 - USB Interface
- LabView and LabWindows™ drivers
- Five Year Warranty



Applications

Genesys™ power supplies have been designed to meet the demands of a wide variety of applications. System Designers will appreciate new, standard, remote programming features such as Global commands. Also, new high-speed status monitoring is available for the RS-485 bus.

Test Systems using the IEEE-488 bus may achieve significant cost savings by incorporating the Optional IEEE Multi-Drop Interface for a Master and up to 30 RS-485 Multi-Drop Slaves. Then up to 30 Slaves may be equipped with the less expensive Optional RS-485 Multi-Drop (MD) interface.

Higher power systems can be configured with up to four 2.4kW modules. Each module is 1U with zero space between them (zero stack).

Flexible configuration is provided by the complete Genesys™ Family: 1U 750W Half-Rack, 1U 750W/1500W/2400W 2U 3.3kW/5kW, 3U 10/15kW Full-Rack. All are identical in Front Panel, Rear Panel Analog, and all Digital Interface Commands.

OEM Designers have a wide variety of Inputs and Outputs from which to select depending on application and location.

Front Panel Description



1. ON/OFF Switch
2. Air Intake allows zero stacking for maximum system flexibility and power density.
3. Reliable encoder controls Output Voltage, Address, OVP and UVL settings.
4. Volt Display shows Output Voltage and directly displays OVP, UVL and Address settings.
5. Reliable encoder controls Output Current, sets Baud rate and Advanced Parallel mode.
6. Current Display shows Output Current and displays Baud rate. Displays total current in Parallel Master/Slave Mode
7. Function/Status LEDs:

● Alarm	● Fine Control	● Preview Settings
● Foldback Mode	● Remote Mode	● Output On
8. Pushbuttons allow flexible user configuration
 - Coarse and Fine adjustment of Output Voltage/Current and Advanced Parallel Master or Slave
 - Preview settings and set Voltage/Current with Output OFF, Front Panel Lock
 - Parallel Master/Slave
 - Set OVP and UVL Limits
 - Set Current Foldback Protection
 - Go to Local Mode and select Address and Baud rate
 - Output ON/OFF and Auto/Safe Re-Start Mode

Rear Panel Description



1. Remote/Local Output Voltage Sense Connections.
2. DIP Switches select 0-5V or 0-10V Programming and other functions.
3. DB25 (Female) connector allows (Non-isolated) Analog Program and Monitor and other functions.
4. RS-485 OUT to other Genesys™ Power Supplies.
5. RS-232/RS-485 IN Remote Serial Programming.
6. Output Connections: Rugged busbars (shown) for up to 100V Output; wire clamp connector for Outputs >100V.
7. Exit air assures reliable operation when zero stacked.
8. Input: 230VAC Single Phase, 208 VAC Three Phase, 50/60 Hz
AC Input Connector: Phoenix P/N: FRONT-4-H-7.62.
9. Optional Interface Position for IEEE 488.2 SCPI (shown) or Isolated Analog, LAN or USB Interface.
10. Auxiliary Output Voltage Connector. Phoenix P/N IMC1.5/7-ST-3.81

Genesys™ Power Parallel and Series Configurations

Parallel operation - Master/Slave:

Active current sharing allows up to four identical units to be connected in an auto-parallel configuration for four times the output power.

In Advanced Parallel Master/Slave Mode, total current is programmed and reported by the Master, Up to four supplies act as one.

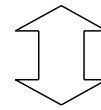
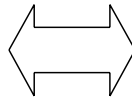
Series operation

Up to two units may be connected in series to increase the output voltage or to provide bipolar output. (Max 600V to Chassis Ground).



Remote Programming via RS-232 & RS-485 Interface

Standard Serial Interface allows daisy-chain control of up to 31 power supplies on the same communication bus with built-in RS-232 & RS-485 Interface with or without Multi-Drop option.



Programming Options (Factory installed)

New IEEE Multi-Drop Interface

- Allows IEEE Master to control up to 30 (Multi-Drop equipped) slaves over RS-485 daisy-chain
- Only the Master needs be equipped with IEEE Interface
- IEEE 488.2 SCPI Compliant
- Program Voltage
- Measure Voltage
- Over Voltage setting and shutdown
- Error and Status Messages
- Program Current
- Measure Current
- Current Foldback shutdown

P/N: IEMD

New Multi-Drop Slave Option

- Slaves need to be equipped with the MD Slave (RS-485) option

P/N: MD

Isolated Analog Programming

- Four Channels to Program and Monitor Voltage and Current.
- Isolation allows operation with floating references in harsh electrical environments.
- Choose between programming with Voltage or Current.
- Connection via removable terminal block: Phoenix MC1,5/8-ST-3.81.
- Voltage Programming, user-selectable 0-5V or 0-10V signal.
 - Power supply Voltage and Current Programming Accuracy $\pm 1\%$
 - Power supply Voltage and Current Monitoring Accuracy $\pm 1.5\%$
- Current Programming with 4-20mA signal.
 - Power supply Voltage and Current Programming Accuracy $\pm 1\%$
 - Power supply Voltage and Current Monitoring Accuracy $\pm 1.5\%$

P/N: IS510

P/N: IS420

LAN Interface

~~LXI~~ Compliant to Class C

- Meets all LXI-C Requirements
- Address Viewable on Front Panel
- Fixed and Dynamic Addressing
- Fast Startup
- VISA & SCPI Compatible
- LAN Fault Indicators
- Auto-detects LAN Cross-over Cable
- Compatible with most standard Networks

P/N: LAN

USB Interface

- Allows Serial Connection to USB Port on Computer
- Serial commands same as (standard) RS-232/RS-485 Interface

P/N: USB

Power Supply Identification / Accessories

How to order

GEN	8	- 300	-	-
Series Name	Output Voltage (0~8V)	Output Current (0~300A)	Factory Options Option: IEMD MD IS510 IS420 LAN USB	AC Input Options 1P230 (Single Phase 170~265VAC) 3P208 (Three Phase 170~265VAC)

Models 2.4kW

Model	Output Voltage VDC	Output Current (A)	Output Power (W)
GEN 8-300	0~8V	0~300	2400
GEN 10-240	0~10V	0~240	2400
GEN 16-150	0~16V	0~150	2400
GEN 20-120	0~20V	0~120	2400
GEN 30-80	0~30V	0~80	2400
GEN 40-60	0~40V	0~60	2400

Model	Output Voltage VDC	Output Current (A)	Output Power (W)
GEN 60-40	0~60V	0~40	2400
GEN 80-30	0~80V	0~30	2400
GEN 100-24	0~100V	0~24	2400
GEN 150-16	0~150V	0~16	2400
GEN 300-8	0~300V	0~8	2400
GEN 600-4	0~600V	0~4	2400

Factory options

RS-232/RS-485 Interface built-in Standard
 GPIB (Multi-Drop Master) Interface*
 Multi-Drop Slave Interface*
 Voltage Programming Isolated Analog Interface*
 Current Programming Isolated Analog Interface*
 LAN Interface (Complies with **LXI** Class C)*
 USB Interface*

* Limit of one interface option per supply

P/N

-
 IEMD
 MD
 IS510
 IS420
 LAN
 USB

Accessories

1. Serial Communication cable

RS-232/RS-485 cable is used to connect the power supply to the Host PC.

Mode	RS-485	RS-232	RS-232
PC Connector	DB-9F	DB-9F	DB-25F
Communication Cable	Shield Ground L=2m	Shield Ground L=2m	Shield Ground L=2m
Power Supply Connector	EIA/TIA-568A (RJ-45)	EIA/TIA-568A (RJ-45)	EIA/TIA-568A (RJ-45)
P/N	GEN/485-9	GEN/232-9	GEN/232-25

2. Serial link cable*

Daisy-chain up to 31 Genesys™ power supplies.

Mode	Power Supply Connector	Communication Cable	P/N
RS-485	EIA/TIA-568A (RJ-45)	Shield Ground L=50cm	GEN/RJ45

* Included with power supply



Also available, Genesys™

1U Half Rack 750W

1U Full Rack 750W/1500W/2400W

2U Full Rack 3300W

3U Full Rack 10/15kW

TDK-Lambda | 6

USA

TDK-Lambda Americas Inc.
405 Essex Rd. Neptune, NJ 07753
Tel: +1-732-922-9300 Fax: +1-732-922-1441
E-mail: sales@us.tdk-lambda.com
www.us.tdk-lambda.com/hp

CANADA

ACA TMetrix
5805 Kennedy Road, Mississauga, Ontario, L4Z 2G3
Tel: +1-800-665-7301 Fax: +1-905-890-1959
Email: lambda@aca.ca
tmetrix.com

MEXICO

AcMax de Mexico
39 Poniente 3515 Piso 5 Col. Las Animas
Puebla, Pue. C.P. 72400
Tel: 01-800-211-0060 / (222) 891-8484 Fax: 222-264-1445
Email: info@acmax.mx, Web: www.acmax.mx

BRAZIL

Suplitech
Rua Sena Madureira 455, Belo Hte - 31340-000
Tel: +55-31-3498 1177 Fax: +55-31-3441 0841
www.suplitech.com.br

UK

TDK-Lambda UK
Kingsley Avenue
Ilfracombe, Devon EX 34 8ES
Tel: +44-1271-856666 Fax: +44-1271-864894
E-mail: powersolutions@uk.tdk-lambda.com
www.uk.tdk-lambda.com

IRELAND

FRANCE

TDK-Lambda France
ZAC des Delaches, CS 41077
9 rue Thuilliere, 91978 Villebon Courtaboeuf
Tel: +33 1 60 12 71 65 Fax: +33 1 60 12 71 66
www.fr.tdk-lambda.com

NETHERLANDS

SPAIN

GERMANY

TDK-Lambda Germany
Karl-Bold-Str.40, D-77855 Achern
Tel: +49-7841-666-0 Fax: +49-7841-500-0
E-mail: info.germany@de.tdk-lambda.com
www.de.tdk-lambda.com

AUSTRIA

SWITZERLAND

ITALY

TDK-Lambda Italy
Via dei Lavoratori 128/130
IT 20092 Cinisello Balsamo (MI)
Tel: +39-02-6129-3863 Fax: +39-02-6129-0900
E-mail: info.italia@it.tdk-lambda.com
www.it.tdk-lambda.com

SCANDINAVIA

BALTICS

TDK-Lambda Germany
Karl-Bold-Str.40, D-77855 Achern
Tel: +49-7841-666-0 Fax: +49-7841-500-0
E-mail: info.germany@de.tdk-lambda.com
www.de.tdk-lambda.com

JAPAN

TDK-Lambda Corporation
International Sales Division,
3-9-1, Shibaura, Minato-ku,
Tokyo 108-0023
Tel: +81 3-6852-7136 Fax: +81 3-6852-7148
E-mail: t.morimoto@jp.tdk-lambda.com
www.jp.tdk-lambda.com

CHINA

TDK-Lambda Shanghai Office
28F, Xingyuan Technology Building No.418, Guiping Road,
Shanghai, 200233 P.R. CHINA
Tel: +86-21-6485-0777 Fax: +86-21-6485-0666
www.cn.tdk-lambda.com

TDK-Lambda Beijing Office
Room 12B11-12B12, Unit 7 DACHENG SQUARE,
No.28 Xuanwumenxi Street, Xuanwu District Beijing,
100053, P.R. CHINA
Tel: +86-10-6310-4872 Fax: +86-10-6310-4874
www.cn.tdk-lambda.com

TDK-Lambda Hong Kong Office
1 / F. SAE Technology Centre, 6 science Park East Avenue,
HongKong Science Park, Shatin, NT.,
Tel: +852-23766658 Fax: +852-23172150
www.cn.tdk-lambda.com

KOREA

TDK-Lambda Corporation
6F Songok Bldg. 4-1 Soonae-Dong
Pundang-Gu, Songnam-Shi Kyonggi-Do, 463-020
Tel: +82-2-556-1171 Fax: +82-2-555-2706
www.tdk-lambda.co.kr

MALAYSIA

TDK-Lambda Malaysia
Lot 709, Nilai Industrial Estate
71800 Nilai, Negeri Sembilan
Tel: +60-6-799-1130 Fax: +60-6-799-3277
www.my.tdk-lambda.com

SINGAPORE

TDK-Lambda Singapore
1008 Toa Payoh North # 06-01/08
Singapore 318996
Tel: +65-6251-7211 Fax: +65-6250-9171
www.sg.tdk-lambda.com

PHILIPPINES

THAILAND

INDIA

TDK-Lambda India
#526, Ground Floor, 10th Main, 7th Cross,
Jeevanbhimannagar, Bangalore 560 075,
Karnataka, India
Tel : +91-80-43550500 Fax : +91-80-43550501
www.in.tdk-lambda.com

ISRAEL

RUSSIA

TDK-Lambda Ltd. Israel
Kibbutz Givat Hashlosha Tel-Aviv 48800
Tel: +972-3-9024-333 Fax: +972-3-9024-777
E-mail: info@tdk-lambda.co.il
www.tdk-lambda.co.il



TDK-Lambda Americas Inc. 405 Essex Road, Neptune, NJ 07753 USA
Tel: +1 732 922 9300 Fax: +1 732 922 1441
www.us.tdk-lambda.com/hp