GENESYS™ GH1kW/1.5kW Series
Programmable DC Power Supplies
Half-Rack 1kW/1.5kW in 1U Height

! Advanced Features Built-In !

- Arbitrary Waveform Generator with Auto-Trigger Capability
  - Programmable Slew Rate Control (Vout/Iout)
- Constant Power Limit Operation • Internal Resistance Programming
  - Built-In Remote Isolated Analog Interface
- Built-In LAN (LXI 1.5), USB, and RS-232/RS-485 Interfaces
- Optional EtherCAT, Modbus-TCP, IEEE (488.2) Interfaces
  - Blank Front Panel Option Available
The G+ENESYS™ family of programmable power supplies sets a new standard for flexible, reliable, AC/DC power systems in OEM, Industrial and Laboratory applications.

**Features include:**

- Leading DC Programmable power density (1.5kW in 1U height) in 19” Half-Rack-mount
- Light-weight <3.5 kg
- Wide Range of popular worldwide AC inputs:
  - GH1kW/1.5kW: 1ø (85~265VAC)
- Active PFC (0.99 typical)
- Output Voltage up to 600V, Current up to 150A
- Built-in LAN (10/100), USB, RS-232/RS-485 Interface
- Multi-Drop capability (RS-485)
- Multi-functional front panel display
- Last-Setting Memory
- Auto-Start / Safe-Start: user selectable
- High Resolution 16 bit ADCs & DACs
- Arbitrary Waveform Generator with Auto-Trigger Capability
- Store up to 100 steps into four internal memory cells
- High-speed Programming
- Constant Voltage/Constant Current operation modes
- Constant Power (CP) Limit
- Slew-Rate Control (V/I)
- Internal Resistance Programming Simulation
- Local / Remote Sensing - software controlled
- Built-In Remote Isolated Analog Program/Monitor and Control Interface
- Protection functions (OVP, UVP, UVL, FOLD (CV/CC), OCL, OTP, AC FAIL)
- Fan speed profile controlled by ambient temperature and load
- Certified LabWindows™/CVI, LabVIEW™, and IVI Drivers
- Optional EtherCAT, Modbus-TCP, IEEE (488.2) Interfaces
- 19” Rack Mount capability for ATE and OEM application
- Scalable Power Systems
- Parallel Systems with Auto-Configure
- Worldwide Safety Agency approvals
- CE Mark for Low Voltage, EMC and RoHS3 Directives
- Five year warranty

**Applications**

G+ENESYS™ power supplies have been designed to meet the demands of a wide variety of applications.

**Test & Measurement systems, Component Device Testing, Manufacturing and process control.**

**Semiconductor Processing & Burn-In, Aerospace & Satellite Testing, Medical Imaging, Green Technology.**

**Higher power systems** can be configured with up to four 1.5kW units. Each unit is 1U with zero space between them (zero stack).

**OEM Designers** have a wide variety of Inputs and Outputs from which to select depending on application and location.
GH1kW/1.5kW Front Panel Description

1. Input Power ON/OFF Switch
2. Air Intake allows zero stacking for maximum system flexibility and power density.
3. Reliable Detent Encoders for settings and Menu navigation.
4. High Contrast/Brightness display with wide viewing angle, 16 segment LCD
5. Function/Status LEDs: Active modes and function indicators
6. Pushbuttons allow flexible user configuration

GH1kW/1.5kW Rear Panel Description

1. Isolated Analog Programming, Monitoring and other control connector (DB26 Female)
2. USB Interface connector (Type B).
3. RS-232/RS-485 IN/OUT Remote Digital Interface (RJ-45 type) for Multi-Drop connection
4. LAN (LXI 1.5) Interface connector (RJ-45 type with LAN status indicators).
5. Auto paralleling Bus connectors (mini I/O type) for connecting Master unit-to-Slave and Slave unit-to-Slave unit.
6. Remote/Local Output Voltage Sense Connections (spring cage).
7. Output Connections: Rugged busbars (shown) for models up to and including 100V Output; Output connector: PHOENIX CONTACT GIC 2.5/4-G-7,62 for models with Outputs >100V. Plug connector: PHOENIX CONTACT GIC 2.5/4-ST-7,62 for models with Outputs >100V.
9. Optional Interface Position for IEEE 488.2 SCPI or AnyBus Interface.
10. Exhaust air assures reliable operation when units are zero stacked.
11. Functional Ground connection (M3x8mm screw).
**Front Panel Display MENU/CONTROL buttons:**

![Front Panel Display MENU/CONTROL buttons](image)

**Front Panel Display indicators**

![Front Panel Display indicators](image)
**GENESYS™ GHB1kW/1.5kW Series**

**Blank Front Panel (ATE version)**

A Blank Front Panel is available for applications where the front panel display and controls are not required and only remote interface (Digital/Analog) is needed.

The Blank Front Panel option has all the standard product functions and features except the display. The power supply can be controlled via the rear panel Remote Digital Interface (LAN, USB, RS-232/RS-485) or via the Remote Isolated Analog Interface.

**GENESYS™ Parallel and Series Configurations**

**Parallel operation - Master/Slave:**

Auto paralleling Scalable Master-Slave Operation.
Active current sharing allows up to four identical units to be connected
Total real current is programmed, measured and reported by the Master. Up to four supplies operate as one.

**Series operation**

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

**Multi-Drop Remote Programming via Communication Interface**


- First unit is LAN, USB, RS-232, RS-485, etc.
- All other units use RS-485 daisy chain with linking cable.
**Graphical User Interface**

Advanced "Virtual Front Panel" allows programming and monitoring unit(s) with or without front panel display.

1. Control and monitor up-to 31 units with "Address" bar
2. Front panel set-up menu control (PROgram, SYSTem, CONFiguration, PROTection and COMMunication)
3. Informative "Parameters" status bar
4. Individual unit and Global command control
5. Data logging including errors, events and recovery
6. Realtime Graph and Waveform creator, store/load sequence.
7. Solar array mode - calculate MPP (Max Peak Power) for solar array.
9. Remote communication state LOC, REM, LLO.
10. Programmed signals 1&2

**GUI Waveform Profile Generator**
How to order GH1kW/1.5kW - Power Supply Identification / Accessories

<table>
<thead>
<tr>
<th>Series Name</th>
<th>Output Voltage</th>
<th>Output Current</th>
<th>Interface Options</th>
<th>AC Cord Options only for 1kW</th>
<th>Accessories Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Panel Type</td>
<td>(0~10V)</td>
<td>(0~150A)</td>
<td></td>
<td>Region: E - Europe</td>
<td>M - Printed *User Manual</td>
</tr>
<tr>
<td>Empty: standard</td>
<td></td>
<td></td>
<td></td>
<td>U - North America</td>
<td>* User Manual &amp; GUI are available on the website</td>
</tr>
<tr>
<td>B: Blank Front Panel</td>
<td></td>
<td></td>
<td></td>
<td>J - Japan</td>
<td>P - Bus Paralleling Cable</td>
</tr>
</tbody>
</table>

AC Inputs (All Models)

10, 85 - 265Vac

<table>
<thead>
<tr>
<th>Interface Options (Factory installed)</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN (100 &amp; 1.5 compliant with Multi-Drop capability) - built-in</td>
<td>-</td>
</tr>
<tr>
<td>USB 2.0 compliant with Multi-Drop capability - built-in</td>
<td>-</td>
</tr>
<tr>
<td>RS-232/RS-485 - built-in</td>
<td>-</td>
</tr>
<tr>
<td>Isolated Analog Program/Monitor Interface (5V/10V Pgm/Mon with 600V isolation) - built-in</td>
<td>IEEE</td>
</tr>
<tr>
<td>IEEE (488.2 &amp; SCPI compliant with Multi-Drop capability installed)</td>
<td>MDBS</td>
</tr>
<tr>
<td>Modbus-TCP</td>
<td>ECAT</td>
</tr>
</tbody>
</table>

Models 1kW

<table>
<thead>
<tr>
<th>Model</th>
<th>Voltage (V)</th>
<th>Current (A)</th>
<th>Power (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GH10-100</td>
<td>0~10V</td>
<td>0~100</td>
<td>1000</td>
</tr>
<tr>
<td>GH20-50</td>
<td>0~20V</td>
<td>0~50</td>
<td>1000</td>
</tr>
<tr>
<td>GH30-34</td>
<td>0~30V</td>
<td>0~34</td>
<td>1020</td>
</tr>
<tr>
<td>GH40-25</td>
<td>0~40V</td>
<td>0~25</td>
<td>1000</td>
</tr>
<tr>
<td>GH60-17</td>
<td>0~60V</td>
<td>0~17</td>
<td>1020</td>
</tr>
</tbody>
</table>

Models 1.5kW

<table>
<thead>
<tr>
<th>Model</th>
<th>Voltage (V)</th>
<th>Current (A)</th>
<th>Power (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GH10-150</td>
<td>0~10V</td>
<td>0~150</td>
<td>1500</td>
</tr>
<tr>
<td>GH20-75</td>
<td>0~20V</td>
<td>0~75</td>
<td>1500</td>
</tr>
<tr>
<td>GH30-50</td>
<td>0~30V</td>
<td>0~50</td>
<td>1500</td>
</tr>
<tr>
<td>GH40-38</td>
<td>0~40V</td>
<td>0~38</td>
<td>1520</td>
</tr>
<tr>
<td>GH60-25</td>
<td>0~60V</td>
<td>0~25</td>
<td>1500</td>
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</tbody>
</table>

Accessories

Rack Mounting applications P/N:GH/RM

The Rack Mounted kit allows the units to be zero stacking for maximum system flexibility and power density without increasing the 1U height of the units. To install one GH1kW/1.5kW unit or two units side-by-side in a standard 19" rack in 1U(1.75") height, use option kit P/N:GH/RM

Single unit installation

Single GH1kW/1.5kW power supply in a standard 19" rack in 1U(1.75") height

Dual unit installation

Two GH1kW/1.5kW power supplies side-by-side in a standard 19" rack in 1U (1.75") height

Benchtop applications Multi Output P/N:GH/MO

The benchtop stacking kit allows the units to be Zero stacked for maximum system flexibility and power density without increasing the 1U height of the units. To install a GH1kW/1.5kW two units one on top of the other use option kit P/N:GH/MO-2U
### GH1kW SERIES SPECIFICATIONS

#### OUTPUT RATING

<table>
<thead>
<tr>
<th>GH</th>
<th>10</th>
<th>100</th>
<th>20</th>
<th>200</th>
<th>30</th>
<th>300</th>
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</table>

#### INPUT CHARACTERISTICS

| V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V |
| A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS |

#### FUNCTIONALITY AND FEATURES

1. **Parallel operation**
   - Possible. Up to 4 identical units in Master/Slave mode. Refer to instruction manual.
2. **Series operation**
   - Possible. Two identical units. Refer to instruction manual.
3. **Daisy chain**
   - Power supplies can be connected in Daisy chain to synchronize their turn-on and turn-off.
4. **Constant power control**
   - Limits the output power to a programmed value. Programming via the communication ports or the front panel.
5. **Output resistor control**
   - Emulates series resistance. Resistance range: 1~1000Ω. Programming via the communication ports or the front panel.
6. **Slew rate control**
   - Programmable. Output rise and Output fall slew rate. Programming range: 0.0001~9999.9 V/sec or A/sec. Programming via the communication ports or the front panel.
7. **Arbitrary waveforms**
   - Profiles of up to 100 steps can be stored in 4 memory cells. Activation by command via the communication ports or by the front panel.

#### PROGRAMMING AND READBACK (USB, LAN, RS232/485, Optional IEEE (*16) Interfaces)

| V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V | V |
| A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A | A |
| mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS | mS |

#### OUTPUT RATING

1. **Rated output voltage** (*1)
   - 0% of rated output voltage
2. **Rated output current** (*1)
   - 0% of actual output current
3. **Rated output power**
   - 0.2% of rated output voltage
4. **Rated output resolution**
   - 0.003% of rated output current
5. **Rated output accuracy**
   - 0.005% of rated output voltage
6. **Rated output accuracy**
   - 0.1% of rated output current
7. **Output resolution (of rated output voltage)**
   - 0.01% of rated output voltage
8. **Output resolution (of rated output current)**
   - 0.003% of rated output current

#### INPUT CHARACTERISTICS

1. **Input voltage/freq. (*13)**
   - 85~265Vac, continuous, 47~63Hz, Single Phase
2. **Maximum input current at 100% load (100/200)**
   - 0.01% of rated output voltage
3. **Power factor (type)**
   - 0.98 ~ 0.98 VAr
4. **Efficiency at 100 Vac/200Vac, rated output (*17)**
   - 86.88 ~ 88.90
5. **Input current** (*5)
   - 0.02% of rated output current

#### ANALOG PROGRAMMING AND MONITORING (ISOLATED FROM THE OUTPUT)

1. **Vout programming accuracy** (*15)**
   - Less than +/-0.15% of rated output voltage over 30 minutes following power on.
2. **Iout programming accuracy** (*14)**
   - Less than +/-0.05% of rated output current over 30 minutes following power on.
3. **Vout resistor programming**
   - 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: +/-0.5% of rated Vout.
4. **Iout resistor programming** (*14)**
   - 0~100%, 0~5/10Kohm full scale, user selectable. Accuracy and linearity: +/-0.5% of rated Iout.

#### SIGNALS AND CONTROLS (ISOLATED FROM THE OUTPUT)

1. **Programmed signals**
   - Two open drain programmable signals. Maximum voltage 25V, Maximum sink current 100mA (Shunted by 27V zener)
2. **Slew rate control**
   - Programmable. Output rise and Output fall slew rate. Programming range: 0.0001~9999.9 V/mSec or A/mSec. Programming via the communication ports or the front panel.
3. **CV/CC Monitor**
   - Open collector. CC mode: On. CV mode: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA.
4. **CV/CC Monitor**
   - Open collector. CV mode: On. CC mode: Off. Maximum Voltage: 30V, Maximum Sink Current: 10mA.
5. **Remote trigger input/trigger output signals**
   - Maximum high level input voltage = 0.8V. Minimum high level input voltage = 2.5V. Maximum high level input = 5V positive edge trigger: tw=10us minimum. Tr,TF=1us Maximum, Min delay between 2 pulses = 1ms.

#### DIAGRAMS AND WIRING

- Power supplies can be connected in Daisy chain to synchronize their turn-on and turn-off.
### GH1.5kW SERIES SPECIFICATIONS

#### OUTPUT RATING

<table>
<thead>
<tr>
<th>GH</th>
<th>10-150</th>
<th>20-75</th>
<th>30-50</th>
<th>40-38</th>
<th>60-25</th>
<th>80-19</th>
<th>100-15</th>
<th>150-10</th>
<th>300-5</th>
<th>600-2.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>150</td>
<td>300</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### INPUT CHARACTERISTICS

| V      | 10     | 20    | 30    | 60    | 80    | 100   | 150    | 300    |       |         |

#### OUTPUT CHARACTERISTICS

| V      | 10     | 20    | 30    | 60    | 80    | 100   | 150    | 300    |       |         |

#### PERFORMANCE CHARACTERISTICS

| V      | 10     | 20    | 30    | 60    | 80    | 100   | 150    | 300    |       |         |

### FUNCTIONS AND FEATURES

1. Parallel operation
2. Series operation
3. Easy chain
4. Constant power control
5. Output resistance control
6. Slew rate control
7. Arbitrary waveforms

### PROGRAMMING AND READBACK (USB, LAN, RS232/485, Optional IEE) Interface

| V      | 10     | 20    | 30    | 40    | 60    | 80    | 100    | 150    | 300    | 600     |

### REMARKS

- All specifications are subject to change without notice.
- Production data is used for the following conditions: Unless otherwise stated, constant line, load & temperature.
- Unless specifically stated, all specifications are based on 25°C or 50°C, 47~63Hz, 8hr warm up.

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**Note:** The content provided is a structured representation of a technical document focusing on electrical specifications and performance characteristics of a power supply product. The table format and detailed data enable a clear understanding of the product's specifications across various operating conditions and features.
## Protectve Functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Specification</th>
<th>50</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>150</th>
<th>300</th>
<th>600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foldback protection</td>
<td>Output shut-down when power supply changes mode from CV or Power Limit to CC mode or from CC to Power Limit to CV mode. User preselectable. Reset by AC input recycle in autostart mode, by Power Switch, by OUTPUT button, by rear panel or by communication.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Over-voltage protection (OVP)</td>
<td>Output shut-down. Reset by AC input recycle in autostart mode, by OUTPUT button, by rear panel or by communication.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over-voltage programming range</td>
<td>V</td>
<td>2.5 - 12</td>
<td>1 - 24</td>
<td>2 - 48</td>
<td>2 - 44.1</td>
<td>5 - 66.75</td>
<td>5 - 89.2</td>
<td>5 - 110.25</td>
</tr>
<tr>
<td>Over-voltage programming accuracy</td>
<td>±1% of rated output voltage</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Output under voltage limit (UVL)</td>
<td>Prevents from adjusting Vout below limit. Does not apply in analog programming. Reset by front panel or communication port.</td>
<td></td>
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</tr>
<tr>
<td>Over-temperature protection</td>
<td>Shuts down the output. Auto recovery by autostart mode.</td>
<td></td>
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</tr>
<tr>
<td>Over-temperature protection</td>
<td>Prevents adjustment of Vout below limit.</td>
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</tr>
<tr>
<td>Output under voltage protection (OVP)</td>
<td>Prevents adjustment of Vout below limit.</td>
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</table>

## ENVIRONMENTAL CONDITIONS

<table>
<thead>
<tr>
<th>Condition</th>
<th>Specification</th>
<th>50</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>150</th>
<th>300</th>
<th>600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature</td>
<td>±0 - 50°C, 100% load.</td>
<td></td>
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</tr>
<tr>
<td>Storage temperature</td>
<td>±30 - 85°C</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Operating humidity</td>
<td>±20 - 90% RH (no condensation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage humidity</td>
<td>±10 - 95% RH (no condensation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Altitude</td>
<td>Operating temperature</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

## Mechani

<table>
<thead>
<tr>
<th>Specification</th>
<th>100000 (50000)</th>
<th>200000 (50000)</th>
<th>300000 (50000)</th>
<th>400000 (50000)</th>
<th>500000 (50000)</th>
<th>600000 (50000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum voltage drop</td>
<td>±10% of rated output voltage</td>
<td>±10% of rated output voltage</td>
<td>±10% of rated output voltage</td>
<td>±10% of rated output voltage</td>
<td>±10% of rated output voltage</td>
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</tbody>
</table>

## Safety/EMC

<table>
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<tr>
<th>Specification</th>
<th>UL60950-1, CSA22.2 No. 60101-1, IEC60101-1, EN60101-1.</th>
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<tbody>
<tr>
<td>1. Applicable standards</td>
<td>Safety GH1KW/1.5kW</td>
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<tr>
<td>1. Interface classification</td>
<td>Vout≤50V Models. Output: J1, J2, J3, J4, J5, J6, J7, J8 (sense) &amp; J9 (communication options) are Non-Hazardous. 60V&gt;Vout&gt;600V Models: Output &amp; J8 (sense) are hazardous. J1, J2, J3, J4, J5, J6, J7 &amp; J9 (communication options) are Non-Hazardous.</td>
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<td>1.2 Withstand voltage</td>
<td>Vout≤50V Models: Input – Output &amp; J8 (sense), J1, J2, J3, J4, J5, J6, J7 &amp; J9 (communication options): 4242VDC 1min, Input - Ground: 2835VDC 1min. 60V&gt;Vout&gt;600V Models: Output &amp; J8 (sense) are hazardous. J1, J2, J3, J4, J5, J6, J7 &amp; J9 (communication options): 4242VDC 1min, Input - Ground: 2835VDC 1min.</td>
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<td>1.3 Insulation resistance</td>
<td>1000MΩ at 25°C, 70%RH. Output to Ground 500VDC</td>
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<td>2. Conducted emission</td>
<td>RE/EN61004-3 Industrial environment, Annex H table H.1 , FCC, Part 15-A, VCCI-A</td>
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## EMC Compliance

| Specification                  | RE/EN61004-3 Industrial environment                         |    |    |    |     |     |     |

Unless otherwise noted, specifications are warranted over the ambient temperature range of 0°C to 50°C.

**Notes:**

1. Minimum voltage is guaranteed to maximum 0.1% of rated output voltage.
2. Minimum current is guaranteed to maximum 0.2% of rated output current.
3. For cases where conformance to various safety standards (UL, IEC, etc…) is required, to be described as 100-240Vac (50/60Hz).
4. Signal and control ports interface cables length: Less than 3m, DC output power port cables length Less than 30m.
5. Not including EMI filter input current, less than 0.2mSec.
6. 85 ~ 135VAC or 170 ~ 265VAC, Load constant.
7. From No-Load to Full-Load, constant input voltage. Measured at the sensing point in Remote Sense.
9. For load voltage change, equal to the unit voltage rating, constant input voltage.
10. The maximum voltage on the power supply terminals must not exceed the rated voltage.
11. From 90% to 100% of Rated Output Voltage, with rated, resistive load.
12. 25% to 100% output condition. Reset by Power Switch, by OUTPUT button, by rear panel or by communication. 1.8 kW ~ 1MHz.
13. Measured at the sensing point.
14. Measured at ambient temperature for using IEEE is 40°C.
Outline Drawing GENESYS™ GH1kW (150V-600V)

- AC INPUT IEC 320-C16
- IEEE OR ANYBUS OPTIONS J9
- 90° CONNECTOR J1
- D926 CONNECTOR J2
- SERIAL OUT CONNECTOR J3
- LAN CONNECTOR J5
- OUTPUT CONNECTOR G9, 2.5/4.0-7.62 PHOENIX CONTACT
- PARALLEL CONNECTOR J7 (M) J6 (B)

Dimensions:
- Width: 447.0 ± 1.5 mm
- Height: 460.0 ± 1.5 mm
- Depth: 180.2 ± 1.0 mm
- Height: 39.0 ± 0.5 mm
- Depth: 8.0 ± 0.5 mm

Notes:
1. AC INPUT RATING, SAFETY APPROVAL SYMBOLS AND EU REPRESENTATIVE LABEL ARE SHOWN HERE ACCORDING TO THE SPECIFICATIONS.
2. MODEL NAME AND OUTPUT RATING ARE SHOWN HERE ACCORDING TO THE SPECIFICATIONS.
3. COMPANY LOGO IS SHOWN HERE.

Additional Notes:
- 4 FOOT SNAPS SHIPPED IN PACKAGE

SEE NOTE 1
SEE NOTE 2
SEE NOTE 3
Outline Drawing GENESIS™ GH1.5kW (10V-100V)
<table>
<thead>
<tr>
<th>Country</th>
<th>Address</th>
<th>Phone Numbers</th>
<th>Email</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>TDK-Lambda Nordic</td>
<td>+45-8853-8086</td>
<td><a href="mailto:info@dk.tdk-lambda.com">info@dk.tdk-lambda.com</a></td>
<td><a href="http://www.emea.lambda.tdk.com/dk">www.emea.lambda.tdk.com/dk</a></td>
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<tr>
<td>Japan</td>
<td>TDK-Lambda Corporation</td>
<td>+81-3-6778-1113 FAX: +81-3-6778-1160</td>
<td></td>
<td><a href="http://www.jp.lambda.tdk.com">www.jp.lambda.tdk.com</a></td>
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<tr>
<td>China</td>
<td>TDK-Lambda (China) Electronics Co. Ltd, Shanghai Office 5th Floor Kehui Tower, 1188 Qinzhou Road (North), Xuhui District Shanghai 200233, China</td>
<td>+86-21-6485-0777 Fax: +86-21-6485-0666</td>
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<td><a href="http://www.lambda.tdk.com.cn">www.lambda.tdk.com.cn</a></td>
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<td></td>
<td>Beijing Branch of TDK-Lambda (China) Electronic Co. Ltd. Room 12B11-12B12, Unit 7 Dacheng square, No.28 Xuanwumenxi Street, Xuanwu District Beijing, 100053, CHINA</td>
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<td>Singapore 318996</td>
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<td>TDK India Private Limited. Power Supply Division</td>
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