



Programmable DC Power Supplies 5kW in 2U Built in RS-232 & RS-485 Interface Advanced Parallel Operation Optional Interface: LXI Compliant LAN IEEE488.2 SCPI (GPIB) Multi-drop Isolated Analog Programming



Genesys™ Family GENH 750W Half Rack GEN1U 750/1500/2400W Full Rack GEN2U 3.3/5kW



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:

- High Power Density 5kW in 2U
- Wide Range of popular worldwide AC inputs, 3ø (208VAC, 400VAC)
- Active Power Factor Correction (Three-Phase AC Input)
- Output Voltage up to 600V, Current up to 600A
- 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 Compliant LAN
- LabView[®] and LabWindows[®] drivers
- Five Year Warranty

Worldwide Safety Agency Approvals; CE Mark for LVD and EMC Regulation



Applications

Genesys[™] power supplies have been designed to meet the demands of a wide variety of applications.

Test & Measurement systems, Component Device Testing.

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

Higher power systems can be configured with up to four 5kW modules. Each module is 2U with zero space between them (zero stack).

Flexible configuration is provided by the complete Genesys[™] Family: 1U 750W Half-Rack, 1U 750W, 1500W and 2400W 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 baudrate 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 ControlRemote Mode
- Preview Settings
- 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

• Foldback Mode

- 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.
- Input: 230VAC Single Phase (shown), 208 & 400VAC Three Phase, 50/60 Hz
 AC Input Connector: PHOENIX CONTACT Power Combicon PC 6/... Series with strain relief.
- 9. Optional Interface Position for IEEE 488.2 SCPI (shown) or Isolated Analog Interface or LAN Interface.

Genesys [™] 5kW Specifications

												6				
1.0 MODEL MODEL	GEN	8-600	10 500	16-310	20.250	20 170	40 125	60-85	80-65	100 50	150.24			ns in Blu 400-13		
	V		10-500			30-170	40-125				150-34			400-13	500-10	
1.Rated output voltage(*1) 2.Rated Output Current(*2)	1	8 600	500	16 310	20 250	170	125	60 85	80 65	100 50	150 34	200	<u>300</u> 17	13	10	600 8.5
3.Rated Output Current(*2)	A	4800	5000	4960	5000	5100	5000	5100	5200	5000	5100	25 5000	5100	5200	5000	5100
1.1 CONSTANT VOLTAGE MODE	VV	4000	5000	4900	5000	5100	3000	5100	5200	5000	5100	5000	5100	5200	3000	5100
1.Max.line regulation (0.01% of rated Vo)(*6)	mV	0.8	1.0	1.6	2	3	4	6	8	10	15	20	30	40	50	60
				1.6				6								
2.Max load regulation (0.015% of rated Vo+5mV)(*7)		6.2	6.5	7.4	8	9.5	11	14	17.7	20	27.5	35	50	65	80	95
3.Ripple and noise p-p 20MHz (*8)	mV	75	75	70	75	70	70	70	80	90	120	200	200	350	300	450
4.Ripple r.m.s 5Hz~1MHz	mV	8	8	10	10	10	8	8	15	15	20	45	60	70	70	100
5.Remote sense compensation/wire	V	2	2	2	2	5	5	5	5	5	5	5	5	5	5	5
6.Temp. coefficient	PPM/°C			ted out												
7.Temp. stability				Vout ov								e, load &	temp.			
8.Warm-up drift		Less tha	n 0.05%	of rated		oltage+2	2mV over	<u>r 30 minu</u>	ites follo							
9.Up-prog. response time, 0~Vo Rated (*9)					0					5	0			65	80	100
10.Down-prog response Full-load (*9)	mS	15		50			80				100			135	170	200
time No-load (*10)	mS	400	500	600	700	800	900	1000				2000		3000	3000	3000
11 Transient response time	mS													utput cur		tput set
11.Transient response time	ms	point: 1	0-100%,	local sen	se. Less	than 1mS	Sec for m	odels up	to and i	ncluding	100V. 2r	nsec for I	models a	bove 10	VC	
1.2 CONSTANT CURRENT MODE																
1.Max.line regulation (0.05% of rated lo)(*6)	mA	300	250	155	125	85	62.5	42.5	32.5	25	17	12.5	8.5	6.5	5	4.25
2.Max.load regulation (0.1% of rated Io)(*11)		600	500	310	250	170	125	85	65	50	34	25	17	13	10	8.5
3.Ripple r.m.s 5Hz~1MHz . (*12)	mA	1700			700	350	180	120	80	50	50	50	20	15	10	10
4.Load regulation thermal drift				f rated o												
5.Temp. coefficient	PPM/°C			n rated o							,					
6.Temp. stability				lout ove							tantling	load &	tempera	ture		
				Less that										care.		
7.Warm-up drift				els: Less tria												
1.3 PROTECTIVE FUNCTIONS		1201~00	0111000	EIS. LESS [11a11 ±0.2	2.J70 01 ra	ιευ ουίβ	ut currel	n over 3	ommute	3 IUIIUWI	ng powe	i Uil.			
		0 1050	Cort	at Cuma 1	+											
1. OCP				nt Curren			f.		CC 11-1		1.					
2. OCP Foldback				wn when												
3. OVP type				wn, man												
4. OVP trip point													5~330V	5~440V	5~550V	5~660\
5. Output Under Voltage Limit Preset by front panel or communication port. Prevents from adjusting Vout below limit.																
6. Over Temp. Protection			ectable	, latched	or non-l	atched.										
1.4 ANALOG PROGRAMMING AND MON	ITORING															
1.Vout Voltage Programming	0~100%, 0~5V or 0~10V, user select. Accuracy and linearity:±0.5% of rated Vout.															
2.lout Voltage Programming (*13)		0~100%	, 0~5V c	or 0~10V,	user sele	ect. Accu	racy and	linearity	:±1% of r	ated lou	t.					
3.Vout Resistor Programming		0~100%	, 0~5/10	Kohm fu	ll scale,u	ser selec	t.,Accura	acy and li	nearity:	±1% of ra	ted Vou	t.				
4. lout Resistor Programming (*13)		0~100%	, 0~5/10	Kohm fu	ll scale,u	ser selec	t. Accura	icy and li	nearity:	£1.5% of	rated lou	ıt.				
5.On/Off control (rear panel)		By elect	rical. Vo	ltage: 0~	0.6V/2~1	5V,or dry	contact	user sel	ectable	logic.						
6.Output Current monitor (*13)				Accuracy												
7.Output Voltage monitor				Accuracy												
8.Power Supply OK signal				-OK, 0V-				nce								
9. CV/CC Indicator				CC mode					ade: 30V	maximi	ım sink c	urrent· 1	0m∆			
10. Enable/Disable				en:off , Sl								unent. i				
11. Local/Remote analog control				hal or Op							ocal					
												+. 10m A				
12. Local/Remote analog control Indicate	Dr	Upen co	pliector,	Local: Of	i, Remot	e: On. Ma	aximum	voltage:	30V, max	imum si	ik currer	it: IUMA.				
1.5 FRONT PANEL		N / I		1 12 1					<i>c</i> · · ·			1.)				
				ial adjust				arse and	fine adj	ustment	selectab	le).				
				al adjust l												
1.Control functions		On/Off, Output on/off, Re-start modes (auto, safe), Foldback control (CV to CC), Go to local control. Address selection by Voltage (or current) adjust encoder. Number of addresses:31.														
								icoder. N	umber o	t address	ses:31.					
				(automat												
				ion: 1200												-
2.Display				, Accura												
				, Accura												
3.Indications		Voltage	, Current	t, Alarm, I	Fine, Pre	view, Fol	dback, L	ocal, Out	put On,	Front Pai	nel Lock,	CVCC.				
1.6 Interface Specifications for the GEN	ESYS Ser	ries with	RS-232	RS-485 (Or Optio	nal GPI	3/LAN In	terface	nstalled							
									r	100	150	200	200	400	500	(00
1. Remote Voltage Programming (16 bit)				16					80		150		300	400	500	600
Resolution (0.002% of Vo Rated)	mV	0.16	0.20	0.32	0.40	0.60	0.80	1.20	1.60	2.0	3.0	4.0	6.0	8.0	10.0	12.0
Accuracy (0.05% of Vo Rated) (*14)	mV	4	5	8	10	15	20	30	40	50	75	100	150	200	250	300
2. Remote Current Programming (16 hit)						3.40	2.50	1.70	1.30	1.00	0.68	0.50	0.34	0.26	0.20	0.17
	mA	12	10	6.20	5.00		2.00			1.00					0.20	
Resolution (0.002% of Io Rated)	mA mA	12 2400	2000	6.20 1240	5.00 1000		500	340		200					40	≺⊿
Resolution (0.002% of Io Rated) Accuracy (0.3% of Io Rated+0.1% of Io Actual Output) (*13)		12 2400	10 2000	6.20 1240	5.00 1000	680	500	340	260	200	136	100	68	52	40	34
Resolution (0.002% of lo Rated) Accuracy (0.3% of lo Rated+0.1% of lo Actual Output) (*13) 3. Readback Voltage	mA	2400	2000	1240	1000	680			260		136	100	68	52		
Resolution (0.002% of lo Rated) Accuracy(0.3%ofloRated+0.1%ofloActualOutput)(*13) 3. Readback Voltage Resolution (% of Vo Rated)	mA %	2400	2000	0.007	1000 0.006	680 0.004	0.003	0.002	260 0.002	0.011	136 0.007	100 0.006	68 0.004	52 0.003	0.003	0.002
Resolution (0.002% of lo Rated) Accuracy(0.3%ofloRated+0.1%ofloActualOutput)(*13) 3. Readback Voltage Resolution (% of Vo Rated) Resolution (Readback Voltage)	mA % mV	2400 0.002 0.16	2000 0.011 1.10	1240	1000	680	0.003	0.002	260 0.002 1.60	0.011	136 0.007 10.50	100 0.006 12.00	68 0.004 12.00	52 0.003 12.00	0.003	0.002
Resolution (0.002% of lo Rated) Accuracy(0.3%ofloRated+0.1%ofloActualOutput)(*13) 3. Readback Voltage Resolution (% of Vo Rated) Resolution (Readback Voltage)	mA %	2400	2000	0.007	1000 0.006	680 0.004	0.003	0.002	260 0.002	0.011	136 0.007	100 0.006	68 0.004	52 0.003	0.003	0.002
Resolution (0.002% of lo Rated) Accuracy(0.3%ofloRated+0.1%ofloActualOutput)(*13) 3. Readback Voltage Resolution (% of Vo Rated) Resolution (Readback Voltage) Accuracy (0.05%Vo Rated)	mA % mV	2400 0.002 0.16	2000 0.011 1.10	1240 0.007 1.12	1000 0.006 1.20	680 0.004 1.20	0.003	0.002	260 0.002 1.60	0.011	136 0.007 10.50	100 0.006 12.00	68 0.004 12.00	52 0.003 12.00	0.003	0.002
Resolution (0.002% of lo Rated) Accuracy(0.3% of lo Rated+0.1% of lo Actual Output)(*13) 3. Readback Voltage Resolution (% of Vo Rated) Resolution (Readback Voltage) Accuracy (0.05% Vo Rated) 4. Readback Current	mA % mV mV	2400 0.002 0.16 4	2000 0.011 1.10 5	1240 0.007 1.12 8	1000 0.006 1.20 10	680 0.004 1.20 15	0.003 1.20 20	0.002 1.20 30	260 0.002 1.60 40	0.011 11.00 50	136 0.007 10.50 75	100 0.006 12.00 100	68 0.004 12.00 150	52 0.003 12.00 200	0.003 15.00 250	0.002 12.00 300
Resolution (0.002% of lo Rated) Accuracy(0.3% of lo Rated+0.1% of lo Actual Output)(*13) 3. Readback Voltage Resolution (% of Vo Rated) Resolution (Readback Voltage) Accuracy (0.05% Vo Rated) 4. Readback Current Resolution (% of lo Rated)	mA % mV mV %	2400 0.002 0.16 4 0.002	2000 0.011 1.10 5 0.003	1240 0.007 1.12 8 0.004	1000 0.006 1.20 10 0.005	680 0.004 1.20 15 0.006	0.003 1.20 20 0.009	0.002 1.20 30 0.002	260 0.002 1.60 40 0.002	0.011 11.00 50 0.003	136 0.007 10.50 75 0.004	100 0.006 12.00 100 0.005	68 0.004 12.00 150 0.006	52 0.003 12.00 200 0.008	0.003 15.00 250 0.011	0.002 12.00 300
Resolution (0.002% of lo Rated) Accuracy (0.3% of lo Rated+0.1% of lo Actual Output) (*13) 3. Readback Voltage Resolution (% of Vo Rated) Resolution (Readback Voltage) Accuracy (0.05% Vo Rated) 4. Readback Current Resolution (% of lo Rated) Resolution (Readback Current)	mA mV mV % mA	2400 0.002 0.16 4 0.002 12.00	2000 0.011 1.10 5 0.003 15.00	1240 0.007 1.12 8 0.004 12.40	1000 0.006 1.20 10 0.005 12.50	680 0.004 1.20 15 0.006 10.20	0.003 1.20 20 0.009 11.25	0.002 1.20 30 0.002 1.70	260 0.002 1.60 40 0.002 1.30	0.011 11.00 50 0.003 1.50	136 0.007 10.50 75 0.004 1.36	100 0.006 12.00 100 0.005 1.25	68 0.004 12.00 150 0.006 1.02	52 0.003 12.00 200 0.008 1.04	0.003 15.00 250 0.011 40	0.002 12.00 300 0.002 34
2. Remote Current Programming (16 bit) Resolution (0.002% of lo Rated) Accuracy(0.3% of loRated). 3. Readback Voltage Resolution (% of Vo Rated) Resolution (% of Vo Rated) Accuracy (0.05% Vo Rated) 4. Readback Current Resolution (% of lo Rated) Resolution (Readback Current) Accuracy (0.3% of lo Rated) (*13)	mA % mV mV %	2400 0.002 0.16 4 0.002	2000 0.011 1.10 5 0.003	1240 0.007 1.12 8 0.004	1000 0.006 1.20 10 0.005	680 0.004 1.20 15 0.006	0.003 1.20 20 0.009	0.002 1.20 30 0.002	260 0.002 1.60 40 0.002	0.011 11.00 50 0.003	136 0.007 10.50 75 0.004	100 0.006 12.00 100 0.005	68 0.004 12.00 150 0.006	52 0.003 12.00 200 0.008	0.003 15.00 250 0.011	0.002 12.00 300
Resolution (0.002% of lo Rated) Accuracy(0.3%ofloRated+0.1%ofloActualOutput)(*13) 3. Readback Voltage Resolution (% of Vo Rated) Resolution (Readback Voltage) Accuracy (0.05%Vo Rated) 4. Readback Current Resolution (% of lo Rated) Resolution (Readback Current) Accuracy (0.3% of lo Rated) (*13)	mA mV mV % mA	2400 0.002 0.16 4 0.002 12.00	2000 0.011 1.10 5 0.003 15.00	1240 0.007 1.12 8 0.004 12.40	1000 0.006 1.20 10 0.005 12.50	680 0.004 1.20 15 0.006 10.20	0.003 1.20 20 0.009 11.25	0.002 1.20 30 0.002 1.70	260 0.002 1.60 40 0.002 1.30	0.011 11.00 50 0.003 1.50	136 0.007 10.50 75 0.004 1.36	100 0.006 12.00 100 0.005 1.25	68 0.004 12.00 150 0.006 1.02	52 0.003 12.00 200 0.008 1.04	0.003 15.00 250 0.011 40	0.002 12.00 300 0.002 34
Resolution (0.002% of lo Rated) Accuracy(0.3%ofloRated+0.1%ofloActualOutput)(*13) 3. Readback Voltage Resolution (% of Vo Rated) Resolution (Readback Voltage) Accuracy (0.05%Vo Rated) 4. Readback Current Resolution (% of lo Rated) Resolution (Readback Current) Accuracy (0.3% of lo Rated) (*13) 5. OVP/UVL Programming	mA mV mV MV mA mA	2400 0.002 0.16 4 0.002 12.00 1800	2000 0.011 1.10 5 0.003 15.00 15.00	1240 0.007 1.12 8 0.004 12.40 930	1000 0.006 1.20 10 0.005 12.50 750	680 0.004 1.20 15 0.006 10.20 510	0.003 1.20 20 0.009 11.25 375	0.002 1.20 30 0.002 1.70 255	260 0.002 1.60 40 0.002 1.30 195	0.011 11.00 50 0.003 1.50 150	136 0.007 10.50 75 0.004 1.36 102	100 0.006 12.00 100 0.005 1.25 75	68 0.004 12.00 150 0.006 1.02 51	52 0.003 12.00 200 0.008 1.04 39	0.003 15.00 250 0.011 40 30	0.002 12.00 300 0.002 34 25.5
Resolution (0.002% of lo Rated) Accuracy(0.3%ofloRated+0.1%ofloActualOutput)(*13) 3. Readback Voltage Resolution (% of Vo Rated) Resolution (Readback Voltage) Accuracy (0.05%Vo Rated) 4. Readback Current Resolution (% of lo Rated) Resolution (Readback Current) Accuracy (0.3% of lo Rated) (*13)	mA mV mV % mA	2400 0.002 0.16 4 0.002 12.00	2000 0.011 1.10 5 0.003 15.00	1240 0.007 1.12 8 0.004 12.40	1000 0.006 1.20 10 0.005 12.50	680 0.004 1.20 15 0.006 10.20	0.003 1.20 20 0.009 11.25	0.002 1.20 30 0.002 1.70	260 0.002 1.60 40 0.002 1.30	0.011 11.00 50 0.003 1.50	136 0.007 10.50 75 0.004 1.36	100 0.006 12.00 100 0.005 1.25	68 0.004 12.00 150 0.006 1.02	52 0.003 12.00 200 0.008 1.04	0.003 15.00 250 0.011 40	0.002 12.00 300 0.002 34

*1: Minimum voltage is guaranteed to maximum 0.2% of rated output voltage.

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 190-240Vac (50/60Hz) for 3-Phase 208V models, and 380~415Vac (50/60Hz) for

3-Phase 400V models. *4: 3-Phase 208V models: At 208Vac input voltage, 3-Phase 400V: At 380Vac input voltage. With *5: Not including EMI filter inrush current, less than 0.2mSec.
*6: 3-Phase 208V models: 170~265Vac, constant load. 3-Phase 400V models: 342~460Vac,

constant load. *7: From No-Load to Full-Load, constant input voltage. Maximum drop in Remote Sense.

*8: For 8V~300V models: Measured with JEITA RC-9131A (1:1) probe.

*9: From 10% to 90% or 90% to 10% of Rated Output Voltage, with rated, resistive load.

 *10:From 90% to 10% of Rated Output Voltage.
 *11: For load voltage change, equal to the unit voltage rating, constant input voltage.
 *12: For 8V~16V models the ripple is measured from 2V to rated output voltage and rated output current. For other models, the ripple is measured at 10~100% of rated output voltage and rated output current.

*13: The Constant Current programming readback and monitoring accuracy does not include the warm-up and Load regulation thermal drift. *14: Measured at the sense point.

General Specifications Genesys™ 5kW

2.1 INPUT CH	ARACTERISTICS	GEN	8-600	10-500	16-310	20-250	30-170	40-125	60-85	80-65	100-50	150-34	200-25	300-17	400-13	500-10	600-8
1	1. Input voltage/freg. (*3)		3-Phase	3-Phase, 208V models: 170~265Vac, 47~63Hz													
i. Input voltage	(rreq. (*3)	VAC	3-Phase, 400V models: 342~460Vac, 47~63Hz														
2. Maximum		21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	
nput current at 100% load	3-Phase, 400V models:	- A	10.5	11	11	12	11	11	11	11	11	11	11	11	11	11	11
3. Power Factor	(Тур)		3-Phase	models:	0.94@20)8/380Va	c, rated	output p	ower.								
1. Efficiency (*4))	%	83	84	84	86	86	88	88	88	88	88	88	88	88	88	88
5. Inrush Curren	nt (*5)	A		208V m													
2.2 POWER SU	JPPLY CONFIGURATION	۱.															
1. Parallel Opera			Up to 4	identical	units in	master/s	lave mod	de									
 Series Operat 			Up to 2	identical	units. w	ith exter	nal diode	es. 600V	Max to C	hassis gi	round						
	MENTAL CONDITIONS																
1. Operating ter	np		0~50°C,	100% lo	ad.												
2. Storage temp)		-20~85°	С													
Operating hu	imidity		20~90%	RH (nor	-conder	nsing).											
4. Storage humi	idity		10~95%	RH (non	-conder	nsing).											
5. Vibration							is fixed t			urface.							
6. Shock							. Unit is u										
7. Altitude	. Altitude Operating: 10000ft (3000m), Derate output current by 2%/100m above 2000m, Alternatively, derate maximum amb by 1°C/100m above 2000m. Non operating: 40000ft (12000m).						n ambier	it tem									
8. RoHS Complia	ance		Complie	es with th	ne requir	ements	of RoHS o	directive									
2.4 EMC																	
1.Applicable Sta	andards:																
2.ESD			IEC1000	-4-2. Air-	disch8	KV, cont	act disch	4KV									
3.Fast transients	S		IEC1000	-4-4.2K	/												
4.Surge immuni	Surge immunity IEC1000-4-5. 1KV line to line, 2KV line to ground																
5.Conducted im	ucted immunity IEC1000-4-6, 3V																
6.Radiated imm	Radiated immunity IEC1000-4-3, 3V/m																
7.Magnetic field	lagnetic field immunity EN61000-4-8, 1A/m																
8.Voltage dips			EN6100	0-4-11													
9.Conducted en	nission		EN5502	2A, FCC p	part 15-A	, VCCI-A											
10. Radiated em 2.5 SAFETY	nission		EN5502	2A, FCC p	part 15-A	, VCCI-A											
1.Applicable sta	andards		111 6005	0-1 CSA	22.2 No	60050-1	,IEC 6095	50-1 EN (50050-1								
			1				ELV, all co	,		ntrolinte	erfaces (R	S232/48	5, IEEE, Is	olated Ar	halog, LA	N, Sense	Remo
				nming ar				zardous		nication	/control	interfac		2/40E IE	EE Isolat	tod Anal	0 9 1 4
2.Interface class	sification		Models with 60V Vout 400V: Output is Hazardous, communication/control interfaces: RS232/485, IEEE, Isolated Analog, LAN Remote Programing and Monitoring (pins 1-3, pins14-16) are SELV, Sense, Remote Programming and Monitoring (pins 8-13, pins 21-25) are Hazardous.														
							tput is Ha I Monitor				on/contr	olinterfa	aces (RS2	32/485, I	EEE, Isola	ited Anal	og, LA
			Vout 50V models : Input-Output (SELV): 4242VDC 1min, Input-communication/control (SELV): 4242VDC 1min Input-Ground: 2828VDC 1min,														
3.Withstand vol	60V <vout (hazardous):="" (selv):<br="" 100v="" 1min,="" 2600vdc="" control="" input-communication="" input-output="" models:="">4242VDC 1min, Output(Hazardous)-SELV: 1900VDC 1min, Output(Hazardous)-Ground: 1200VDC 1min, Input-Ground: 2828VDC 1min.</vout>																
	100X< Vout 600V models: Input-Output(Hazardous): 3550VDC 1min, Input-communication/control (SELV): 4242VDC 1min, Hazardous. Output-communication/control(SELV): 4242VDC 1min, Output(Hazardous)-Ground: 2670VDC 1min, Input-Ground: 2828VDC 1min.																
3.Insulation resi	istance			an 100M													
2.6 MECHANI	CAL CONSTRUCTION																
1. Cooling			Forced	air flow: f	rom fror	nt to rear	. No vent	ilation h	oles at th	ne top or	bottom	of the ch	nassis; Va	riable fa	n speed.		
2. Dimensions (WxHxD)						n (excludi										
3. Weight			13 kg.					_									
, i i i i i i i i i i i i i i i i i i i	nector (with Protective Co	ver)					r Combic wer Com										
5.Output conne			+	,		,	e Ø 10.5n							hoenix P,	/N: FRON	IT-4-H-7.	62
2.7 RELIABILI	I Y SPECS		5														
I. Warranty	s subject to shange with	utnoti	5 years.														

All specifications subject to change without notice.

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.



Digital Programming via IEEE Multi-Drop Interface

- Allows IEEE Master to control up to 30 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

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 ±1.5%
- Current Programming with 4-20mA signal. Power supply Voltage and Current Programming Accuracy ±1% Power supply Voltage and Current Monitoring Accuracy ±1.5%

LAN Interface **L**M Compliant to Class C

- Meets all LXI-C Requirements
- Address Viewable on Front Panel
- Fixed and Dynamic Addressing
- Compatible with most standard Networks
- TCP / UDP Socket Programming

P/N: IEEE

- Program Current Measure Current
- Current Foldback shutdown

- P/N: LAN VISA & SCPI Compatible
- LAN Fault Indicators
- Auto-detects LAN Cross-over Cable

P/N: IS510

P/N: IS420

Fast Startup

Power Supply Identification / Accessories How to order

GEN	8 -	600 -		
			Factory Options:	Factory AC Input Options:
Series	Output	Output	Option: IEEE	3P208 (Three Phase 170~265VAC)
Name	Voltage	Current	IS510	3P400 (Three Phase 342~460VAC)
	(0~8V	(0~600A)	IS420	

LAN

Models 5kW

Model	Output Voltage VDC	Output Current (A)	Output Power (W)
GEN 8-600	0~8V	0~600	4800
GEN 10-500	0~10V	0~500	5000
GEN 16-310	0~16V	0~310	4960
GEN 20-250	0~20V	0~250	5000
GEN 30-170	0~30V	0~170	5100
GEN 40-125	0~40V	0~125	5000

Factory option	P/N
RS-232/RS-485 Interface built-in Standard	-
GPIB Interface	IEEE
Voltage Programming Isolated Analog Interface	IS510
Current Programming Isolated Analog Interface	IS420

LAN Interface (Complies with Class C) LAN

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 Communication Cable Power Supply Connector	DB-9F Shield Ground L=2m EIA/TIA-568A (RJ-45)	DB-9F Shield Ground L=2m EIA/TIA-568A (RJ-45)	DB-25F Shield Ground L=2m 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

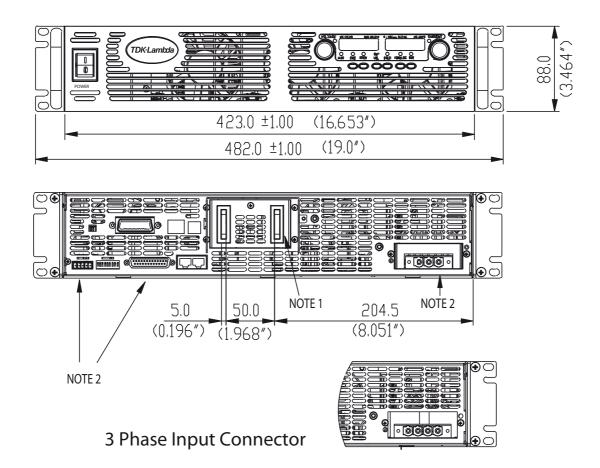
* Included with power supply

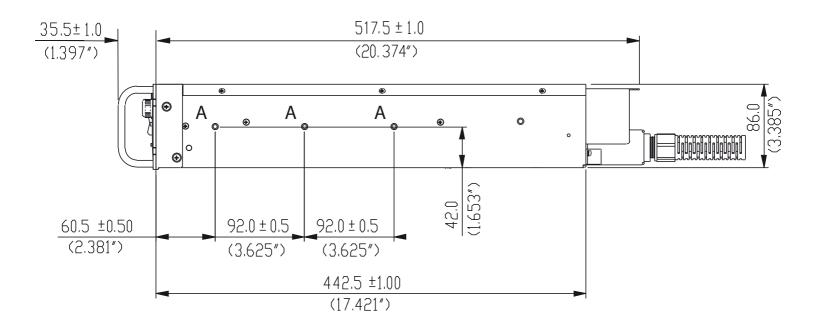


Also available, Genesys™ 1U Half Rack 750W 1U full Rack 750W/1500W/2400W 2U full Rack 3300W

Model	Output Voltage VDC	Output Current (A)	Output Power (W)
GEN 60-85	0~60V	0~85	5100
GEN 80-65	0~80V	0~65	5200
GEN 100-50	0~100V	0~50	5000
GEN 150-34	0~150V	0~34	5100
GEN 200-25	0~200V	0~25	5000
GEN 300-17	0~300V	0~17	5100
GEN 400-13	0~400V	0~13	5200
GEN 500-10	0~500V	0~10	5000
GEN 600-8.5	0~600V	0~8.5	5100

Outline Drawing Genesys[™] 5kW Units





NOTE

Bus bars for 8V to 100V models (shown)
 Wire clamp connector for 150V to 600V models
 Plug connectors included with the power supply
 Chassis slides mounting holes #10-32 marked "A"
 GENERAL DEVICES P/N: C-300-S-116 or equivalent



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