Improved 5 Specifications

# Genesys\*\*

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



### TDK·Lambda

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; culture CE Mark for LVD and EMC Regulation





#### **Applications**

Genesys<sup>™</sup> 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 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 (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

												Speci	ificatior	ns in Blu	e are im	prove
MODEL	GEN	8-600	10-500	16-310	20-250	30-170	40-125	60-85	80-65	100-50	150-34			400-13		
1.Rated output voltage(*1)	V	8	10	16	20	30	40	60	80	100	150	200	300	400	500	600
2.Rated Output Current(*2)	A	600	500	310	250	170	125	85	65	50	34	25	17	13	10	8.5
3.Rated Output Power	W	4800	5000	4960	5000	5100	5000	5100	5200	5000	5100	5000	5100	5200	5000	5100
1.1 CONSTANT VOLTAGE MODE					,		,		,	,				,	,	
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
2.Max load regulation (0.015% of rated Vo+5mV)(*7)	mV	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
							owing 30									
7.Temp. stability							llowing				ctant line	a load &	tomn			
8.Warm-up drift	-						2mV over					e, loau &	temp.	-		
9.Up-prog. response time, 0~Vo Rated (*9)	mS	Less tria	11 0.0370		001put v 0	ortage+2	ziiiv ovei	30 1111110	ites iolio	wirig po				65	80	100
10.Down-progresponse Full-load (*9)	mS	15		50	U		80				100			135	170	200
time No-load (*10)	mS	400	500	600	700	800	900	1000	1200	1500		2000	2500	3000	3000	3000
time [NO-load ( 10)	1113													utput cur		
11.Transient response time	mS													above 10		tput se
1.2 CONSTANT CURRENT MODE		point. I	J-10070,	ocai sen	se. Less t	iiaii iiiis	ec ioi iii	oueis up	to and n	iciuuiiig	1007. 21	isec ioi i	illoueis	above 10	UV	
1.Max.line regulation (0.05% of rated lo)(*6)	m A	300	250	155	125	85	62.5	42.5	32.5	25	17	12.5	0.5	6.5	5	4.25
	mA			155	125		62.5				17	12.5	8.5	6.5		4.25
2.Max.load regulation (0.1% of rated lo)(*11)	mA	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	1600	1000	700	350	180	120	80	50	50	50	20	15	10	10
4.Load regulation thermal drift	DDA4/0C						er 30 min				e.					
							following				tont lin :	102-10-	tomar == :	turo		
6.Temp. stability							llowing 3							ture.		
7.Warm-up drift							output ci									
·		20V~60	UV mode	ls: Less t	han ±0.2	5% of ra	ted outp	ut currer	nt over 3	<u>0 minute</u>	s followi	ng powe	r On.			
1.3 PROTECTIVE FUNCTIONS		0 4														
1. OCP			Constar					61.1								
2. OCP Foldback							ange fro									
3. OVP type							put recy									
4. OVP trip point													5~330V	5~440V	5~550V	5~660
5. Output Under Voltage Limit							ort. Prev	ents fron	<u>n adjusti</u>	ng Vout	oelow lin	nit.				
6. Over Temp. Protection			<u>ectable ,</u>	latched	or non-la	tched.										
1.4 ANALOG PROGRAMMING AND MONI																
1.Vout Voltage Programming		0~100%	,0~5V o	r 0~10V,	user sele	ct. Accui	racy and	linearity	:±0.5% o	f rated V	out.					
2.lout Voltage Programming (*13)		0~100%	,0~5V o	r 0~10V,	user sele	ct. Accui	racy and	linearity	:±1% of r	ated lou						
3.Vout Resistor Programming		0~100%	,0~5/10	Kohm fu	ll scale,u	ser selec	t.,Accura	cy 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	cy and li	nearity:±	1.5% of	ated lou	t.				
5.On/Off control (rear panel)		By elect	rical. Vol	tage: 0~	0.6V/2~1	5V,or dry	/ contact	user sel	ectable l	ogic.						
6.Output Current monitor (*13)		0~5V or	0~10V,	Accuracy	/:±1% , us	er selec	table.									
7.Output Voltage monitor					:±1% ,use											
8. Power Supply OK signal							es resista	nce.								
9. CV/CC Indicator							ff, Maxin		age: 30V	maximi	m sink c	urrent: 1	0mA			
10. Enable/Disable																
11. Local/Remote analog control		Dry contact. Open:off , Short: on. Max. voltage at Enable/Disable in: 6V.  By electrical signal or Open/Short: 0~0.6V or short: Remote, 2~15V or open: Local.														
12. Local/Remote analog control Indicator							aximum v					t: 10mA				
		Оренес	nicetoi, i	ocui. Oi	i, nemoc	011. 1410	AMINIMINI	ronage	20 V, 111UA	iiiiaiii sii	iii cui i ci	. 1011171.				
1 5 FRONT PANEL					hy cana											
1.5 FRONT PANEL		Vout/Io	ut manu	al adiust		ate enco	nders (co	arse and	fine adi	istment	selectah	le)				
1.5 FRONT PANEL								arse and	fine adj	ustment	selectab	le).				
		OVP/UV	L manua	l adjust l	y Volt. A	djust en	coder.						ntrol			
1.Control functions		OVP/UV On/Off,	L manua Output o	l adjust l on/off, Re	oy Volt. A e-start m	djust en odes (au	coder. to, safe),	Foldbac	k contro	l (CV to C	C), Go to		ntrol.			
		OVP/UV On/Off, Address	L manua Output o selectio	l adjust l on/off, Re n by Volt	oy Volt. A e-start m tage (or c	djust en odes (au urrent) a	coder. to, safe), adjust en	Foldbac	k contro	l (CV to C	C), Go to		ntrol.			
		OVP/UV On/Off, Address Re-start	L manua Output o selectio modes (	l adjust l on/off, Re n by Volt automat	oy Volt. A e-start m tage (or c ic restart	djust en odes (au urrent) a , safe m	coder. to, safe), adjust en ode).	Foldbac coder. N	k contro	l (CV to C	C), Go to		ntrol.			
1.Control functions		OVP/UV On/Off, Address Re-start Baud rat	L manua Output o selectio modes ( te selecti	l adjust l on/off, Re n by Voli automat on: 1200	by Volt. A e-start m tage (or c ic restart 1,2400,48	djust en odes (au urrent) a , safe m 00,9600	coder. to, safe), adjust en ode). and 19,2	Foldbac coder. N	k contro umber o	l (CV to C f address	C), Go to		ntrol.			
		OVP/UV On/Off, Address Re-start Baud rat Voltage	L manua Output of selection modes ( te selection 4 digits	l adjust l on/off, Re n by Volt automat on: 1200 , Accura	by Volt. A e-start m tage (or c ic restart 1,2400,48 acy: 0.05	djust en odes (au urrent) a , safe m 00,9600 % of rat	coder. ito, safe), adjust en ode). and 19,2 ed outpu	Foldbac coder. N	k control umber o	l (CV to C f address	C), Go to		ntrol.			
1.Control functions 2.Display		OVP/UV On/Off, Address Re-start Baud rat Voltage Current:	L manua Output of selection modes ( te selection 4 digits 4 digits,	l adjust I on/off, Re n by Voli automat on: 1200 , Accura Accura	by Volt. A e-start m tage (or c ic restart 1,2400,48 acy: 0.05 cy: 0.2%	djust en odes (au urrent) a , safe mo 00,9600 % of rate of rateo	coder. to, safe), adjust en ode). and 19,2 ed output	Foldbac coder. N 200. at Voltage current ±	k control umber o e ±1 coul	(CV to C f address	C), Go to es:31.	local co	ntrol.			
1.Control functions 2.Display 3.Indications		OVP/UV On/Off, Address Re-start Baud rat Voltage Voltage Voltage	L manua Output o selectio modes ( te selecti 4 digits, Current	l adjust l on/off, Re n by Voli automat on: 1200 , Accura Accura , Alarm, I	by Volt. A e-start m tage (or c ic restart 1,2400,48 acy: 0.05 cy: 0.2% Fine, Prev	djust en odes (au urrent) a , safe m 00,9600 % of rate of rateo riew, Fol	coder. ito, safe), adjust en ode). and 19,2 ed output doutput d dback, Lo	Foldbac coder. N 200. at Voltage current ± ocal, Out	k controlumber o  e ±1 count. put On,	(CV to C f address	C), Go to es:31.	local co	ntrol.			
1.Control functions     2.Display     3.Indications     1.6 Interface Specifications for the GENE	ESYS Ser	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage, ies with	L manua Output of selectio modes ( te selection 4 digits 4 digits, Current RS-232/	l adjust l on/off, Re n by Voli automat on: 1200 , Accura Accura , Alarm, I	by Volt. A e-start m tage (or c ic restart 1,2400,48 acy: 0.05 cy: 0.2% Fine, Prev	djust en odes (au urrent) a r, safe m 00,9600 % of rate of rated riew, Fol	coder. ito, safe), adjust en ode). and 19,2 ed output doutput d dback, Lo	Foldbac coder. N 200. It Voltage current ± ocal, Out	k controlumber o  e ±1 count. put On,	(CV to C f address nt. Front Par	C), Go to es:31. nel Lock,	local con	ntrol.			
1.Control functions 2.Display 3.Indications	ESYS Ser	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage, ies with	L manua Output of selectio modes ( te selection 4 digits 4 digits, Current RS-232/	l adjust l on/off, Re n by Voli automat on: 1200 , Accura Accura , Alarm, I	by Volt. A e-start m tage (or c ic restart 1,2400,48 acy: 0.05 cy: 0.2% Fine, Prev	djust en odes (au urrent) a r, safe m 00,9600 % of rate of rated riew, Fol	coder. ito, safe), adjust en ode). and 19,2 ed output doutput d dback, Lo	Foldbac coder. N 200. It Voltage current ± ocal, Out	k controlumber o  e ±1 count. put On,	(CV to C f address nt. Front Par	C), Go to es:31.	local con	ntrol.	400	500	600
1.Control functions     2.Display     3.Indications     1.6 Interface Specifications for the GENE	ESYS Ser	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage, ies with	L manua Output of selectio modes ( te selection 4 digits 4 digits, Current RS-232/	l adjust l on/off, Re n by Voli automat on: 1200 , Accura Accura , Alarm, I	by Volt. A e-start m tage (or c ic restart 1,2400,48 acy: 0.05 cy: 0.2% Fine, Prev	djust en odes (au urrent) a r, safe m 00,9600 % of rate of rated riew, Fol	coder. ito, safe), adjust en ode). and 19,2 ed output doutput d dback, Lo	Foldbac coder. N 200. It Voltage current ± ocal, Out	k controlumber o	(CV to C f address nt. Front Par	C), Go to es:31. nel Lock,	local con		400	500	600
2. Display 3. Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit)	ESYS Ser	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage ies with	L manua Output of selection modes (te selection 4 digits 4 digits, Current RS-232/	l adjust l on/off, Re n by Voli automat on: 1200 , Accura Accura , Alarm, I RS-485 (	by Volt. A e-start m tage (or c ic restart 1,2400,48 acy: 0.05 cy: 0.2% Fine, Prev Dr Optio	djust en odes (au urrent) a , safe mo 00,9600 % of rate of rateo riew, Fol nal GPIE	coder. ito, safe), adjust en ode). and 19,2 ed output doutput of dback, Lo B/LAN Int	Foldbac coder. N :00. it Voltage current ± ocal, Out terface I	k control umber o  e ±1 count. put On, nstalled	(CV to C f address nt. Front Par	C), Go to es:31. nel Lock,	CVCC.	300			
2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14)	ESYS Ser V mV	OVP/UV On/Off, Address Re-start Baud rai Voltage Current: Voltage, ies with 8 0.16	L manua Output of selectio modes ( te selection 4 digits 4 digits, Current RS-232/ 10 0.20	l adjust l on/off, Re n by Voli automat on: 1200 , Accura Accura , Alarm, I RS-485 ( 0.32	by Volt. A e-start m tage (or c ic restart, 2400,48 acy: 0.05 cy: 0.29 Fine, Prev Or Option 20 0.40	djust en odes (au urrent) a , safe m 00,9600 % of rate of rateo riew, Fol al GPIE 30 0.60	coder. ito, safe), adjust en ode). and 19,2 ed output doutput d dback, Lo B/LAN Int 40 0.80	Foldbac coder. N 00. it Voltage current d ocal, Out terface I 60 1.20	k control umber o  e ±1 count. put On, l nstalled  80 1.60	nt. Front Par	C), Go to es:31. nel Lock,	CVCC.	300 6.0	8.0	10.0	12.0
2.Display 3.Indications  1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit)	ESYS Ser V mV mV	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage, ies with 8 0.16 4	L manua Output c selectio modes ( te selecti: 4 digits, Current RS-232/ 10 0.20 5	l adjust l on/off, Re n by Voli automat on: 1200 , Accura Accura , Alarm, l 16 0.32 8	by Volt. A e-start m tage (or c ic restart ,2400,48 acy: 0.05 cy: 0.2% Fine, Prev Or Optio  0.40 10	djust en odes (au urrent) a , safe m 00,9600 % of rate of ratecriew, Fol nal GPIE 30 0.60	coder. to, safe), adjust en ode). and 19,2 ed output dback, Lo 8/LAN Int 40 0.80 20	Foldbac coder. N 100. at Voltage current ± ocal, Out terface II 60 1.20 30	k control umber o  e ±1 count. 1 count. put On, nstalled 80 1.60 40	nt. Front Par  100 2.0 50	C), Go to es:31.  nel Lock,  150 3.0 75	CVCC. 200 4.0	300 6.0 150	8.0 200	10.0 250	12.0 300
2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) Resolution (0.002% of lo Rated)	ESYS Ser V mV mV	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage ies with 8 0.16 4	L manua Output c selectio modes ( te selecti : 4 digits, Current RS-232/ 10 0.20 5	l adjust l on/off, Ren n by Volta automat on: 1200 , Accura Accura , Alarm, I RS-485 ( 0.32 8	by Volt. A e-start m tage (or c ic restart, ,2400,48 acy: 0.05 cy: 0.2% Fine, Prev Or Optio  0.40 10	djust en odes (au urrent) a , safe m 00,9600 % of rate of rateo riew, Fol nal GPIE 30 0.60 15	coder. to, safe), adjust en ode). and 19,2 ed output dback, Lo 8/LAN Int 40 0.80 20	Foldbac coder. N 00. it Voltage current ± ocal, Out terface Ii 60 1.20 30	k control umber o  e ±1 count. 1 count. put On, nstalled 80 1.60 40	1 (CV to C f address  nt.  Front Par  100 2.0 50	C), Go to es:31.  nel Lock,  150 3.0 75	CVCC.  200 4.0 100	300 6.0 150	8.0 200 0.26	10.0 250 0.20	12.0 300
2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) Resolution (0.002% of lo Rated) Accuracy (0.3% of loRated) Accuracy (0.3% of loRated)	ESYS Ser V mV mV	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage, ies with 8 0.16 4	L manua Output c selectio modes ( te selecti: 4 digits, Current RS-232/ 10 0.20 5	l adjust l on/off, Re n by Voli automat on: 1200 , Accura Accura , Alarm, l 16 0.32 8	by Volt. A e-start m tage (or c ic restart ,2400,48 acy: 0.05 cy: 0.2% Fine, Prev Or Optio  0.40 10	djust en odes (au urrent) a , safe m 00,9600 % of rate of ratecriew, Fol nal GPIE 30 0.60	coder. to, safe), adjust en ode). and 19,2 ed output dback, Lo 8/LAN Int 40 0.80 20	Foldbac coder. N 100. at Voltage current ± ocal, Out terface II 60 1.20 30	k control umber o  e ±1 count. 1 count. put On, nstalled 80 1.60 40	nt. Front Par  100 2.0 50	C), Go to es:31.  nel Lock,  150 3.0 75	CVCC. 200 4.0	300 6.0 150	8.0 200	10.0 250	12.0 300
2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) Resolution (0.002% of lo Rated)	ESYS Ser V mV mV	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage ies with 8 0.16 4	L manua Output c selectio modes ( te selecti : 4 digits, Current RS-232/ 10 0.20 5	l adjust l on/off, Ren n by Volta automat on: 1200 , Accura Accura , Alarm, I RS-485 ( 0.32 8	by Volt. A e-start m tage (or c ic restart, ,2400,48 acy: 0.05 cy: 0.2% Fine, Prev Or Optio  0.40 10	djust en odes (au urrent) a , safe m 00,9600 % of rate of rateo riew, Fol nal GPIE 30 0.60 15	coder. to, safe), adjust en ode). and 19,2 ed output dback, Lo 8/LAN Int 40 0.80 20	Foldbac coder. N 00. it Voltage current ± ocal, Out terface Ii 60 1.20 30	k control umber o  e ±1 count. 1 count. put On, nstalled 80 1.60 40	1 (CV to C f address  nt.  Front Par  100 2.0 50	C), Go to es:31.  nel Lock,  150 3.0 75	CVCC.  200 4.0 100	300 6.0 150	8.0 200 0.26	10.0 250 0.20	12.0 300
2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) Resolution (0.002% of lo Rated) Accuracy (0.3% of loRated) Accuracy (0.3% of loRated)	ESYS Ser V mV mV	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage ies with 8 0.16 4	L manua Output c selectio modes ( te selecti : 4 digits, Current RS-232/ 10 0.20 5	l adjust l on/off, Ren n by Volta automat on: 1200 , Accura Accura , Alarm, I RS-485 ( 0.32 8	by Volt. A e-start m tage (or c ic restart, ,2400,48 acy: 0.05 cy: 0.2% Fine, Prev Or Optio  0.40 10	djust en odes (au urrent) a , safe m 00,9600 % of rate of rateo riew, Fol nal GPIE 30 0.60 15	coder. to, safe), adjust en ode). and 19,2 ed output dback, Lo 8/LAN Int 40 0.80 20	Foldbac coder. N 00. it Voltage current ± ocal, Out terface Ii 60 1.20 30	k control umber o  e ±1 count. 1 count. put On, nstalled 80 1.60 40	1 (CV to C f address  nt.  Front Par  100 2.0 50	C), Go to es:31.  nel Lock,  150 3.0 75	CVCC.  200 4.0 100	300 6.0 150 0.34 68	8.0 200 0.26	10.0 250 0.20 40	12.0 300
2.Display 3.Indications 1.6 Interface Specifications for the GENE 1.8 Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) Resolution (0.002% of Io Rated) Accuracy (0.3% of loRated) (16 bit) Resolution (0.002% of Io Rated) 3. Readback Voltage Resolution (% of Vo Rated)	ESYS Ser V mV mV mA mA	OVP/UV On/Off, Address Re-start Baud rai Voltage Current: Voltage, ies with 8 0.16 4	L manua Output of selection modes (te selectio	l adjust L on/off, Re n by Volt automat on: 1200 , Accura Accura , Alarm, I RS-485 ( 0.32 8	py Volt. A p-start m tage (or c ic restart),2400,48 to;2400,48 to;200,505 cy: 0.2% Fine, Prev Or Optio  20 0.40 10 5.00 1000	djust en odes (au urrent) a , safe m 00,9600 % of rate view, Fol nal GPIE 30 0.60 15	coder. to, safe), adjust en ode). and 19,2 ed output dback, Lo 8/LAN Int 40 0.80 20	Foldbac coder. N  100.  10 Voltage current ± coal, Out terface li  1.20  30  1.70  340	e ±1 count. put On, nstalled 80 1.60 40	1 (CV to C) f address:  nt.  Front Par  100 2.0 50 1.00 200	C), Go to es:31.  nel Lock,  150 3.0 75  0.68 136	CVCC.  200 4.0 100 0.50 100	300 6.0 150 0.34 68	8.0 200 0.26 52	10.0 250 0.20 40	12.0 300 0.17 34
1.Control functions  2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) Resolution (0.002% of lo Rated) Accuracy(0.3% of lo Rated) Accuracy(0.3% of lo Rated) Accuracy(0.3% of lo Rated) Accuracy(0.3% of lo Rated) Resolution (% of Vo Rated) Resolution (Readback Voltage)	ESYS Ser V mV mV mA mA	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage ies with 8 0.16 4	L manua Output of selection modes (te selection te selection of the select	adjust L   adjust L   adjust L   n/off, Re n by Volia automat on: 1200   , Accura Accura , Alarm, L   RS-485 (	by Volt. A be-start m tage (or c ic restart), 2400,48 bcy: 0.05 cy: 0.2% Fine, Prev Dr Optio 20 0.40 10 5.00 1000	djust en odes (au urrent) a , safe m 00,9600 % of rate of rate view, Fol 15 0.60 15 3.40 680	coder. tto, safe), adjust en ode). and 19,2 ed output dback, Lc 8/LAN Int 40 0.80 20 2.50 500	Foldbac coder. N (100. at Voltage current ± bocal, Out terface li 60 1.20 30 1.70 340	k control umber o  e ±1 count. put On, I nstalled  80  1.60  40  1.30  260	100 2.0 50 200 200 0.011	C), Go to es:31.  150 3.0 75 0.68 136	CVCC.  200 4.0 100 0.50 100 0.006	300 6.0 150 0.34 68	8.0 200 0.26 52	10.0 250 0.20 40	12.0 300 0.17 34
1.Control functions  2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) Resolution (0.002% of lo Rated) Accuracy(0.3% of loRated-0.1% of lo Rated) Accuracy(0.3% of loRated-0.1% of lo Rated) Accuracy (0.05% of Vo Rated) Resolution (% of Vo Rated) Resolution (Readback Voltage) Accuracy (0.05% Vo Rated)	ESYS Ser V mV mV mV mA mA	OVP/UV On/Off, Address Re-start Baud raf Voltage Current: Voltage ies with  8 0.16 4  12 2400  0.002 0.16	L manua Output of selection modes (te selection 4 digits 4 digits 4 digits, Current RS-232/ 10 0.20 5 10 2000	l adjust L on/off, Ren n by Volta automat on: 1200 , Accura Accura , Alarm, I 16 0.32 8 6.20 1240	py Volt. A p-start m tage (or c ic restart), 2400,48 tcy: 0.05 cy: 0.2% Fine, Prev Dr Optio 20 0.40 10 5.00 1000	djust en odes (au urrent) a; , safe m o0,9600 % of rate of rate or iew, Fol nal GPIE 30 0.60 15 3.40 680 0.004 1.20	coder. to, safe), adjust en ode). and 19,2 ed output doutput d	Foldbac coder. N (00). It Voltage current ± ocal, Out terface I (60) 1.20 30 1.70 340 1.20 1.20 1.20	stalled	1 (CV to C) f address  nt.  Front Par  100 2.0 50 1.00 200 0.011 11.00	C), Go to es:31.  150 3.0 75 0.68 136	CVCC.  200 4.0 100  0.50 100  0.006 12.00	300 6.0 150 0.34 68 0.004 12.00	8.0 200 0.26 52 0.003 12.00	0.20 40 0.003 15.00	0.17 34 0.002 12.00
1.Control functions  2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) 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	ESYS Ser V mV mV  mA mA mA mV mV	OVP/UV On/Off, Address Re-start Baud rat Voltage ies with 8 0.16 4 12 2400 0.002 0.16 4	L manua Output c selectio selectio modes ( te selecti 4 digits 4 digits, Current RS-232/ 10 0.20 5  10 2000  0.011 1.10 5	l adjust l on/off, Ren n by Volta automat on: 1200 , Accura Accura , Alarm, I RS-485 ( 0.32 8 6.20 1240	by Volt. Astart mstart msta	djust en odes (au urrent) a urrent) a y safe me 00,9600 % of rate of rate view, Fol nal GPIE 3.40 680 0.004 1.20	coder. to, safe), adjust en ode). and 19,2 ed output dback, Ld 8/LAN Int 40 0.80 20  2.50 500	Foldbac (coder, N ) (00.	k control umber o e ±1 count. 1 count. put On, I nstalled 80 1.60 40 1.30 260 0.002 1.60 40	100 2.0 50 1.00 200 2.0 50 50 50 50 50 50 50 50 50 50 50 50 50	C), Go to es:31.  nel Lock, 150 3.0 75 0.68 136 0.007 10.50 75	CVCC.  200 4.0 100  0.50 100  0.006 12.00 100	300 6.0 150 0.34 68 0.004 12.00	8.0 200 0.26 52 0.003 12.00 200	0.20 40 0.003 15.00 250	0.17 34 0.002 12.00 300
2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) Resolution (0.002% of Io Rated) Accuracy (0.3% of Rated) (*10) 3. Readback Voltage Resolution (% of Vo Rated) Resolution (Readback Voltage) Accuracy (0.05% Vo Rated) 4. Readback Current Resolution (% of Io Rated)	ESYS Ser V mV mV  mA mA mA  mV mV  wV mV	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage ies with 8 0.16 4 12 2400 0.002 0.16 4	L manua Output c selectio modes ( te selecti 4 digits, 4 digits, 4 digits, 5 10 0.20 5 10 2000 0.011 1.10 5	adjust     n/off, Ren     n/off, R	by Volt. Astart mstart msta	djust en odes (au urrent) a ,, safe m 00,9600 % of rate of rate of rate of rate of safe 0.60 15 3.40 680 0.004 1.20 1.5	coder. to, safe), adjust en ode). and 19,2 ed output doback, Lt. 8/LAN Int 40 0.80 20 0.003 1.20 0.009	Foldbac coder. N  100.  100.  11 Voltage current ± cocal, Out terface li  100.  11.70  340  1.70  340  0.002  1.20  30  0.002	k control   umber o   e ±1 count-   c	100 2.0 50 200 200 0.011 11.00 50 0.003	C), Go to es:31.  150 3.0 75 0.68 136 0.007 10.50 75	CVCC.  200 4.0 100  0.50 100  0.006 12.00 100	300 6.0 150 0.34 68 0.004 12.00 150	8.0 200 0.26 52 0.003 12.00 200	0.20 40 0.003 15.00 250	0.17 34 0.002 12.00 300
1.Control functions  2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) Resolution (0.002% of Io Rated) Accuracy (0.3% of loRated) (*14) 3. Readback Voltage Resolution (% of Vo Rated) Resolution (Readback Voltage) Accuracy (0.05% Vo Rated) 4. Readback Current Resolution (% of Io Rated)	ESYS Ser V mV mV mA mA mV mV mV	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage ies with  8 0.16 4  12 2400  0.002 0.16 4  0.002 12.00	L manua Output c selectio modes ( te selecti 4 digits, 4 digits, Current RS-232/ 10 0.20 5 10 2000 0.011 1.10 5	I adjust I no/off, Re no/off, Re no/off, Re no by Voliautomat on: 1200, Accura Accura Accura Alarm, I 60.32 8 6.20 1240 0.007 1.12 8 0.004 12.40	by Volt. A -start m cage (or c ic restart), 2400,48 cy: 0.05 cy: 0.29 Fine, Prev 0r Optio 20 0.40 10 5.00 1000 0.006 1.20 10 0.005 12.50	djust en odes (au urrent) a diversite de la composite de la compos	coder. to, safe), adjust en ode). and 19,2 ed output outpu	1.70   340   0.002   1.70   0.002   1.70	k control   wmber o   wm	100 2.0 50 1.00 200 0.011 11.00 50 0.003 1.50	C), Go to es:31.  150 3.0 75 0.68 136 0.007 10.50 75	CVCC.  200 4.0 100 0.50 100 0.006 12.00 100 0.005 1.25	300 6.0 150 0.34 68 0.004 12.00 150	8.0 200 0.26 52 0.003 12.00 200	0.20 40 0.003 15.00 250 0.011 40	0.17 34 0.002 12.00 300 0.002 34
2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) Resolution (0.002% of Io Rated) Accuracy(3% of lo Rated)	ESYS Ser V mV mV  mA mA mA  mV mV  wV mV	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage ies with 8 0.16 4 12 2400 0.002 0.16 4	L manua Output c selectio modes ( te selecti 4 digits, 4 digits, 7 digits, 9 digits, 10 0.20 5 10 2000 0.011 1.10 5	adjust     n/off, Ren     n/off, R	by Volt. Astart mstart msta	djust en odes (au urrent) a ,, safe m 00,9600 % of rate of rate of rate of rate of safe 0.60 15 3.40 680 0.004 1.20 1.5	coder. to, safe), adjust en ode). and 19,2 ed output doback, Lt. 8/LAN Int 40 0.80 20 0.003 1.20 0.009	Foldbac coder. N  100.  100.  11 Voltage current ± cocal, Out terface li  100.  11.70  340  1.70  340  0.002  1.20  30  0.002	k control   umber o   e ±1 count-   c	100 2.0 50 200 200 0.011 11.00 50 0.003	C), Go to es:31.  150 3.0 75 0.68 136 0.007 10.50 75	CVCC.  200 4.0 100  0.50 100  0.006 12.00 100	300 6.0 150 0.34 68 0.004 12.00 150	8.0 200 0.26 52 0.003 12.00 200	0.20 40 0.003 15.00 250	0.17 34 0.002 12.00 300
2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) Resolution (0.002% of Io Rated) Accuracy (0.3% of IoRated) Accuracy (0.3% of IoRated) Accuracy (0.3% of IoRated) Nesolution (% of Vo Rated) Resolution (Readback Voltage) Accuracy (0.05% Vo Rated) 4. Readback Voltage) Resolution (Readback Voltage) Accuracy (0.05% Vo Rated) Resolution (% of IoRated) Resolution (% of IoRated) Resolution (% of IoRated) Resolution (% of IoRated) Resolution (Readback Current) Accuracy (0.3% of IoRated) (*13)	ESYS Ser V mV mV mA mA mV mV mV	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage ies with  8 0.16 4  12 2400  0.002 0.16 4  0.002 12.00	L manua Output c selectio modes ( te selecti 4 digits, 4 digits, Current RS-232/ 10 0.20 5 10 2000 0.011 1.10 5	I adjust I no/off, Re no/off, Re no/off, Re no by Voliautomat on: 1200, Accura Accura Accura Alarm, I 60.32 8 6.20 1240 0.007 1.12 8 0.004 12.40	by Volt. A -start m cage (or c ic restart), 2400,48 cy: 0.05 cy: 0.29 Fine, Prev 0r Optio 20 0.40 10 5.00 1000 0.006 1.20 10 0.005 12.50	djust en odes (au urrent) a diversite de la composite de la compos	coder. to, safe), adjust en ode). and 19,2 ed output outpu	1.70   340   0.002   1.70   0.002   1.70	k control   wmber o   wm	100 2.0 50 1.00 200 0.011 11.00 50 0.003 1.50	C), Go to es:31.  150 3.0 75 0.68 136 0.007 10.50 75	CVCC.  200 4.0 100 0.50 100 0.006 12.00 100 0.005 1.25	300 6.0 150 0.34 68 0.004 12.00 150	8.0 200 0.26 52 0.003 12.00 200	0.20 40 0.003 15.00 250 0.011 40	0.17 34 0.002 12.00 300 0.002 34
1.Control functions  2.Display 3.Indications 1.6 Interface Specifications for the GENE 1. Remote Voltage Programming (16 bit) Resolution (0.002% of Vo Rated) Accuracy (0.05% of Vo Rated) (*14) 2. Remote Current Programming (16 bit) Resolution (0.002% of Io Rated) Accuracy (0.3% of loRated) (*14) 3. Readback Voltage Resolution (% of Vo Rated) Resolution (Readback Voltage) Accuracy (0.05% Vo Rated) 4. Readback Current Resolution (% of Io Rated)	ESYS Ser V mV mV mA mA mV mV mV	OVP/UV On/Off, Address Re-start Baud rat Voltage Current: Voltage ies with  8 0.16 4  12 2400  0.002 0.16 4  0.002 12.00	L manua Output c selectio modes ( te selecti: 4 digits. 4 digits. Current RS-232/ 10 0.20 5 10 2000 0.011 1.10 5	I adjust I no/off, Re no/off, Re no/off, Re no by Voliautomat on: 1200, Accura Accura Accura Alarm, I 60.32 8 6.20 1240 0.007 1.12 8 0.004 12.40	by Volt. A -start m cage (or c ic restart), 2400,48 cy: 0.05 cy: 0.29 Fine, Prev 0r Optio 20 0.40 10 5.00 1000 0.006 1.20 10 0.005 12.50	djust en odes (au urrent) a diversite de la composite de la compos	coder. to, safe), adjust en ode). and 19,2 ed output outpu	1.70   340   0.002   1.70   0.002   1.70	k control   wmber o   wm	100 2.0 50 1.00 200 0.011 11.00 50 0.003 1.50	C), Go to es:31.  150 3.0 75 0.68 136 0.007 10.50 75	CVCC.  200 4.0 100 0.50 100 0.006 12.00 100 0.005 1.25	300 6.0 150 0.34 68 0.004 12.00 150	8.0 200 0.26 52 0.003 12.00 200	0.20 40 0.003 15.00 250 0.011 40	0.17 34 0.002 12.00 300 0.002 34

<sup>\*1:</sup> Minimum voltage is guaranteed to maximum 0.2% of rated output voltage.

<sup>\*2:</sup> Minimum current is guaranteed to maximum 0.4% 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

<sup>3-</sup>Phase 400V models.

\*4: 3-Phase 208V models: At 208Vac input voltage, 3-Phase 400V: At 380Vac input voltage. With rated output power.
\*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.

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

<sup>\*9:</sup> From 10% to 90% or 90% to 10% of Rated Output Voltage, with rated, resistive load.

<sup>\*11:</sup> For load voltage, equal to the unit voltage, \*11: For load voltage, 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.

 $<sup>{}^{*}13:</sup> The \, Constant \, Current \, programming \, readback \, and \, monitoring \, accuracy \, does \, not \, include \, the \, does \, not \, include \, not \, include \, the \, does \, not \, include \,$ warm-up and Load regulation thermal drift. \*14: Measured at the sense point.

## General Specifications Genesys™ 5kW

2 1 INPLIT 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	600-8.5
2.11101 01 011						70~265Va			00 05	00 05	100 30	150 54	200 23	300 17	100 15	300 10	000 0.5
1. Input voltage	1. Input voltage/freq. (*3)																
			3-Phase, 400V models: 342~460Vac, 47~63Hz														
2. Maximum Input current	3-Phase, 208V models:	A	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22
at 100% load	3-Phase, 400V models:		10.5	11	11	12	11	11	11	11	11	11	11	11	11	11	11
3. Power Factor	(Typ)		3-Phase models: 0.94@208/380Vac, rated output power.														
4. Efficiency (*4	)	%	83	84	84	86	86	88	88	88	88	88	88	88	88	88	88
5. Inrush Curren	nt (*5)	Α				ess than ! ess than 2											
2.2 POWER SU	JPPLY CONFIGURATION		1														
1. Parallel Opera	1. Parallel Operation Up to 4 identical units in master/slave mode 2. Series Operation Up to 2 identical units, with external diodes, 600V Max to Chassis ground																
2. Series Operat	tion		Up to 2	identical	units. w	ith exter	nal diod	es. 600V	Max to C	hassis gr	ound						
2.3 ENVIRON	MENTAL CONDITIONS																
1. Operating ter				100% lo	ad.												
2. Storage temp			-20~85°														
3. Operating hu				6 RH (nor													
4. Storage hum	idity			RH (non													
5. Vibration						The EUT				urface.							
6. Shock						11mSec.											
7. Altitude						m), Dera m. Non o					ove 2000	m, Alter	natively,	derate n	naximum	n ambier	it temp.
8. RoHS Compli	ance					ements o				,.							
2.4 EMC																	
1.Applicable Sta	andards:																
2.ESD			IEC1000	-4-2. Air-	disch8	KV, conta	ct disch	4KV									
3.Fast transient	S		IEC1000	-4-4. 2K\	/												
4.Surge immun	itv		IEC1000	)-4-5. 1K\	/ line to l	ine, 2KV	line to a	round									
5.Conducted im			IEC1000	-4-6, 3V													
6.Radiated imm			IEC1000	-4-3, 3V/	m												
7.Magnetic field	dimmunity		EN6100	0-4-8, 1A	/m												
8.Voltage dips	·		EN6100	0-4-11													
9.Conducted en	nission		EN5502	2A, FCC p	art 15-A	, VCCI-A.											
10. Radiated em	nission		EN5502	2A, FCC p	oart 15-A	, VCCI-A.											
2.5 SAFETY																	
1.Applicable sta	andards:		UL 6095	0-1, CSA	22.2 No.	60950-1	IEC 609	50-1, EN 6	50950-1								
						tput is SE		mmunic	ation/co	ntrol inte	erfaces (R	S232/48	5, IEEE, Is	olated Ar	nalog, LA	N, Sense	, Remote
2.Interface class	sification		Programming and Monitoring) are SELV.  Models with 60V Vout 400V: Output is Hazardous, communication/control interfaces: RS232/485, IEEE, Isolated Analog, LAN, Remote Programming and Monitoring (pins 1-3, pins14-16) are SELV, Sense, Remote Programming and Monitoring (pins 8-13, pins 21-25) are Hazardous.														
						500V: Out					on/contr	ol interfa	aces (RS2	32/485,1	EEE, Isola	ted Anal	og, LAN,
				0V mod round: 2		put-Out 1min,	put (SE	LV): 42	42VDC	1min, lı	nput-co	mmunio	cation/c	ontrol	(SELV): 4	4242VD	C 1min,
3.Withstand vol	ltage		60V <vout (hazardous):="" (selv):="" 100v="" 1200vdc="" 1900vdc="" 1min,="" 1min,<="" 2600vdc="" 2828vdc="" 4242vdc="" control="" input-communication="" input-ground:="" input-output="" models:="" output(hazardous)-ground:="" output(hazardous)-selv:="" td=""><td></td></vout>														
			4242VD	C 1min, F	lazardou	:: Input-C us. Outpu und: 2670	it-comm	unicatio	n/contro	I(SELV): 4	1242VDC		cation/c	ontrol (SI	ELV):		
3.Insulation resi	istance		More th	an 100M	ohm at 2	25°C , 709	6 RH.	-									
	CAL CONSTRUCTION																
1. Cooling			Forced	air flow: f	rom fror	nt to rear	No vent	ilation h	oles at tl	he top or	bottom	of the ch	nassis; Va	riable fai	n speed.		
2. Dimensions (	WxHxD)					142.5mm											
3. Weight			13 kg.														
	nector (with Protective Cove	er)	Single F			ls, Power											
5.Output conne	octors		1			oaeis, Po oars (hole								hoeniy D	/NI- EDON	T_1_H. 7	62
2.7 RELIABILI			100 10 10	ov mode	าง. มนง-โ	vai 5 (11016	וכ.טו ש	1111). 150	10 000	v models	. wire cla	inh cour	iector, P	iloeilix P	IN. FRUIV	ı - <del>'+</del> -∏-/.	02
1. Warranty	i i oreco		5 years.														
	s subject to change withou	t notic									-						

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

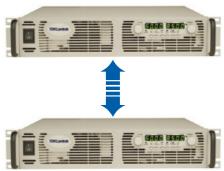
and reported by the Master, Up to four supplies act as one.

#### 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.



#### **Programming Options (Factory installed)**

#### 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**

- Program Current
- Measure Current
- Current Foldback shutdown

#### **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 ±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 Compliant to Class C P/N: LAN

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

- VISA & SCPI Compatible
- LAN Fault Indicators
- Auto-detects LAN Cross-over Cable
- Fast Startup

P/N: IEEE

P/N: IS510

P/N: IS420

### 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	
Madala E	1-147		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

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

#### **Factory option** P/N

RS-232/RS-485 Interface built-in Standard

**GPIB** Interface IEEE

Voltage Programming Isolated Analog Interface IS510 IS420 Current Programming Isolated Analog Interface LAN Interface (Complies with LXI 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<sup>™</sup> power supplies.

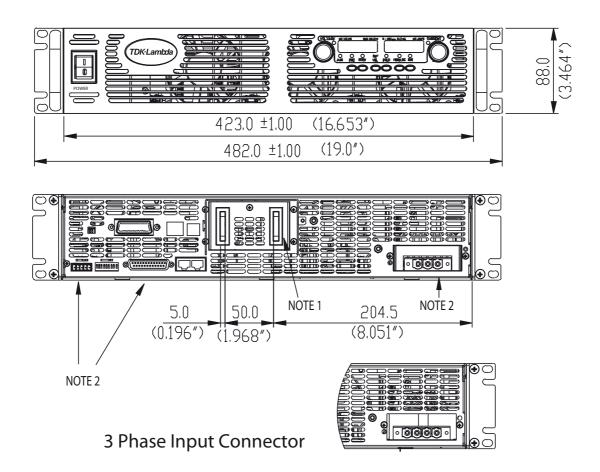
Mode	Power Supply Connector	Communication Cable	P/N
RS-485	EIA/TIA-568A (RJ-45)	Shield Ground L=50cm	GEN/RJ45

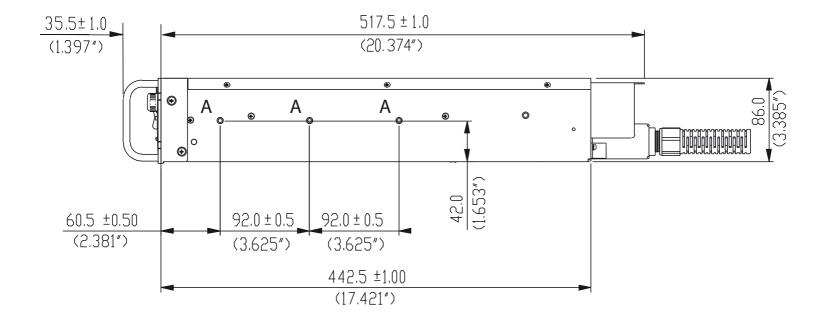
<sup>\*</sup> Included with power supply



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

# Outline Drawing Genesys™ 5kW Units





#### **NOTE**

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

#### Your contact:



