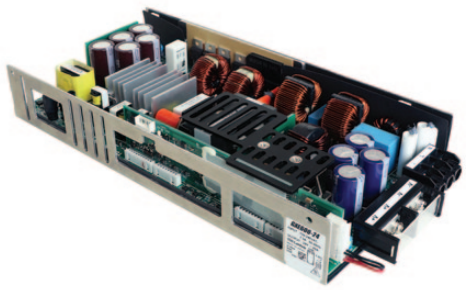
Medical Industrial Test Comm Broadcast

Single Output 600W Programmable Medical & ITE Power Supplies

Features	Benefits
• Convection Cooled	• Low Acoustic Noise and Vibration
• Up to 95% Efficient	• Less Power Consumed
• Constant Voltage & Constant Current Modes	• Can be used as a Voltage or Current Source
• Monitoring & Programming Functions	• Read/write Capability for Flexibility
• Digital or Analog Programming	• For use with RS-485 or an External Voltage
• Seven Year Warranty	• Low Cost of Ownership



Specification

Model		GXE600-24	GXE600-48
AC Input Voltage range (1)	VAC	85 - 265VAC (47 - 63Hz). Withstands 300VAC for 5s	
Inrush Current (100 / 200VAC)	A	40 / 40A	
Power Factor (100 / 200VAC)	-	Meets EN61000-3-2 (0.99 / 0.95)	
Input Current (115/230VAC) (Typ)	A	6.1 / 3.1A	
Nominal Output Voltage	VDC	24V	48V
Maximum Output Current	A	25A	12.5A
Output Voltage Range (Manual Adjust)	VDC	19.2 - 28.8V	38.4 - 57.6V
Output Voltage Range (Via Programming) (2)	VDC	4.8 - 28.8V	9.6 - 57.6V
Current Limit Set Point (Via Programming) (2)	A	5 - 28.8A	2.5 - 14.4A
Temperature Coefficient	%/°C	<0.02%/°C	
Regulation	-	See Model Selector	
Overcurrent Protection (3)	-	>28.8A	>14.4A
Overvoltage Protection (3)	V	28.8 - 31.2V	57.6 - 62.4V
Hold Up Time (Typ at 100% load)	ms	20ms	
Leakage Current (max)	mA	<0.3mA	
Standby Voltage Vsb)	-	4.8V - 5.2V 1A	
Remote Sense	-	Yes	
Remote On/Off	-	Isolated opto-coupler. Unit off when current is flowing through the opto diode	
Power Fail Signal	-	Signal is high when the output voltage drops due to AC loss or OCP, OVP, OTP	
AC Fail Signal	-	Signal goes high when the AC input is not present	
Parallel Operation	-	Yes, up to five units	
Operating Temperature (-40°C start up)	°C	Convection: -20°C to +70°C, derate linearly to 50% load from 50°C to 70°C (4)	
Storage Temperature	°C	-40°C to +85°C	
Operating Humidity (non condensing)	%RH	20 - 90%RH	
Storage Humidity (non condensing)	%RH	10 - 90%RH	
Cooling	-	Convection or forced air cooling	
Withstand Voltage	VAC	Input to Ground 2kVAC (1xMOPP), Input to Output 4kVAC (2xMOPP), Output to Ground 1.5kVAC (1xMOPP), Output to Signals 100VAC for 1 min.	
Isolation Resistance	MΩ	>100MΩ at 25°C & 70%RH, Output to Ground 500VDC	
Vibration (non operating)	-	10 - 55Hz: 19.6m/s^2 (sweep 1 min) X, Y, Z for 1 hour	
Shock	-	< 196.1 m/s^2	
Safety Agency Certifications	-	IEC/UL/CSA/EN60950-1, IEC/UL/CSA/EN62368-1, IEC/ES/CSA/EN60601-1, IEC/EN62477-1 (OVC III), CE Mark	
Line Dips	-	SEMI-F47 (200VAC input)	
Conducted & Radiated EMI	-	EN55011 / EN55032-B, FCC Class B, VCCI-B	
Immunity	-	IEC61000-4-2, -3, -4, -5, -6, -8, -11, IEC61000-6-2, IEC60601-1-2 Ed 4	
Weight (Typ)	g	1300	
Size (WxHxD)	mm	127 x 41 x 254mm	
MTBF - Telcordia SR-332 issue 3*	Hours	511,677 hours	
Warranty	Yrs	7	

Notes: **(1)** 85Vac: 360W, 100 to <170Vac: 500W, 170V to 265Vac: 600W (Convection cooled). 600W when forced air is applied (see installation manual)
(2) Using RS-485 communications or external 1-6V voltage source. See installation manual for details
(3) Overcurrent & Overvoltage limits and recovery modes can be set using the RS-485 communications
4) See installation manual for full derating curves *24V output model, 25°C ambient, full load, 230VAC input

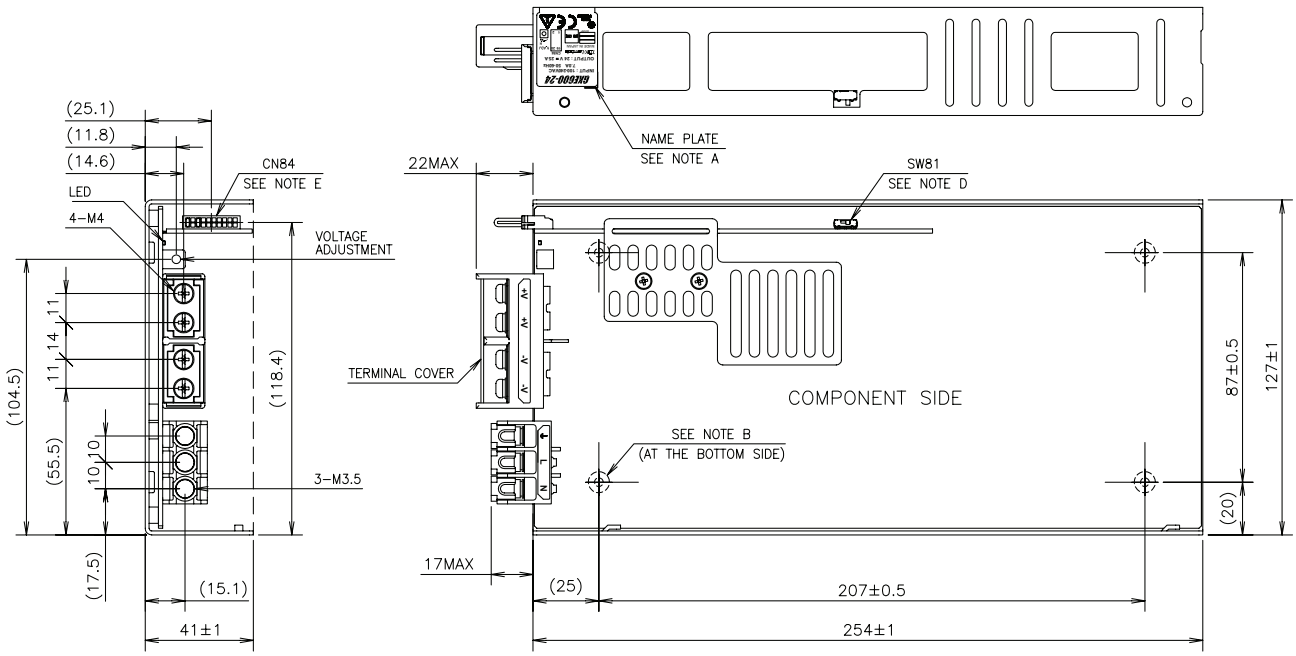
Model Selector

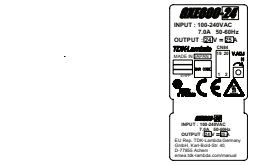
Model	Output Voltage (V)	Max Output Power (W)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV)	Efficiency (typ) % 115/230 VAC
GXE600-24	24	600	144	96	150	92 / 95
GXE600-48	48	600	288	192	350	92 / 95

Monitoring and Programming Functions

Function	Digital (RS-485) Control	Analog Control
Output Voltage Monitor	Read back	No
Output Current Monitor	Read back	No
Output Voltage Programming	Adjustable	Adjustable, use a 1-6V external voltage source
Output Current Programming	Adjustable	Adjustable, use a 1-6V external voltage source
Over Voltage Protection Set Point	Adjustable	Fixed
Over Voltage Recovery	Auto-recovery or manual settings	Cycle AC input or use the remote on/off
Over Current Set Point	Adjustable	Fixed
Over Current Recovery	Auto recovery: Constant current, hiccup or foldback Latching: Constant current or foldback	Constant current, auto-recovery
Over Temperature Recovery	Cycle AC input or use the remote on/off	Cycle AC input or use the remote on/off
Remote On/Off	Yes, enable or inhibit type	Yes, enable or inhibit type
Internal Temperature Monitoring	Yes, -20˚C to +100˚C	No
Operating Run Time Log	Records more than 20 years of data	No
Remaining Electrolytic Capacitor Life	Indicates hours left	No
Alarm History	OCP, OVP, OTP, remote on/off, system error	No
Slew Rate (Rise-time) Control	Voltage and current	No
Communication Configuration	ID, Baud Rate, Parity	Not applicable
Product Information	Model #, serial #, lot #, firmware version	Not applicable
Power Fail Signal Threshold	Adjustable for either output voltage or current	Fixed (voltage only)

Outline Drawing GXE600 Series





== NOTES ==

A : MODEL NAME, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, MAXIMUM OUTPUT CURRENT AND COUNTRY OF MANUFACTURE ARE SHOWN HERE IN ACCORDANCE WITH THE SPECIFICATIONS.

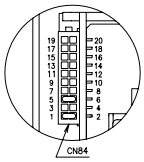
NAME PLATE DETAILS

B : 4-M4 TAPPED & STANDOFF ARE FOR CUSTOMER'S CHASSIS MOUNTING. (SCREW PENETRATION DEPTH 4mm MAX.)

C : 2-M4 TAPPED & STANDOFF ARE FOR CUSTOMER'S CHASSIS MOUNTING. *NOT ENSURED SPECIFICATION OF VIBRATION AND SHOCK. (SCREW PENETRATION DEPTH 4mm MAX.)

D : SW81 IS "EN" SIDE POSITION AT SHIPMENT.

E : SIGNAL CONNECTOR INFORMATION
PIN CONFIGURATION AND FUNCTION OF CN84.



== SIGNAL CONNECTOR USED ==

PART DESCRIPTION	PART NAME	MANUFACT
PIN HEADER	S20B-PHDSS	JST

== MATCHING HOUSINGS, PIN & TOOL ==

PART DESCRIPTION	PART NAME	MANUFACT
SOCKET HOUSING	PHDR-20VS	JST
TERMINAL PINS	SPHD-002T-P0.5(AWG28~24) SPHD-001T-P0.5(AWG26~22)	JST
HAND CRIMPING TOOL	YRS-620(SPHD-002T-P0.5) YC-610R(SPHD-001T-P0.5)	JST

== ACCESSORIES ==

* TERMINAL COVER ----------1
(ATTACHED ON TERMINAL AT SHIPMENT)
* SHORT PIECE ----------1
SHORTING +Vm — +S, -Vm — -S
(ATTACHED ON CN84 AT SHIPMENT)

PIN No.	CONFIGURATION	FUNCTION
1	+Vm	OUTPUT MONITOR TERMINAL (+V)
2	+S	REMOTE SENSING TERMINAL FOR +OUTPUT
3	NC	-
4	NC	-
5	-Vm	GND FOR OUTPUT MONITOR TERMINAL (-V)
6	-S	REMOTE SENSING TERMINAL FOR -OUTPUT
7	PC	CURRENT BALANCE TERMINAL
8	CC	OUTPUT CURRENT EXTERNAL CONTROL TERMINAL
9	PV	OUTPUT VOLTAGE EXTERNAL CONTROL TERMINAL
10	COM	GND FOR CC AND PV AND PC SIGNAL
11	PF	POWER FAIL SIGNAL TERMINAL
12	AC FAIL	AC FAIL (LOW AC) ALARM SIGNAL TERMINAL
13	CNT 1	REMOTE ON/OFF CONTROL TERMINAL (1)
14	+STB	STANDBY SUPPLY+ (5V,1A)
15	CNT 2	REMOTE ON/OFF CONTROL TERMINAL (2)
16	-STB	STANDBY SUPPLY- (CONNECTED TO TOG INTERNALLY)
17	SG	GND FOR +,-DATA (CONNECTED TO TOG INTERNALLY)
18	TOG	GND FOR CNT AND PF, AC FAIL SIGNALS
19	+DATA	RS485 +DATA (NON-INVERSION)
20	-DATA	RS485 -DATA (INVERSION)

Options

Suffix	Description
/A	Cover

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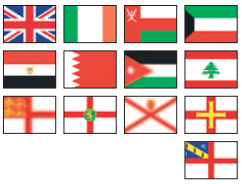

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