

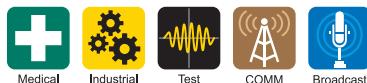
## Single output 600W Programmable Medical and ITE Power Supplies

## Features

- ◆ Convection Cooled
- ◆ Up to 95% Efficient
- ◆ RS-485 Read-Write Communication (Modbus RTU protocol)
- ◆ Constant Voltage & Constant Current Modes
- ◆ Monitoring & Programming Functions
- ◆ Digital or Analog Programming
- ◆ Seven Year Warranty



## Key Market Segments &amp; Applications



## Specifications

| Model  |       | GXE600-24  | GXE600-48      |
|--|-------|--|----------------|
| AC Input Voltage range <sup>(1)</sup>                    | 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) <sup>(2)</sup>    | VDC   | 4.8 - 28.8V  | 9.6 - 57.6V    |
| Current Limit Set Point (Via Programming) <sup>(2)</sup> | A     | 5 - 28.8A  | 2.5 - 14.4A    |
| Temperature Coefficient                                  | %/°C  | <0.02%/°C  |                |
| Regulation   | -     | See Model Selector   |                |
| Overcurrent Protection <sup>(3)</sup>                    | -     | >27.5A   | >13.8 A        |
| Overvoltage Protection <sup>(3)</sup>                    | 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 V <sub>sb</sub>                          | -     |  | 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 to +70°C, derate linearly to 50% load from 50 to 70°C <sup>(4)</sup>   |                |
| Storage Temperature                                      | °C    | -40 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 <sup>2</sup> (sweep 1 min) X, Y, Z for 1 hour   |                |
| Shock  | -     | /HD version: Designed to meet MIL-STD-810G 514.7 Category 4, 10  |                |
| Safety Agency Certifications                             | -     | < 196.1m/s <sup>2</sup> /HD version: Designed to meet MIL-STD-810G 516.7 Procedure I, VI   |                |
| Line Dips  | -     | UL/CSA60950-1, IEC/JL/CSA/EN62368-1, IEC/ES/CSA/EN60601-1, IEC/EN62477-1 (OVC III) CE Mark   |                |
| Conducted & Radiated EMI                                 | -     | SEMI-F47 (200VAC input)  |                |
| Immunity   | -     | EN55011 / EN55032-B, FCC Class B, VCCI-B   |                |
| Weight (Typ)   | g     | IEC61000-4-2, -3, -4, -5, -6, -8, -11, IEC61000-6-2, IEC60601-1-2 Ed 4   |                |
| Size (WxHxD)   | mm    | 1300   |                |
| MTBF - Telcordia SR-332 issue 3*                         | Hours | 127 x 41 x 254mm   |                |
| Warranty   | Yrs   | 511,677 hours  |                |
|  |       | Seven Years  |                |

(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

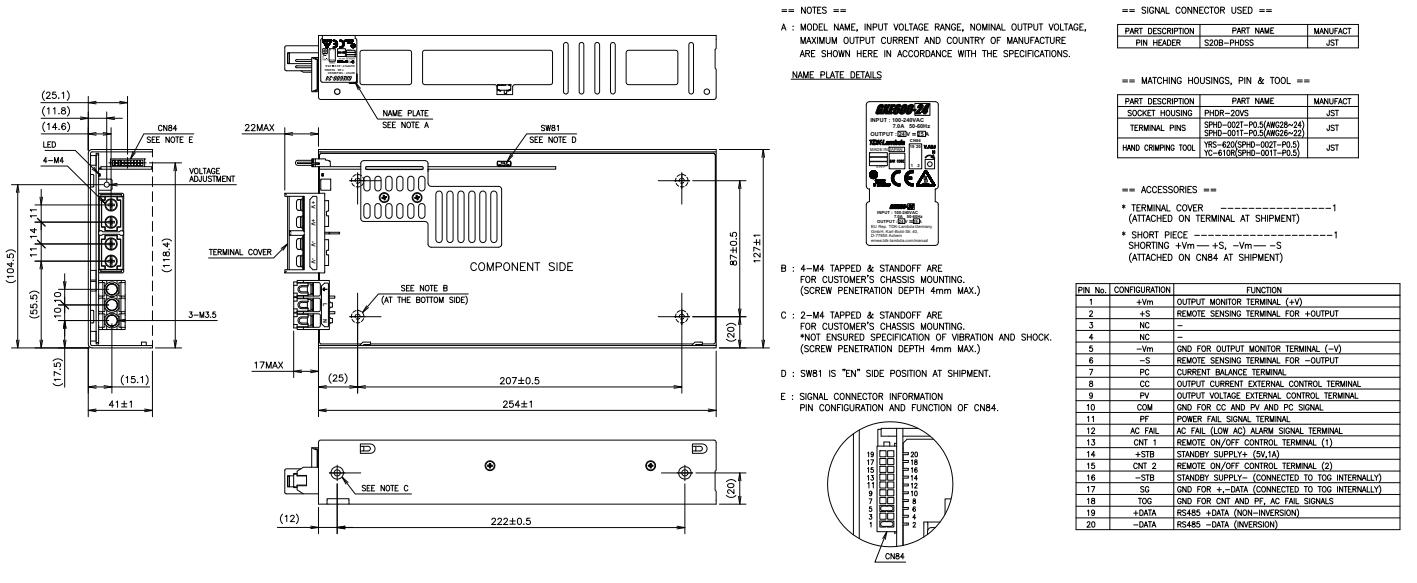
## Model Selector

| 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<br>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 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



## Options

| Suffix | Description  |
|--------|--|
| Blank  | U channel chassis                                      |
| /A     | U channel chassis with cover                           |
| /HD    | U channel chassis, ruggedized & pcb coating            |
| /HDA   | U channel chassis with cover, ruggedized & pcb coating |

For Additional Information, please visit  
<https://product.tdk.com/info/en/products/power/index.html>

