

GPT-9000 Specifications

The specifications apply when the GPT-9000 is powered on for at least 30 minutes at 15°C~35°C.

Specifications

Environment

| | | |
|-----------------------|---|------------------------|
| Range | Temperature | Humidity |
| Warranty | 15°C ~ 35°C | ≤70% (No condensation) |
| Operation | 0°C ~ 40°C | ≤70% (No condensation) |
| Storage | -10°C ~ 70°C | ≤85% (No condensation) |
| Installation Location | Indoors at an amplitude of up to 2000m. | |

AC Withstanding Voltage

| | |
|------------------------------|---|
| Output Voltage Range | 0.100kV~ 5.000kV |
| Output Voltage Resolution | 2V |
| Output Voltage Accuracy | ± (1% of setting +5V) with no load |
| Maximum Rated Load (Table1) | 200 VA (5kV/40mA) |
| Maximum Rated Current | 40mA 0.001mA ~ 10mA (0.1kV≤V≤0.5kV) 0.001mA ~ 40mA (0.5kV<V≤5kV) |
| Output Voltage Waveform | Sine wave |
| Frequency | 50 Hz / 60 Hz |
| Voltage Regulation | ± 1% +5V [Maximum rated load → no load] |
| Voltmeter Accuracy | ± (1% of reading+ 5V) |
| Current Measurement Range | 0.001mA~040.0mA |
| Current Best Resolution | 1uA 0.001mA (0.001mA~0.999mA) 0.01mA (01.00mA~09.99mA) 0.1mA (010.0~040.0mA) |
| Current Measurement Accuracy | ± (1.5% of rdg + 30 counts) when HI SET<1.00mA ± (1.5% of rdg + 3 counts) when HI SET≥1.00mA |
| Window Comparator Method | Yes |
| ARC DETECT | Yes |
| Rise-time Control Function | Yes |
| RAMP (Ramp Time) | 0.1~999.9S |

Continued...

| | |
|-------------------|-------------------|
| TIMER (Test Time) | OFF*, 0.5S~999.9S |
| GND | ON/OFF |

* The timer can only be turned off under special MANU mode (MANU=***-000)

DC Withstanding Voltage

| | |
|------------------------------|--|
| Output Voltage Range | 0.100kV~ 6.000kV |
| Output Voltage Resolution | 2V |
| Output Voltage Accuracy | ± (1% of setting +5V) with no load |
| Maximum Rated Load(Table1) | 50W (5kV/10mA) |
| Maximum Rated Current | 10mA 0.001mA ~ 2mA (0.1kV≤V≤0.5kV) 0.001mA ~ 10mA (0.5kV<V≤6kV) |
| Voltmeter Accuracy | ± (1% of reading+ 5V) |
| Voltage Regulation | ± 1% +5V [Maximum rated load → no load] |
| Current Measurement Range | 0.001mA~010.0mA |
| Current Best Resolution | 1uA 0.001mA(0.001mA~0.999mA) 0.01mA(01.00mA~09.99mA) 0.1mA(010.0mA) |
| Current Measurement Accuracy | ± (1.5% of reading +30uA) |
| Window Comparator Method | Yes |
| ARC DETECT | Yes |
| Rise-time Control Function | Yes |
| RAMP (Ramp Time) | 0.1~999.9S |
| TIMER (Test Time) | OFF*, 0.5S~999.9S |
| GND | ON/OFF |

* The timer can only be turned off under special MANU mode (MANU=***-000)

Insulation Resistance Test

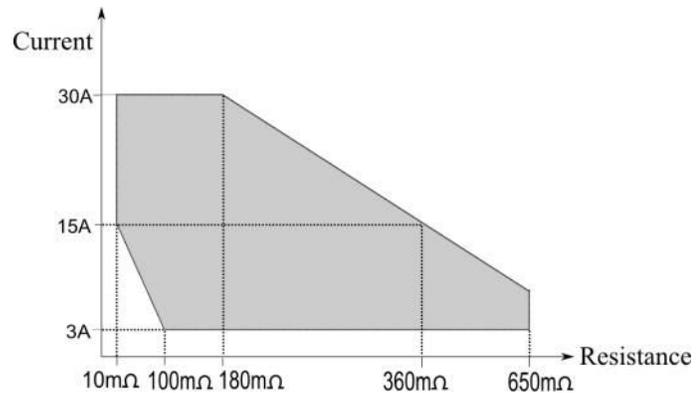
| | | |
|------------------------------|--|------------------------|
| Output Voltage | 50V~1000V | |
| Output Voltage Resolution | 50V | |
| Output Voltage Accuracy | (1% of setting+5V) with no load | |
| Resistance Measurement Range | 1MΩ~ 9500MΩ | |
| Test Voltage | Measurement Range | Accuracy |
| 50V≤V<500V | 1~50MΩ | ±(5% of reading +1MΩ) |
| | 51~2000MΩ | ±(10% of reading +1MΩ) |
| 500V≤V≤1000V | 1~500MΩ | ±(5% of reading +1MΩ) |
| | 501~9500MΩ | ±(10% of reading +1MΩ) |
| Voltage Regulation | ±1% +5V [Maximum rated load → no load] | |
| Window Comparator Method | Yes | |
| Rise-time Control Function | Yes | |

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| | |
|-------------------|------------|
| RAMP (Ramp Time) | 0.1~999.9S |
| TIMER (Test Time) | 1S~999.9S |
| GND | OFF |

Ground Bond Test

| | |
|-------------------------------|--|
| Output Current Range | 03.00A~30.00A |
| Output Current Accuracy | ± (1% of reading +0.2A) when 3A≤I≤8A ± (1% of reading +0.05A) when 8A<I≤30A |
| Output Current Resolution | 0.01A |
| Frequency | 50Hz/60Hz |
| Ohmmeter Measurement Accuracy | ± (1% of reading +2mΩ) |
| Ohmmeter Measurement Range | 10mΩ~650.0mΩ |



| | |
|---------------------------------|-------------|
| Test Voltage | Max. 6V(AC) |
| Ohmmeter Measurement Resolution | 0.1mΩ |
| Windows Comparator Method | Yes |
| TIMER (Test Time) | 0.5S~999.9S |
| GND | OFF |

Interface

| | |
|--------------------------|--------------|
| REMOTE (Remote terminal) | Yes |
| SIGNAL IO | Yes |
| RS232 | Yes |
| USB (Device) | Yes |
| GPIB | Yes (OPTION) |

General

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|---------|--|
| DISPLAY | 240 x 64 dot matrix LED back light LCD |
| MEMORY | AUTO/MANU mode 100 memory blocks total |

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| | |
|---------------------|---|
| POWER SOURCE | AC100V/120V/220V/230V ±10% 50Hz/60Hz |
| ACCESSORIES | Power cord x1, Quick Start Guide x1 User Manual x1 (CD) GHT-114x1 for GPT-9801, GPT-9802, GPT-9803 GHT-114x1, GTL-115x1 for GTP-9804 |
| DIMENSIONS & WEIGHT | Approx. 330(W) x 150(H) x 460(D) mm (Max.), 19kg(Max) |

Table 1: Output Limitation in Withstanding Voltage Testing

| | Upper Current | Pause | Output Time |
|----|--|-------------------------------------|----------------------------|
| AC | $30\text{mA} \leq I \leq 40\text{mA}$ | At least as long as the output time | Maximum 240 seconds |
| | $0.001\text{mA} \leq I < 30\text{mA}$ | Not necessary | Continuous output possible |
| DC | $0.001\text{mA} \leq I \leq 10\text{mA}$ | Not necessary | Continuous output possible |
| GB | $15\text{A} < I \leq 30\text{A}$ | At least as long as the output time | 999.9 |
| | $3\text{A} \leq I \leq 15\text{A}$ | Not necessary | 999.9 |

NOTE: Output Time = Ramp Time + Test Time.

GPT-9000 Dimensions

