

## GPT-12000 Specifications

The specifications apply when the GPT-12000 is powered on for at least 30 minutes under +15°C~+35°C

**GPT-12004 (Front)**



**GPT-12003/12002/12001 (Front)**



**GPT-12004 (Rear)**



**GPT-12003/12002/12001 (Rear)**



**(All models are available with optional GPIB or LAN)**

Model \ Func.	AC Withstanding	DC Withstanding	Insulation Resistance	Ground Bond	Ground Continuity
GPT-12001	✓	----	----	----	✓
GPT-12002	✓	✓	----	----	✓
GPT-12003	✓	✓	✓	----	✓
GPT-12004	✓	✓	✓	✓	✓

AC WITHSTANDING	
Output-Voltage Range	0.050kV~5.000kV
Output-Voltage Resolution	1V
Output-Voltage Accuracy	± (1% of setting + 5V) [no load]
Maximum Rated Load	200 VA (5kV/40mA)
Maximum Rated Current	40mA (0.5kV < V ≤ 5kV) 10mA (0.05kV ≤ V ≤ 0.5kV)
Output-Voltage Waveform	Sine wave
Output-Voltage Frequency	50 Hz / 60 Hz selectable
Voltage Regulation	± (1% + 5V) [maximum rated load → no load]
Voltmeter Accuracy	± (1% of reading + 5V)
Current Measurement Range	1μA~40.00mA
Current Best Resolution	1μA / 10μA
Current Measurement Accuracy	±(1.5% of reading + 30μA)
Current Offset	60μA Maximum
Window Comparator Method	Yes
ARC Detect	Yes
RAMP UP (Rise Time)	0.1s~999.9s

RAMP DOWN (Fall Time)	0.0s~999.9s	
TIMER (Test Time)	OFF, 0.3s~999.9s	
TIMER Accuracy	±(100ppm + 20ms)	
WAIT TIME	0.0s~999.9s	
GND	ON/OFF	
<b>DC WITHSTANDING</b>		
Output-Voltage Range	0.050kV~6.000kV	
Output-Voltage Resolution	1V	
Output-Voltage Accuracy	± (1% of setting + 5V) [no load]	
Maximum Rated Load	50W (5kV/10mA)	
Maximum Rated Current	10mA (0.5kV < V ≤ 6kV) 2mA (0.05kV ≤ V ≤ 0.5kV)	
Voltage Regulation	± (1% + 5V) [maximum rated load → no load]	
Voltmeter Accuracy	± (1% of reading + 5V)	
Current Measurement Range	1μA~10.00mA	
Current Best Resolution	0.1μA / 1μA / 10μA	
Current Measurement Accuracy	±(1.5% of reading + 3μA) when I Reading < 1mA ±(1.5% of reading + 30μA) when I Reading ≥ 1mA	
Current Offset	5μA Maximum	
Window Comparator Method	Yes	
ARC Detect	Yes	
RAMP UP (Rise Time)	0.1s~999.9s	
RAMP DOWN (Fall Time)	0.0s~999.9s	
TIMER (Test Time)	OFF, 0.3s~999.9s	
TIMER Accuracy	±(100ppm + 20ms)	
WAIT TIME	0.0s~999.9s	
GND	ON/OFF	
<b>INSULATION RESISTANCE</b>		
Output Voltage	50V~1200V dc	
Output-Voltage Resolution	50V	
Output-Voltage Accuracy	± (1% of setting + 5V) [no load]	
Resistance Measurement		
Test Voltage	Display Range	Measurement Range / Accuracy
50V ≤ V ≤ 100V	0.1MΩ ~ 10.00GΩ	0.1MΩ ~ 1MΩ : ±(5% of reading + 3 count) 1 MΩ ~ 50MΩ : ±(5% of reading + 1 count)
150V ≤ V ≤ 450V	0.1MΩ ~ 20.00GΩ	51MΩ ~ 2GΩ : ±(10% of reading + 1 count)
500V ≤ V ≤ 1200V	0.1MΩ ~ 50.00GΩ	0.1MΩ ~ 1MΩ : ±(5% of reading + 3 count) 1 MΩ ~ 500MΩ : ±(5% of reading + 1 count) 501MΩ ~ 9.999GΩ : ±(10% of reading + 1 count) 10GΩ ~ 50GΩ : ±(20% of reading + 1 count)*
Voltage Regulation	± (1% + 5V) [maximum rated load → no load]	
Voltmeter Accuracy	± (1% of reading + 5V)	
Short-Circuit Current	10mA max.	
Output Impedance	2kΩ	
Window Comparator Method	Yes	
RAMP UP (Rise Time)	0.1s~999.9s	
RAMP DOWN (Fall Time)	0.0s~999.9s	
TIMER (Test Time)	OFF, 0.3s~999.9s	
TIMER Accuracy	±(100ppm + 20ms)	
WAIT TIME	0.0s~999.9s	
GND	ON/OFF	
<b>Ground Bond</b>		
Output-Current	03.00A~32.00A ac	
Output-Current Resolution	0.01A	

Output-Current Accuracy	3A ≤ I ≤ 8A : ±(1% of reading + 0.2A) 8A < I ≤ 32A : ±(1% of reading + 0.05A)
Test-Voltage	8Vac max (open circuit)
Test-Voltage Frequency	50Hz/60Hz selectable
Ohmmeter Measurement Range	1mΩ~ 650mΩ
Ohmmeter Measurement Resolution	0.1mΩ
Ohmmeter Measurement Accuracy	±(1% of reading + 2 mΩ)
Window Comparator Method	Yes
TIMER (Test Time)	0.3s~999.9s
TIMER Accuracy	±(100ppm + 20ms)
Test Method	Four Terminal
GND	ON/OFF
<b>Continuity Test</b>	
Output-Current	100mA dc (fixed)
Ohmmeter Measurement Range	0.10Ω~ 70.00Ω
Ohmmeter Measurement Resolution	0.01Ω
Ohmmeter Measurement Accuracy	±(10% of reading + 2 Ω)
Window Comparator Method	Yes
TIMER (Test Time)	0.3s~999.9s
TIMER Accuracy	±(100ppm + 20ms)
<b>MEMORY</b>	
Single Step Memory	MANU : 100 blocks
Automatic Testing Memory	AUTO : 100 blocks, manu per auto : 10
<b>INTERFACE</b>	
REMOTE (Front) terminal	Standard
USB host (Front)	Standard
Rear Output	Standard
RS-232C	Standard
USB device	Standard
Signal I/O	Standard
GPIB	Option
LAN	Option
<b>DISPLAY</b>	
	7" color LCD
<b>POWER SOURCE</b>	
	AC 100V~240V ± 10%, 50Hz/60Hz Power consumption : 400VA max.
<b>DIMENSION &amp; WEIGHT</b>	
GPT-12001/12002/12003	380(W) x 148(H) x 436(D) mm; Approx. 11kg
GPT-12004	380(W) x 148(H) x 454(D) mm; Approx. 15kg

\* When Ground Mode is "ON", the measurement range is 30GΩ max. and adding 10% error for accuracy.