

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)


(For all models with optional GPIB)

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)
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
WAIT TIME		0.0s~999.9s
GND		ON/OFF
DC WITHSTANDING		
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
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
WAIT TIME		0.0s~999.9s
GND		ON/OFF
INSULATION RESISTANCE		
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)
150V≤V≤450V	0.1MΩ~ 20.00GΩ	1 MΩ~50MΩ : ±(5% of reading + 1 count) 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) 10.00GΩ~50.00GΩ : ±(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
WAIT TIME		0.0s~999.9s
GND		ON/OFF
Ground Bond		
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
Test Method	Four Terminal
GND	ON/OFF
Continuity Test	
Output-Current	100mA dc (fixed)
Ohmmeter Measurement Range	0.10Ω~ 70.00Ω
Ohmmeter Measurement Resolution	0.01Ω
Ohmmeter Measurement Accuracy	±(10% of reading + 2Ω)
Window Comparator Method	Yes
TIMER (Test Time)	0.3s~999.9s
MEMORY	
Single Step Memory	MANU : 100 blocks
Automatic Testing Memory	AUTO : 100 blocks, manu per auto : 10
INTERFACE	
Front panel	REMOTE terminal, USB host
Rear panel	Rear Output, RS-232C , USB device, Signal I/O, GPIB (Optional)
DISPLAY	
	7" color LCD
POWER SOURCE	
	AC 100V~240V ± 10%, 50Hz/60Hz; Consumption: 400VA
DIMENSION & WEIGHT	
	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.