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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
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
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
INSULATION RESISTANCE	
Output Voltage	50V~5000V dc
Output-Voltage Resolution	50V
Output-Voltage Accuracy	± (1% of setting + 5V) [no load]
Resistance Display	
Test Voltage	Display Range
50V≦V≦100V	0.1MΩ~ 10.00GΩ
150V≦V≦450V	0.1MΩ~ 20.00GΩ
500V≦V≦5000V	0.1MΩ~ 50.00GΩ
Resistance Measurement	
Test Voltage	Measurement Range / Accuracy
50V≦V≦450V	0.1MΩ~1MΩ：±(5% of reading + 3 count) 1.1MΩ~50MΩ：±(5% of reading + 1 count) 50.1MΩ~2GΩ：±(10% of reading + 1 count)
500V≦V≦1200V	0.1MΩ~1MΩ：±(5% of reading + 3 count) 1.1MΩ~500MΩ：±(5% of reading + 1 count) 500.1MΩ~9.999GΩ：±(10% of reading + 1 count) 10GΩ~50GΩ：±(20% of reading + 1 count)*
1250V≦V≦5000V	0.1MΩ~1MΩ：±(5% of reading + 3 count) 1.1MΩ~500MΩ：±(5% of reading + 1 count) 500.1MΩ~9.999GΩ：±(10% of reading + 1 count) 10GΩ~50GΩ：±(15% 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
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
TIMER Accuracy	±(100ppm + 20ms)
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 + 2 Ω)
Window Comparator Method	Yes
TIMER (Test Time)	0.3s~999.9s
TIMER Accuracy	±(100ppm + 20ms)
MEMORY	
Single Step Memory	MANU：100 blocks
Automatic Testing Memory	AUTO：100 blocks, manu per auto：10
INTERFACE	
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
DISPLAY	
	7” color LCD
POWER SOURCE	
	AC 100V~240V ± 10%, 50Hz/60Hz Power consumption : 400VA max.
DIMENSION & WEIGHT	
GPT-12001/12002/12003 GPT-12004	380(W) x 148(H) x 436(D) mm; Approx. 11kg 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.

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