

## GPT-15000 Specifications

The specifications apply when the GPT-15000 is powered on for at least 30 minutes under +15°C~+35°C

**GPT-15004 (Front)**

**GPT-15003/15002/15001 (Front)**

**GPT-15004 (Rear)**

**GPT-15003/15002/15001 (Rear)**


(All models are available with optional GPIB or LAN)

| Model \ Func. | AC Withstanding | DC Withstanding | Insulation Resistance | Ground Bond | Ground Continuity |
|---------------|-----------------|-----------------|-----------------------|-------------|-------------------|
| GPT-15001     | √*              | ----            | ----                  | ----        | √                 |
| GPT-15002     | √*              | √               | ----                  | ----        | √                 |
| GPT-15003     | √*              | √               | √                     | ----        | √                 |
| GPT-15004     | √*              | √               | √                     | √           | √                 |

\* : Short current > 200mA

| 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           | 500 VA (5kV/100mA)                                   |
| Maximum Rated Current        | 100mA (0.5kV < V ≤ 5kV)<br>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~100.0mA                                          |
| Current Best Resolution      | 1μA / 10μA / 100μA                                   |
| 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           |                | 100W (5kV/20mA)                                                                                                                                                              |
| Maximum Rated Current        |                | 20mA (0.5kV < V ≤ 6kV)<br>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~20.00mA                                                                                                                                                                  |
| Current Best Resolution      |                | 0.1μA / 1μA / 10μA                                                                                                                                                           |
| Current Measurement Accuracy |                | ±(1.5% of reading + 3μA) when I Reading < 1mA<br>±(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)<br>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)<br>1 MΩ~500MΩ : ±(5% of reading + 1 count)<br>501MΩ~9.999GΩ : ±(10% of reading + 1 count)<br>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)<br>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                                                                         |
| GPIO                            | Option                                                                           |
| LAN                             | Option                                                                           |
| <b>DISPLAY</b>                  |                                                                                  |
|                                 | 7" color LCD                                                                     |
| <b>POWER SOURCE</b>             |                                                                                  |
|                                 | AC 100V~240V ± 10%, 50Hz/60Hz<br>Power consumption : 1000VA max.                 |
| <b>DIMENSION &amp; WEIGHT</b>   |                                                                                  |
| GPT-15001/15002/15003           | 380(W) x 148(H) x 492(D) mm; Approx. 17kg                                        |
| GPT-15004                       | 380(W) x 148(H) x 546(D) mm; Approx. 21kg                                        |

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