

# Intelligent Safety Analyzer



## GPT-12000 Series

### AC/DC/IR/GB Electrical Safety Analyzer

- 200VA AC Test Capacity
- 7" LCD Color Display
- Capacitive Load Testing Capability Up to 47  $\mu$ F
- Controllable Ramp Up & Ramp Down Time
- Statistics Function
- Testing Time Starting From 0.3s
- Provide USB Flash Drive Storage Function
- Universal Power Input

| Function Model | Output Capacity | AC | DC | IR | GB | Continuity | Rear Output |
|----------------|-----------------|----|----|----|----|------------|-------------|
| GPT-12001      | 200VA           | ✓  |    |    |    | ✓          | ✓           |
| GPT-12002      | 200VA           | ✓  | ✓  |    |    | ✓          | ✓           |
| GPT-12003      | 200VA           | ✓  | ✓  | ✓  |    | ✓          | ✓           |
| GPT-12004      | 200VA           | ✓  | ✓  | ✓  | ✓  | ✓          | ✓           |

**NEW**

**7" LCD**



[www.gwinstek.com](http://www.gwinstek.com)

**GW INSTEK**  
Simply Reliable

## SPECIFICATIONS

|                                 |                                                                                               |                   |
|---------------------------------|-----------------------------------------------------------------------------------------------|-------------------|
| 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     |
|                                 | 50V ≤ V ≤ 100V                                                                                | 0.1M Ω ~ 10.00G Ω |
|                                 | 150V ≤ V ≤ 450V                                                                               | 0.1M Ω ~ 20.00G Ω |
|                                 | 500V ≤ V ≤ 1200V                                                                              | 0.1M Ω ~ 50.00G Ω |
|                                 | Measurement Range / Accuracy                                                                  |                   |
|                                 | 0.1MΩ~1MΩ : ±(5% of reading + 3 count); 1 MΩ~50MΩ : ±(5% of reading + 1 count);               |                   |
|                                 | 51MΩ~2GΩ : ±(10% of reading + 1 count)                                                        |                   |
|                                 | 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)               | 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~ 90.00Ω                                                                                 |                   |
| Ohmmeter Measurement Resolution | 0.01Ω                                                                                         |                   |
| Ohmmeter Measurement Accuracy   | ±(10% of reading + 2 Ω)                                                                       |                   |
| MEMORY                          |                                                                                               |                   |
| Single Step Memory              | MANU : 100 blocks                                                                             |                   |
| Automatic Testing Memory        | AUTO : 100 blocks, Manu per auto : 10                                                         |                   |
| INTERFACE                       |                                                                                               |                   |
| Standard (Front)                | REMOTE, USB host                                                                              |                   |
| Standard (Rear)                 | Rear Output, RS-232C, USB device, Signal I/O,                                                 |                   |
| Option                          | GPIB                                                                                          |                   |
| DISPLAY                         |                                                                                               |                   |
|                                 | 7" color LCD                                                                                  |                   |
| POWER SOURCE                    |                                                                                               |                   |
|                                 | AC 100V~240V ± 10%, 50Hz/60Hz; Power consumption : Max. 400VA                                 |                   |
| DIMENSIONS & WEIGHT             |                                                                                               |                   |
|                                 | 380(W) x 148(H) x 454(D) mm; Approx. 15kg                                                     |                   |

Specifications subject to change without notice. GPT-12000CD1DH

## ORDERING INFORMATION

|           |                                        |
|-----------|----------------------------------------|
| GPT-12004 | AC/DC/IR/GB Electrical Safety Analyzer |
| GPT-12003 | AC/DC/IR Electrical Safety Analyzer    |
| GPT-12002 | AC/DC Electrical Safety Analyzer       |
| GPT-12001 | AC Electrical Safety Analyzer          |

## ACCESSORIES

Quick Start Guide x 1, Power cord x 1, CDx1 (complete user manual), Interlock Key x 1, Remote terminal Cable GHT-119 x 1, Test lead GHT-115 x 1 for GPT-12001/12002/12003, Test lead GHT-115 x 1, GTL-215 x 1 for GPT-12004

## OPTION

Opt.1 GPIB card

## OPTIONAL ASSESSORIES

|         |                                                              |         |                         |
|---------|--------------------------------------------------------------|---------|-------------------------|
| GHT-113 | High Voltage Test Pistol                                     | GHT-118 | HV/GB Adapter           |
| GHT-117 | HV Adapter                                                   | GHT-205 | High Voltage Test Probe |
| GTL-248 | GPIB Cable, approx. 2m                                       |         |                         |
| GTL-247 | USB Cable, A-A type, approx. 1.8m                            |         |                         |
| GTL-232 | RS-232C Cable, 9-pin Female to 9-pin null Modem for Computer |         |                         |

## GOOD WILL INSTRUMENT CO., LTD.

No.7-1, Jhongsing Road, Tucheng Dist., New Taipei City 236, Taiwan

T +886-2-2268-0389 F +886-2-2268-0639

E-mail: marketing@goodwill.com.tw



www.gwinstek.com www.facebook.com/CWInstek

**GW INSTEK**  
Simply Reliable