

Specifications						
	MODEL	GPI-745A	GPI-735A	GPI-725A	GPT-715A	GPT-705A
AC HI-POT TEST	Output Voltage, AC kV V Resolution V Regulation V Accuracy Trip Current, mA Current Resolution Current Accuracy	0.1~5kV 5V 1% of reading+5V 1% + 10V, above 500V 0.10~40mA 0.02mA/step 1%+ 50uA				
DC HI-POT TEST	Output Voltage, DC kV V Resolution V Regulation V Accuracy Trip Current, mA Current Resolution Current Accuracy	0.1~6kV 5V 1% + 5V 1% + 10V, above 500V 0.1~10mA 0.01mA 1% + 50uA	0.1~6kV 5V 1% + 5V 1% + 10V, above 500V 0.1~10mA 0.01mA 1% + 50uA	—	0.1~6kV 5V 1% + 5V 1% + 10V, above 500V 0.1~10mA 0.01mA 1% + 50uA	—
INSULATION RESISTANCE TEST	Output Voltage, DC V Resistance Resistance Accuracy	50/100/500/1000V 500V/1000V:1~9999MΩ 50V/100V:1~2000MΩ 50V/100V 1~50MΩ:5% of reading 51M~200MΩ:10% of reading 201M~1990MΩ:20% of reading 500V/1000V 1~500MΩ:5% of reading 501M~2000MΩ:10% of reading 2001M~9900MΩ:20% of reading				
GROUND BOUND TEST	Output Voltage, AC V Output Current, AC A Current Resolution Current Accuracy Ground Bound R Test Resistance Resolution Resistance Accuracy Test Method	Max. 8V (DC) 3~42A 0.02A 1%+50mA 0~620 mΩ 100uΩ 1%+3mΩ 4 wires				
FEATURES	Arc Detection Ramp-Up Setting Continuity Check Key Lock Remote Control Memory Storage External Scanner Box Scanner Interface Real Panel Output RS-232C Interface GPIB Interface Display	40level programmable no yes start, reset, pass/fail 10 x 16 option standard standard option 24 x 2 large-character LCD	40level programmable yes yes start, reset, pass/fail 10 x 16 option standard standard option 24 x 2 large-character LCD	40level programmable yes yes start, reset, pass/fail 10 x 16 option standard standard option 24 x 2 large-character LCD	40level programmable yes yes start, reset, pass/fail 10 x 16 option standard standard option 24 x 2 large-character LCD	40level programmable yes yes start, reset, pass/fail 10 x 16 option standard standard option 24 x 2 large-character LCD
POWER SOURCE		AC100V, 120V, 220V, 230V± 10%, 50/60Hz				
ACCESSORIES		Power cord x 1, Instruction manual x 1, Programming manual x 1, Test lead GHT-105A x 1, GHT-107A x 1, GTL-115 x 1				
DIMENSIONS & WEIGHT		330(W) x 149(H) x 446(D) mm, Approx. 15kg				

Specifications subject to change without notice.

Ordering Information

GPI-745A : AC 200VA AC/DC Withstand Voltage / Insulation / Ground Bound Electrical Safety Tester
 GPI-735A : AC 200VA AC/DC Withstand Voltage / Insulation Electrical Safety Tester
 GPI-725A : AC 200VA AC Withstand Voltage / Insulation Electrical Safety Tester
 GPT-715A : AC 200VA AC/DC Withstand Voltage Electrical Safety Tester
 GPT-705A : AC 200VA AC Withstand Voltage Electrical Safety Tester
 HSB-001-1 : Scanner Box, 8ch HV, and 8ch GB
 HSB-001-2 : Scanner Box, 16ch HV

Standard Accessories

Instruction Manual x 1
 Programming Manual x 1
 Power Cord x 1
 GHT-105A x 1 : Tip High Voltage Probe
 GTL-115 x 1 : Ground Bound Test Lead (for GPI-745A only)

Optional Accessories

GHT-107A : Clip High Voltage Probe
 RGA-402 : Rack-mount

ISO-9001 & ISO-14001 CERTIFIED MANUFACTURER



GOOD WILL INSTRUMENT CO., LTD.
 No. 95-11, Pao-Chung Road, Hsin-Tien City,
 Taipei Hsien, Taiwan, R.O.C.
 TEL: 886-2-29179188 FAX: 886-2-29179189
 http://www.goodwill.com.tw
 E-mail: marketing@goodwill.com.tw

U.S.A.
INSTEK CORP.
 1205 John Reed Court
 City of Industry, CA 91745, U.S.A.
 TEL: 1-626-3366537
 FAX: 1-626-3691748
 http://www.instek.com

MALAYSIA
GOOD WILL Southeast Asia Sdn. Bhd.
 No. 5-3-11, Hunza Complex,
 Jalan Gangsa, Greenlane Heights,
 11600 Penang, Malaysia
 TEL: 60-4-6591988
 FAX: 60-4-6591989

CHINA
GOOD WILL Instrument(Suzhou)Co.,Ltd.
 NO.69, Lushan Road, Suzhou New District,
 Jiangsu, China
 TEL: 86-512-66617177
 FAX: 86-512-66617277

PT-700SGD0

GPI/GPT-700A Series

The Fully Automatic 4-in-1 Electrical Safety Tester



- Thoughtful Safety Design
- Reliable Test Result
- User-friendly Design
- Fully Automatic Interface



GPT/GPI-700A series are the fully automatic, at 200VA test capacity electrical safety testers, which might combine AC/DC Hi-pot, Insulation Resistance and high current ground bond (up to 42A) test. The GPT/GPI-700A series comply with the requirement of the electrical equipment and appliance testing standards such as UL, CSA and other international standards. The design of thoughtful safety, reliable test result, user-friendly and fully automatic interface make the GPT/GPI-700A series become the advanced safety tester, that can perform up to four essential electrical safety tests and deliver fast and reliable test result from a single test connection.

Features

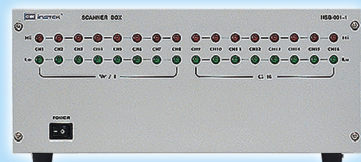
- 200VA AC Test Capacity
- AC/DC Withstanding Voltage Test & Insulation Resistance Test
- 42A Ground Bond Test
- True RMS Cut-Off Current Read Back
- Arc Detection
- Zero Crossing Turn-On Operation Switch
- Linear Amplifier with Feedback Control to Provide High Regulated Voltage Output
- Controllable Ramp-Up Time
- Output Voltage and Current Limit Could be set Without HV Output
- Output Voltage Adjustable During Test Period
- Remote Control for START, RESET, and Test Result Output
- Automatic FAIL Indicator of Alarm Lamp and Buzzer
- RS-232C/Scan Interface (Standard)
- Rear Panel Output (GPI-745A : Standard, Others : Option)
- GPIB Interface (Option)
- Scanner Box for Automatic Test (Option)

16 Channels Scanner Box (Opt.)

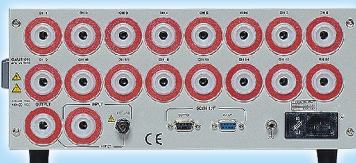
With the option of 16 Channels Scanner Box, it is very convenient to complete safety test of up to 15 test points by pressing one button. Each Channel of this Scanner Box can be set as output or return and used for safety test of AC/DC Hi-Pot, IR or GB.



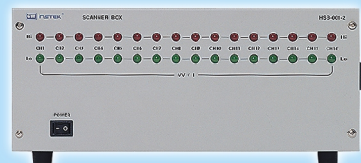
HSB-001-1 Rear Panel
(8ch HV + 8CH GB)



HSB-001-1 Front Panel



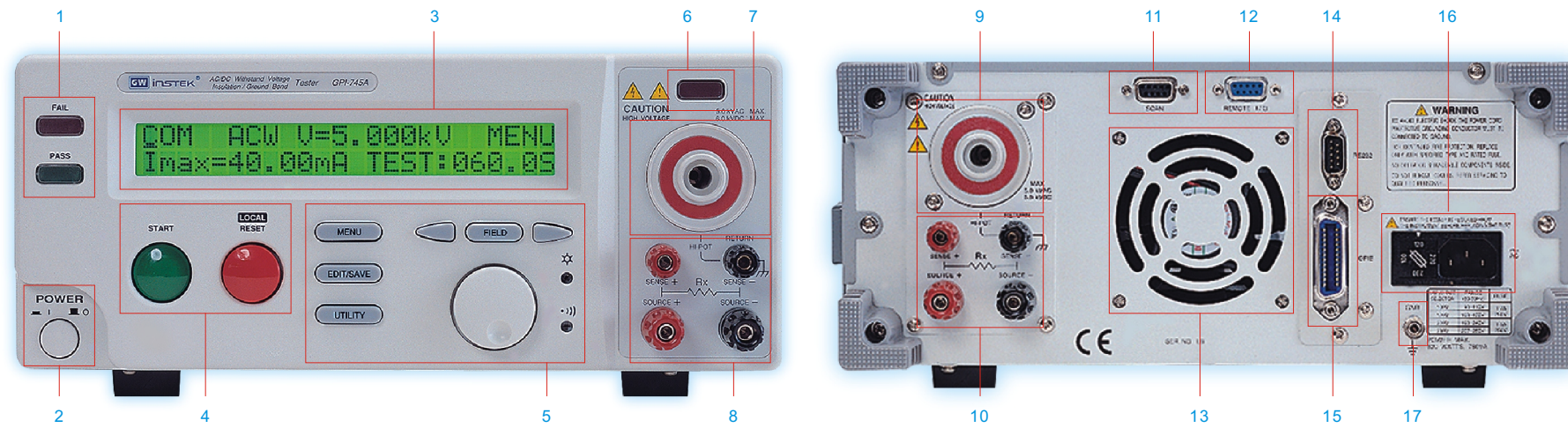
HSB-001-2 Rear Panel
(16ch HV)



HSB-001-2 Front Panel

AC/DC/IR/GB Electrical Safety Tester

GPT/GPI-700A Series



GPI-745A Front Panel

GPI-745A Rear Panel

1. Pass/Fail Indicator
2. Power Switch
3. 24x2 Large character LCD Display
4. Start, Reset key
5. Operation Key/Wheel
6. Flash Indicators
7. H.V. Output
8. Current Output
9. H.V. Output
10. Current Output
11. Scanner Interface
12. Remote Interface
13. Fan
14. RS-232C Interface
15. GPIB Interface
16. Power Plug / Fuse
17. Ground Terminal

Thoughtful Safety Design

No Load Set Up of Trip Current and Output Voltage

With the GPT/GPI-700A series, it is a safe way to set the trip current and output voltage without having the high voltage activated, or the use of a load resistor

Safety Fault Interrupt

With the built-in Safety Fault Intercept technology, GPT/GPI-700A series will be able to set the high limit current as watchdog to detect whether the current is abnormal and shut-off the output power when trip current is over high limitation of current.

Flashing High voltage indicator

A flashing red LED will give warning when the high voltage is present at output

Reliable Test Result Design

Highly Regulated Voltage Output

The highly regulated linear power amplifier of GPT/GPI-700A series provides a very stable HV output and avoids the loading effect of DUT.

Zero Crossing Turn-On

The zero crossing turn-on is to assure that the output voltage will start from the zero crossing of sine wave. With this Zero-Turn-On function, it will prevent the unexpected occurrence of spike or Arc, which might cause wrong trigger of cut-off current.

True RMS Current Read-Back

The GPT/GPI-700A series is equipped with a true RMS circuit to make sure that the read-back of the test is a real value instead of average value, especially under the capacitance and inductance load. This function will prevent wrong measurement result of cut-off current measurement.

Selectable ARC Detection

ARC is the short duration (>10us) of current spike occurred due to the dramatic change of voltage or current. GPT/GPI-700A series offer selectable ARC detection from 1 level to 40 level to identify the potential problem of product quality such as screw loosen, bad material insulation and so on.

Controllable Ramp Up Time

It is quite possible to create the spike under the safety test of DC Hi-pot and IR. GPT/GPI-700A series can control the ramp up time to prevent the occurrence of spike, which might cause the wrong measurement result.

User-friendly Design

Memories of 10 Groups, and Each Group contains 16 Steps of test set-up

Under one group, GPT/GPI-700A series provide 16 steps of test set-up, which can be set to test one kind of electrical safety test, and complete 16 steps of test under one group by pressing one button. GPT/GPI-700A series offers 10 groups of memories to facilitate your test up to 10 different products in your production line.

Hi-Low Limit Setting and Pass/Fail Flash Alarm

Within the test set-up of each step, it is convenient to set the Hi-Low limit setting to facilitate each electrical safety test. In the meantime, the status of test result will be view easily through the PASS/Fail Alarm.

15 CHs Test Result Indication (Scanner Opt.)

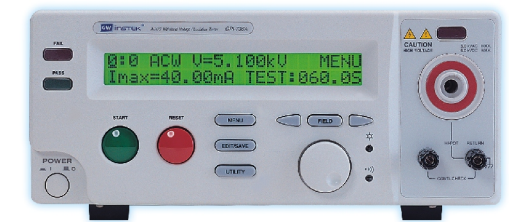
If you connect GPT/GPI-700A series to Scanner Box, you can see the status of test result for 16 Channels simultaneously on 24 x 2 large-character LCD.

Fully Automatic Interface

RS-232C, Scanner interface (standard), GPIB interface (option), Rear Panel Output (GPI-745A : standard, others : option)

SELECTION GUIDE

MODEL	FUNCTION	AC	DC	IR	GB
GPT-705A		✓			
GPT-715A		✓	✓		
GPI-725A		✓		✓	
GPI-735A		✓	✓	✓	
GPI-745A		✓	✓	✓	✓



GPT-705A/715A & GPI-725A/735A Front Panel

Applications

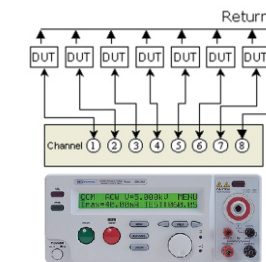


Figure-1

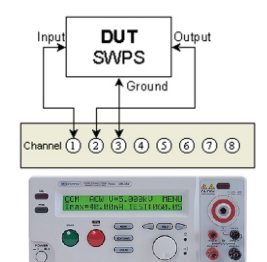


Figure-2

Multi-DUT Test

•Productivity always is a key issue for production. However, the scanner box holds this kind of the feature, which allows user to verify a number of DUT by same test or different test to improve the efficiency by one connection. (See Figure-1)

AC/DC Hi-Pot Test

• This is the most common electrical safety test performed today. A high voltage either AC or DC is applied to determine if a break down will occur in the insulation of the DUT

Insulation Resistance Test

• Insulation is to test the characteristic of an insulating material that being subject to voltage. Applied voltage is normally at DC 50V/100V/500V/1000V and the resistance is at least 2MΩ.

Multi-Points Test

• When the DUT need to test different points, then scanner is the key element for it. For example, if the Switching Power Supply need to do Hi-pot test between input/output, and input/ground, then scanner will allow you to define the channel 1, 2, 3 as HV output or return to complete the test. (See Figure-2)

Ground Bond Test

• This is to make sure ground system can adequately handle the fault current if the product's insulation should fail. Applied current is up to 40A, and detected level is under 0.1Ω.

Continuity Check

• Ensure the connection between the Ground in line cord and the case. Applied current is 100mA and detected level is 1Ω only.