GPT-9503/9513
– Multi-channel Hipot Tester
(8 CH, AC/DC/IR:3-in-1)

Pre-Announcement

Version. 0

Date. 2020.09.

Simply Reliable

固緯電子實業股份有限公司

GPT-95x3 Outlook – Front

STOP / START

4.3" TFT

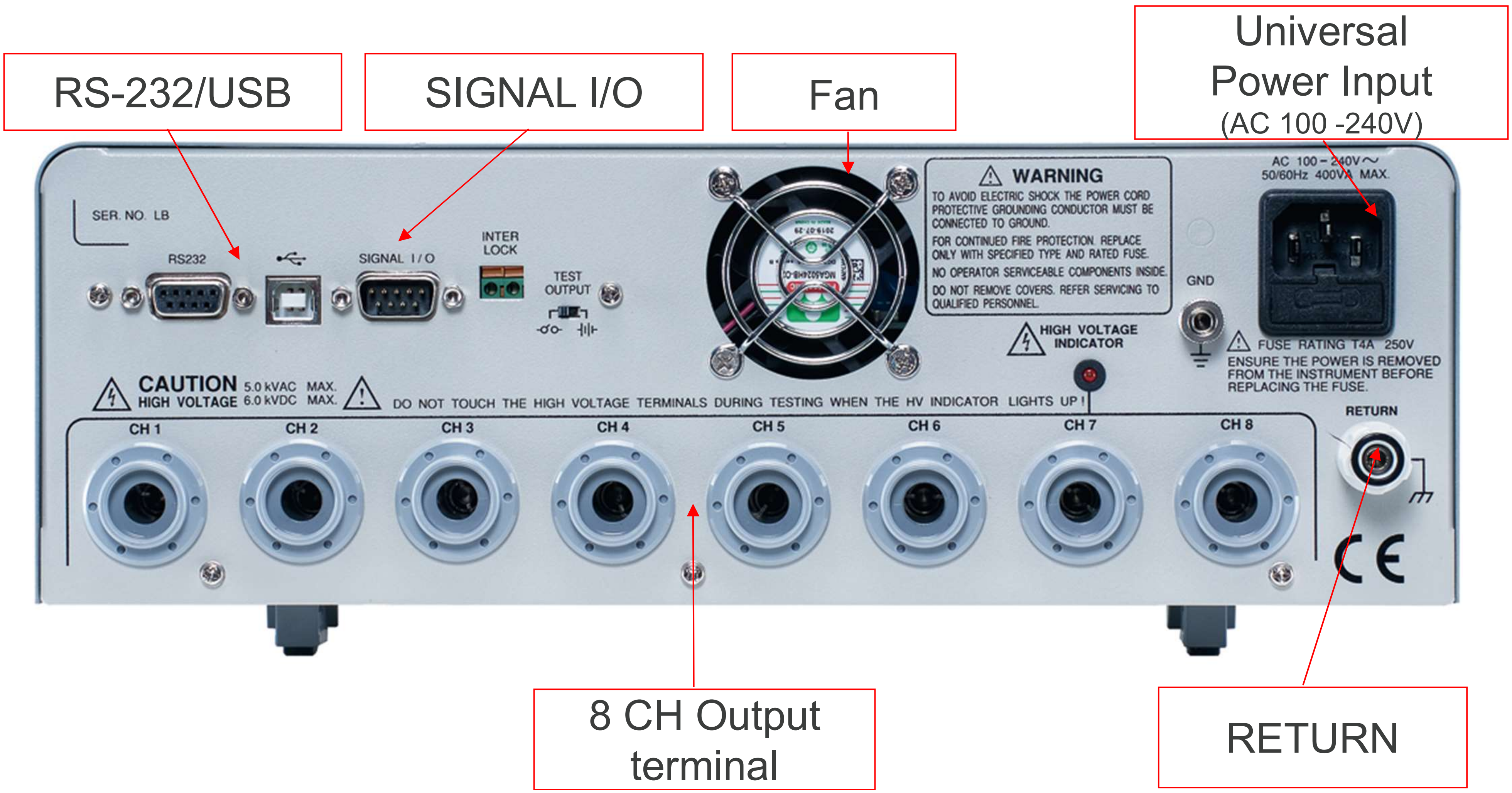
Wheel, Navigator

F1~F5 Quick key

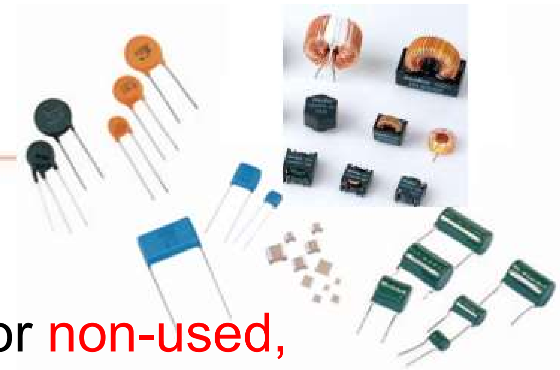
USB
HOST

HV Output
terminal

GPT-95x3 Outlook – Rear



GPT-95x3 Models



Basic:

- GPT-9503: Ch1~8 is selectable for either HV output or non-used, share the same RETURN terminal

Applications in general electronic components, such as capacitors, inductors, wires ...

Conduct component hi-pot test at both ends to provide a basic test requirements for single time / mass-quantity.

Advanced:

- GPT-9513: Ch1~8 is selectable for HV output, L- RETURN or non-used

Providing product a multi-step safety testing requirement such as modules, transformers, and motors which reduce the testing risk of customer operation line change.

Features

- ***8CH for ACW/DCW/IR***

  150VA output capacity with 8 channels for ACW/DCW/IR (3-in-1) tests. A single unit performs multi-points tests or Auto Scan tests without conducting with external scanner box.

- ***Graphic TFT LCD***

  4.3” color TFT LCD, resolution 480*272.

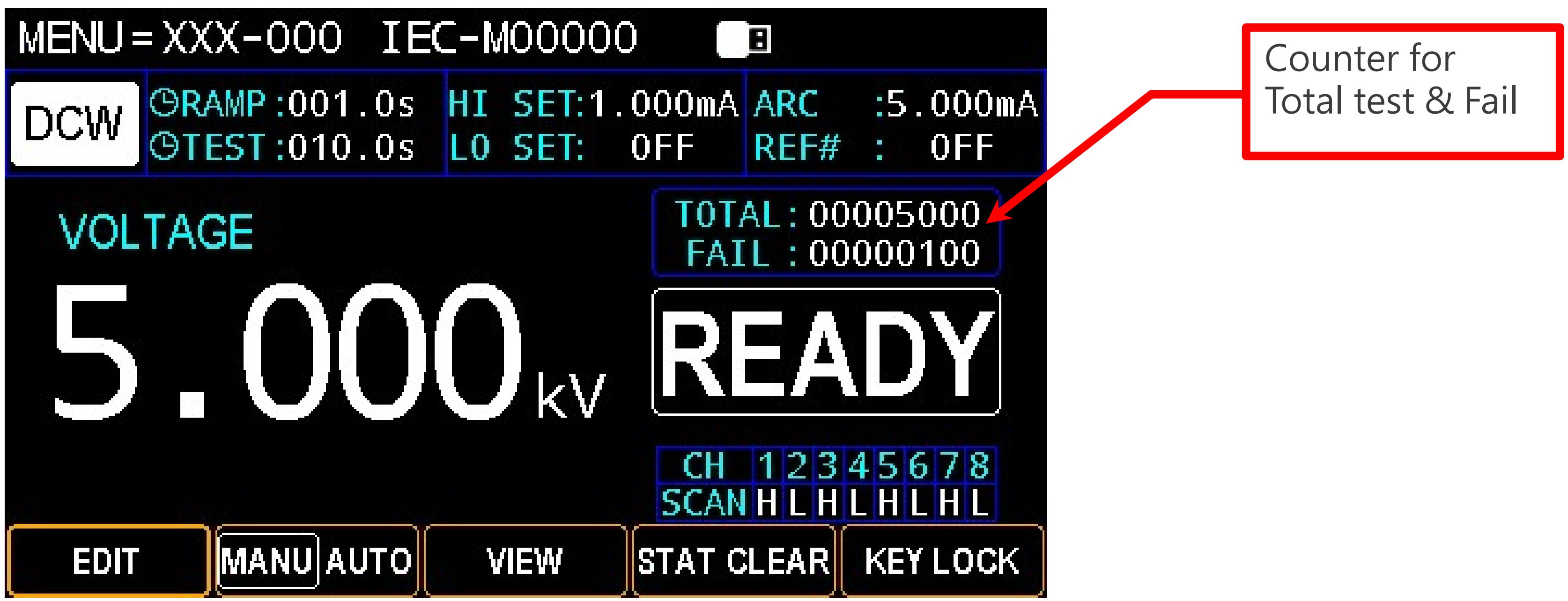
  Large graphic screen provides user-friendly operation interface during operating or setting test parameters and provides more complete measurement information either.

- ***Testing condition copy function***

  The front panel USB host can access saved testing condition of GPT-9500, and then copy to other GPT-9500 which can quick replication and expansion of production line equipment.

Statistics

On screen display of the numbers of total tests (TOTAL) and failures (FAIL) without extra counter



Flexible Channel output for setting

1. Different output voltage for different channel can be set
2. Auto scan mode for sequential tests of HV output to Return channel pairs

Safety

Channels are located at the rear panel of the product to prevent the operator from the HV electric shock. The rear panel outputs can also maintain the neatness of the fixture wiring. Disconnection detection function is available to prevent the wiring disconnection or losing

Advanced

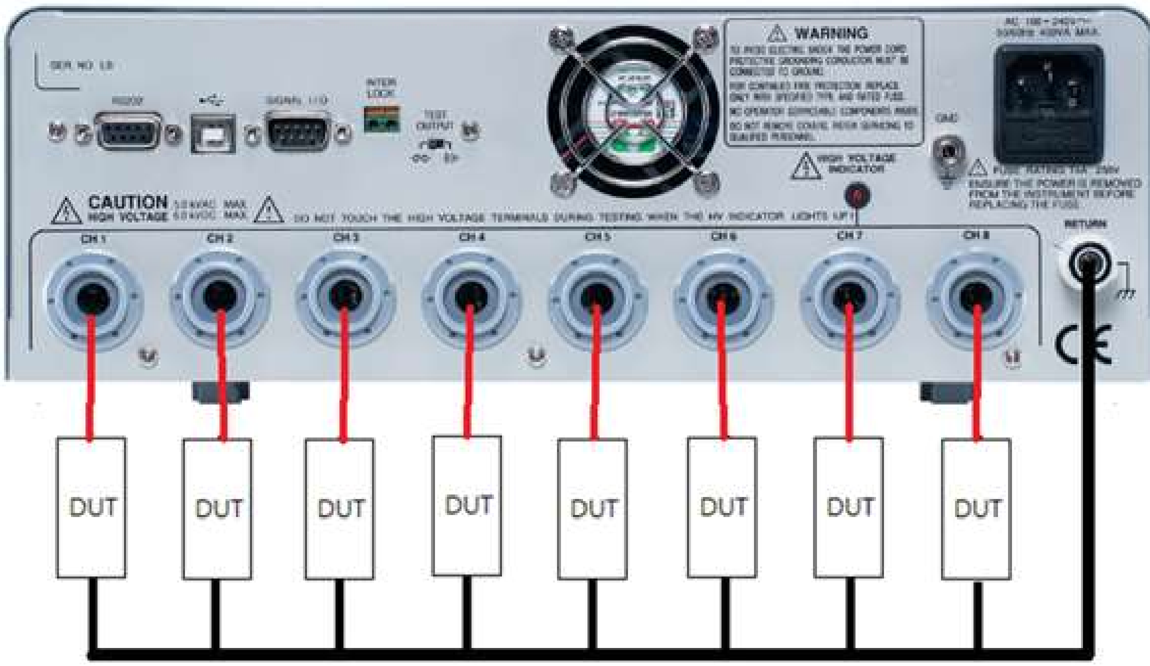
Same as GPT-10000 series hardware design, high capacitive load testing capability, ARC detection and continuity check function…

Application (Model: GPT-9503)

CH 1~8 : For same type of component tests, parallel HV connection of multiple channels can share a RETURN terminal to do one-time test for saving testing time

8CH output at same time

(Component test)



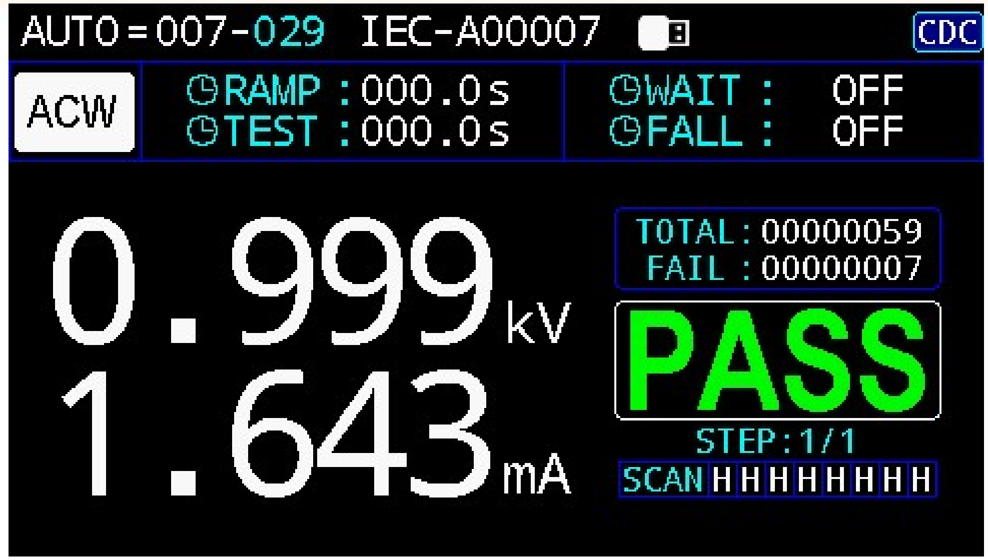
Assume component spec. leakage is 3mA and the normal component has avg. leakage of 1mA
8CH test same time, total leak 1mA * 8 = 8mA
Hi Set setup is 8mA * K (K=tolerance factor)

*** If the test fails (> Hi SET), the product will scan DUT one by one to verify the defective component.**

Application (Model: GPT-9503)

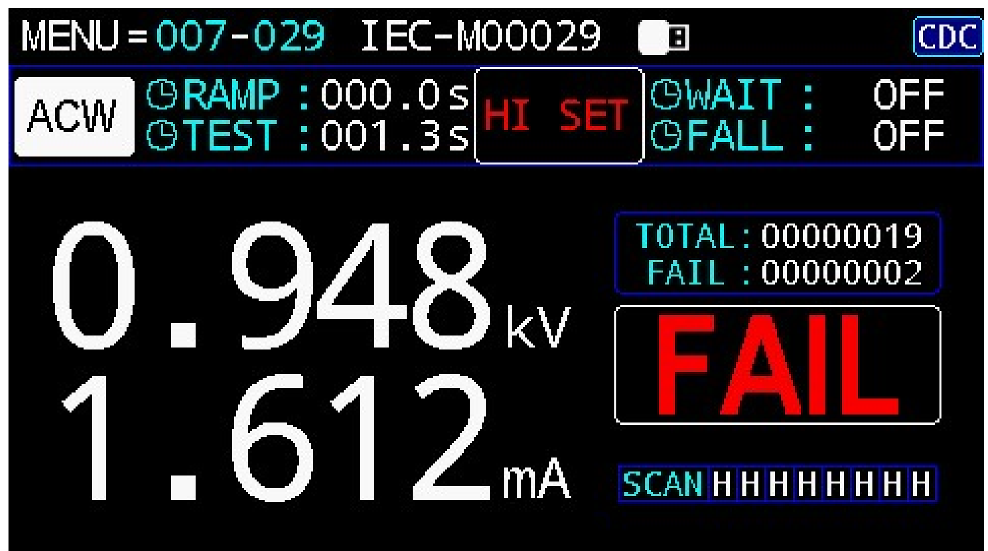
GPT Result for 8CH output at same time

PASS



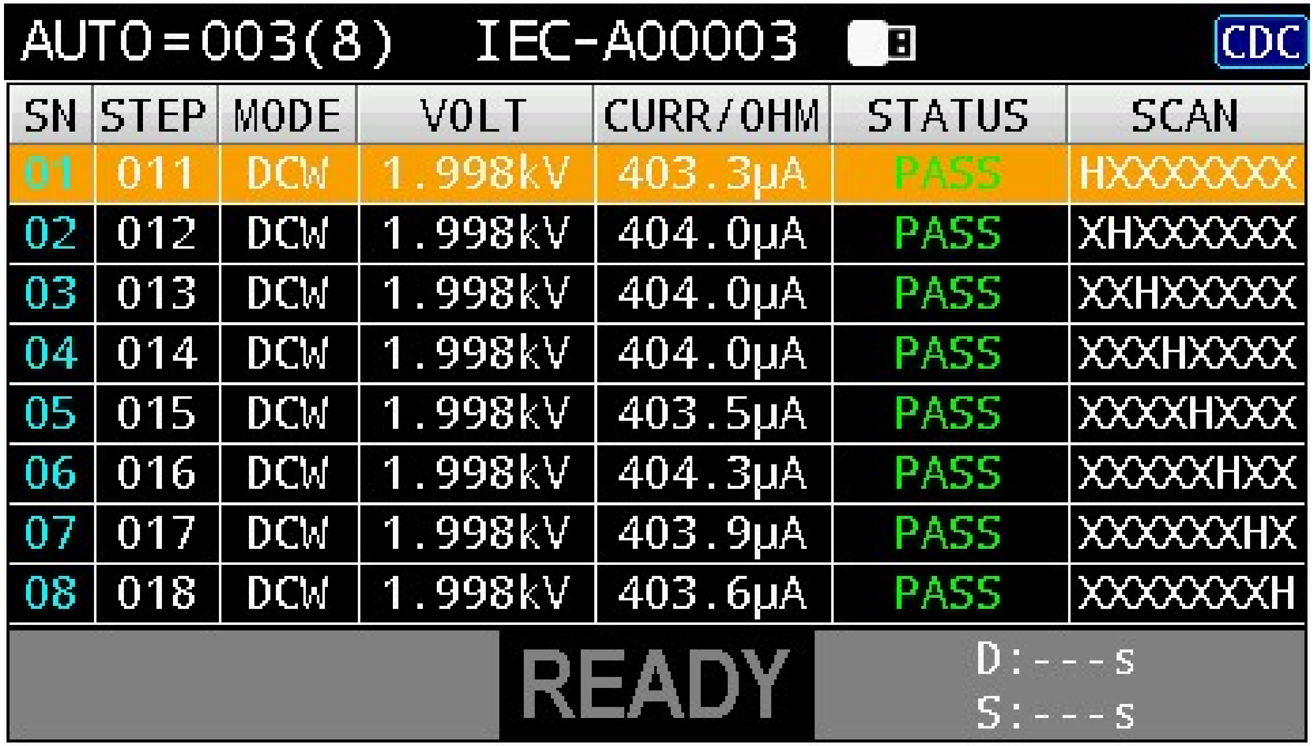
FAIL

Need scan one by one again



Application (Model: GPT-9503)

GPT Result for 8CH tests in sequence



AUTO=003(8) IEC-A00003 CDC

SN	STEP	MODE	VOLT	CURR/OHM	STATUS	SCAN
01	011	DCW	1.998kV	403.3μA	PASS	HXXXXXXX
02	012	DCW	1.998kV	404.0μA	PASS	XHXXXXXX
03	013	DCW	1.998kV	404.0μA	PASS	XXHXXXXX
04	014	DCW	1.998kV	404.0μA	PASS	XXXHXXXX
05	015	DCW	1.998kV	403.5μA	PASS	XXXXHXXX
06	016	DCW	1.998kV	404.3μA	PASS	XXXXXHXX
07	017	DCW	1.998kV	403.9μA	PASS	XXXXXXHX
08	018	DCW	1.998kV	403.6μA	PASS	XXXXXXXH

READY

D:---s

S:---s

Application (Model: GPT-9513)

(Power supply for Communication)

STEP	VOLTAGE	HI limit	Lo limit	RAMP	TEST	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
1	AC 0.7kV	10mA	OFF	5s	5s	H	x	L	x	x	x	x	x
2	AC 2.0kV	10mA	OFF	5s	5s	x	H	L	x	x	x	x	x
3	AC 4.0kV	10mA	OFF	5s	5s	L	H	x	x	x	x	x	x

According to customer testing requirement, set 3 MANU test:

m-1: CH1 to CH3, ACW 700V

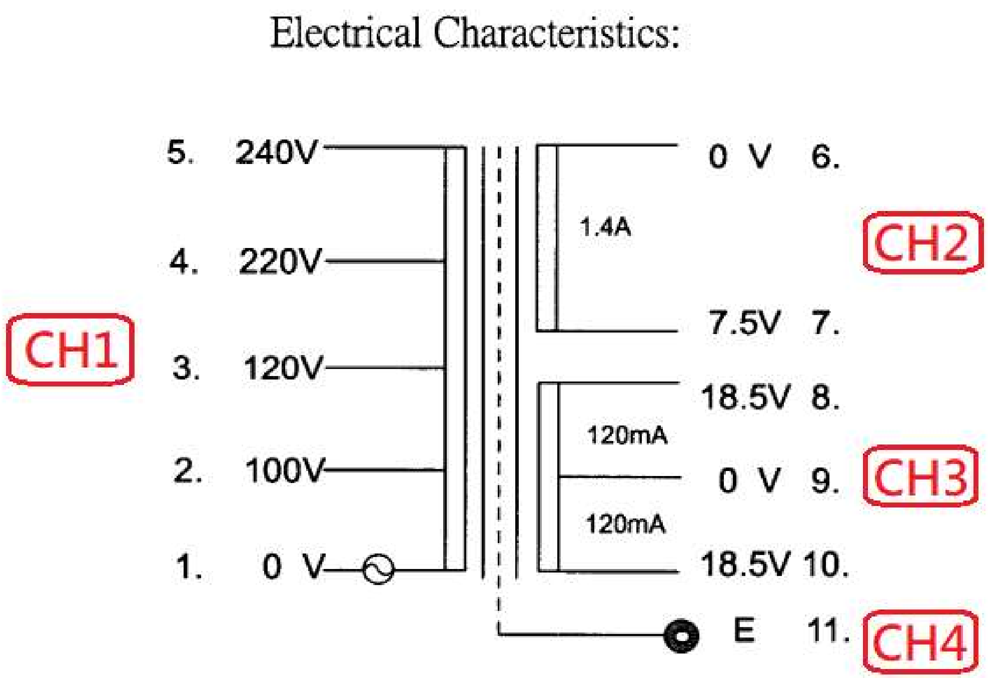
m-2: CH2 to CH3 ACW 2000V

m-3: CH2 to CH1 ACW 4000V

-Into AUTO mode and then create an AUTO contents 3 MANU

Application (Model: GPT-9513)

Transformer Testing



Wiring planning
CH 1: primary winding
CH 2: secondary winding _1
CH 3: secondary winding _2
CH 4: transformer Case

Application (Model: GPT-9513)

Testing step:

				Primary	Sec-1	Sec-2	Case
STEP	VOLTAGE	Limit	TEST	CH1	CH2	CH3	CH4
1	AC 1kV	1mA	1s	H	L	x	x
2	AC 1kV	1mA	1s	H	x	L	x
3	AC 500V	1mA	1s	H	x	x	L
4	AC 500V	1mA	1s	x	H	x	L
5	AC 500V	1mA	1s	x	x	H	L
6	IR 500V	50Mohm	1s	H	x	x	L
7	IR 500V	50Mohm	1s	x	H	x	L
8	IR 500V	50Mohm	1s	x	x	H	L
9	IR 500V	50Mohm	1s	x	H	L	x

Test Steps:	
1: Primary to secondary winding _1 HV Test	6: Primary winding-CASE IR Test
2: Primary to secondary winding _2 HV Test	7: Secondary winding_1-CASE IR Test
3: Primary winding-CASE HV Test	8: Secondary winding_2-CASE IR Test
4: Secondary winding_1-CASE HV Test	9: Secondary winding_1 to secondary winding_1 IR Test
5: Secondary winding_2-CASE HV Test	

Application (Model: GPT-9513)

GPT Setup

AUTO=004(9) IEC-A00004 CDC

SN	STEP	MODE	VOLT	HI SET	LO SET	SCAN
01	021	ACW	1.000kV	1.000mA	OFF	HLXXXXXX
02	022	ACW	1.000kV	1.000mA	OFF	HXLXXXXX
03	023	ACW	0.500kV	1.000mA	OFF	HXXLXXXX
04	024	ACW	0.500kV	1.000mA	OFF	XHXLXXXX
05	025	ACW	0.500kV	1.000mA	OFF	XXHLXXXX
06	026	IR	0.500kV	OFF	050.0MΩ	HXXLXXXX
07	027	IR	0.500kV	OFF	050.0MΩ	XHXLXXXX
08	028	IR	0.500kV	OFF	050.0MΩ	XXHLXXXX

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GPT Result

AUTO=004(9) IEC-A00004 CDC

SN	STEP	MODE	VOLT	CURR/OHM	STATUS	SCAN
01	021	ACW	1.000kV	0.066mA	PASS	HLXXXXXX
02	022	ACW	1.000kV	0.063mA	PASS	HXLXXXXX
03	023	ACW	0.500kV	0.043mA	PASS	HXXLXXXX
04	024	ACW	0.500kV	0.035mA	PASS	XHXLXXXX
05	025	ACW	0.500kV	0.033mA	PASS	XXHLXXXX
06	026	IR	0.500kV	4.082GΩ	PASS	HXXLXXXX
07	027	IR	0.500kV	19.19GΩ	PASS	XHXLXXXX
08	028	IR	0.500kV	26.25GΩ	PASS	XXHLXXXX

READY

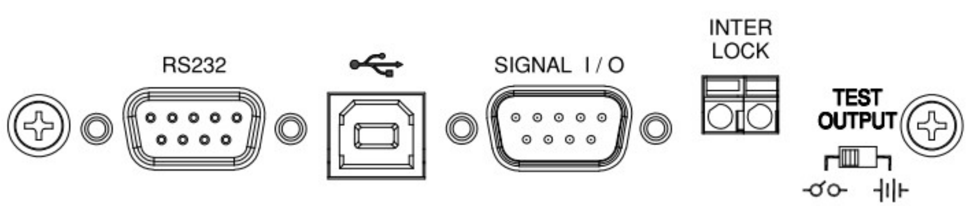
Interfaces

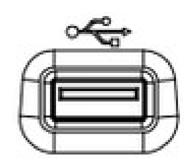
Control Interface:

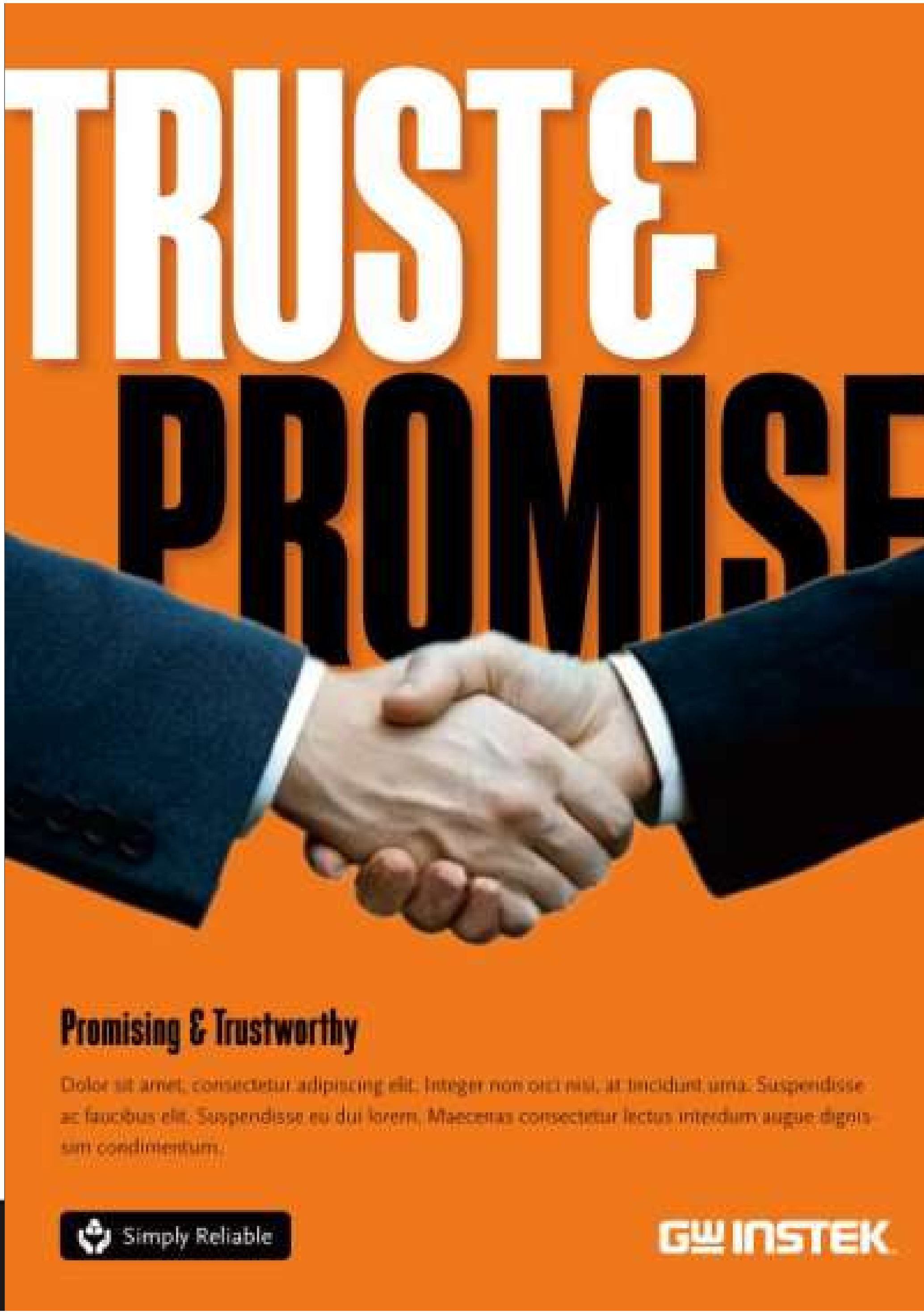
- USBCDC/USBTMC,
- RS-232
- SIGNAL I/O
- Comply with IEEE488.2

USB Storage:

- Configuration Export/ Import,
- Screen shoot (HARDCOPY)







Thank You For Your Continuous Support