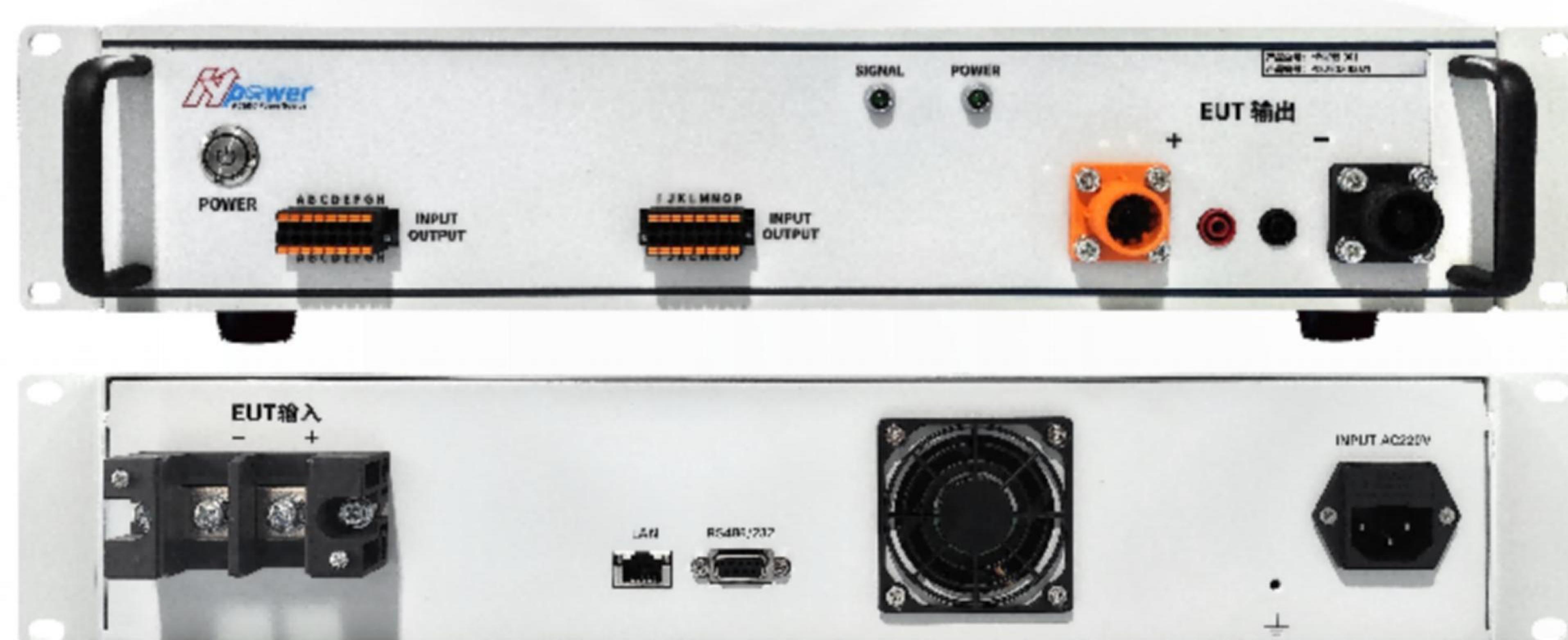


HY-PISSU 80-50、HY-PISSU 80-100



HY-PISSU Series Pin Interrupt Simulator

Hangyu Power System (Shanghai) Co., Ltd.



Official wechat: hypower-cn

Mobile/Whatsapp: +8613801800699
Fax: +86-21-67285228-8009
Email: sales@hangyupower.com
neo@hangyupower.com
Address: Block B, Building 11, No. 1698
Minyi Road, Songjiang District, Shanghai
Web: www.hangyupower.com

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HY-PISSU series product information, Version
V4.01
All technical data and instructions are based on
the actual product
If there is any change, Hangyu Power has the
final interpretation right

Product Brief

The HY-PISSU wire harness interruption simulator is a product developed and produced by Hangyu Power Supply to meet the requirements of wire harness interruption testing for power lines and signal lines. It simulates the interruption, plugging and unplugging of power lines and signal lines. It is a testing device specifically designed to meet the standards of vehicle manufacturers. It can meet the test requirements for E10, E13, E14 in LV 124 and for E48-09 of the LV 148 in LV 148. At the same time, it can also meet the test requirement of GM 3172 that the switching time is less than 200ns.



Regarding the testing requirements in ISO16750-2:

4.6.1.2 Micro interruption in supply voltage (This test requires the optional HY-PISSU pin interrupt simulator to be used in conjunction with the HY-BPSU series automotive electronic testing high-speed power supply.)

Test purpose:

This test simulates the effect of micro interruption events in supply voltage caused by short circuits or open circuits of the supply lines, for instance by contact faults, defect relays, relay-contact bounce or by switching from the main power supply to a redundant power supply. This test is relevant for both 12 V and 24 V systems.

Test method:

■ To verify the switch reaction time, two reference measurements shall be performed and documented with the test setup given in Figure 9. In the first reference measurement, the DUT is replaced with a $1\text{k}\Omega$ resistor, and in the second measurement, the DUT is replaced with a 10Ω resistor. The reference measurements enable the reaction time of the switch to be verified as acceptable before the full test is performed. The resistors used shall, therefore, have low inductance. Acceptable reaction time for the switch shall be $\leq 10\mu\text{s}$.

■ Apply the test simultaneously to all power supply inputs (connections) of the DUT. Both test case 1 (see Figure 10 and Table 9 in 4.6.1.2.2.2) and test case 2 (see Figure 11 and Table 10 in 4.6.1.2.2.3) shall be performed.

■ Test condition — open switch resistance: $\geq 10\text{M}\Omega$.

■ The operating mode of the DUT shall be 3.4, as defined in ISO 16750-1.

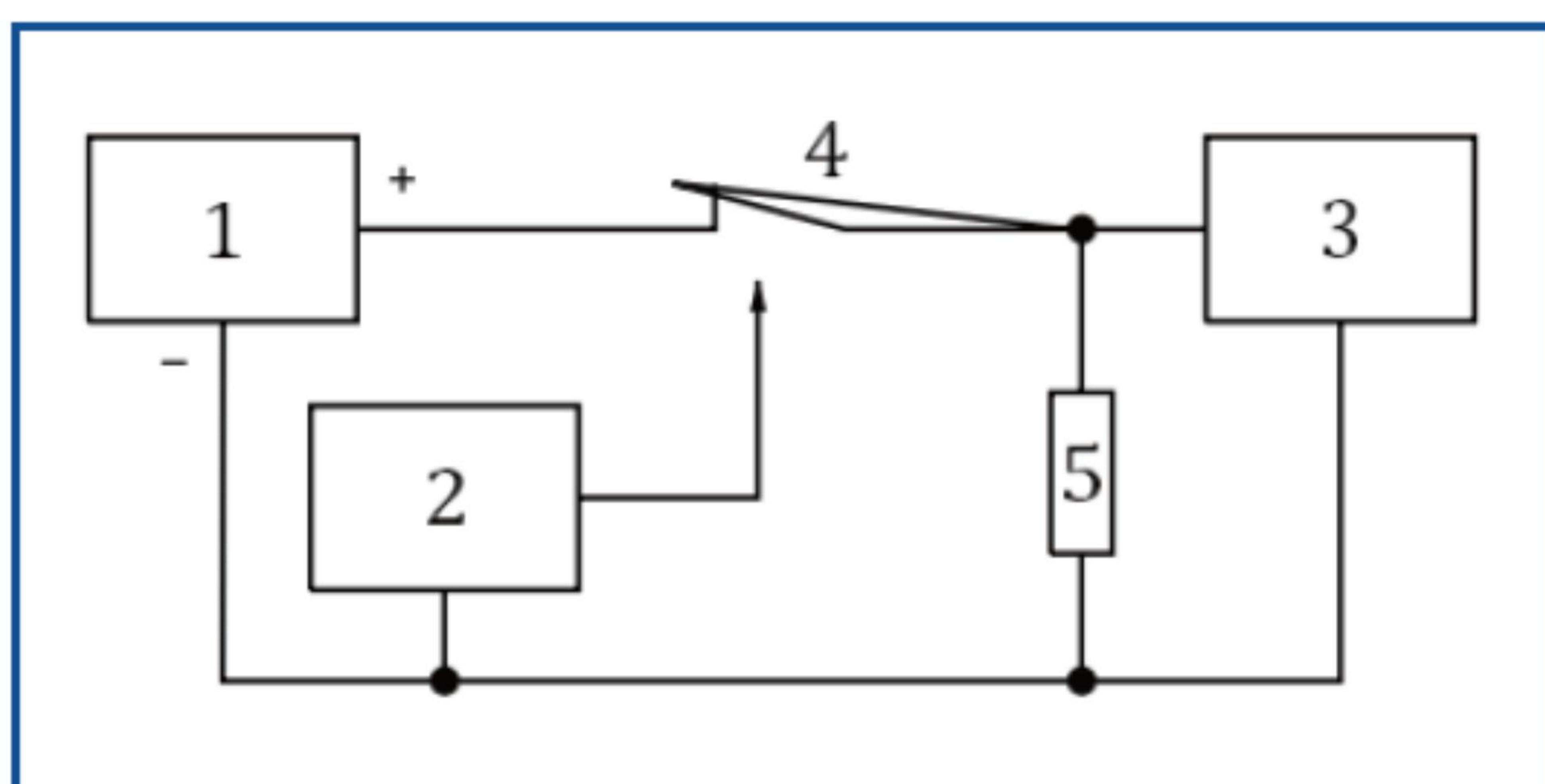
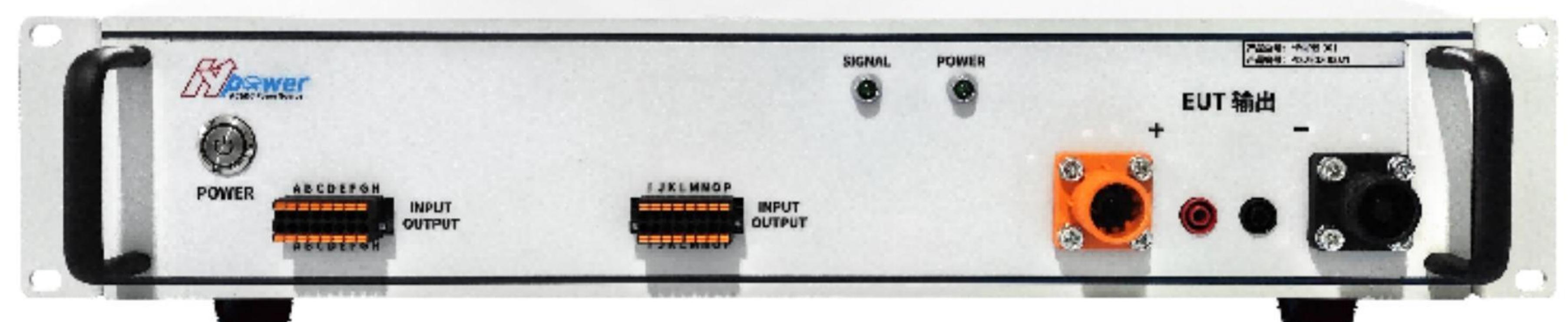


Figure 9 — Test set up for micro interruption with 12/24 V nominal voltage (UN)

1: Power supply
 2: Programmable control circuit to open the switch connection
 3: DUT
 4: Normally closed switch
 5: Optional low resistance parallel load

Application Field

- Electrical performance test of on-board electronics
- Simultaneously meet the test requirements of 12V/24V/48V systems, etc



Meet the Standards

LV 124 (2013)	PSA B21 7110 Renault 36.00.808/--L
LV 148	Great Wall GWT A D01-01:2020-09
MBN 10615	Great Wall BMW: GS 95003-2
MBN LV 124-1	Tianji Auto Q/DK TE 4601-2019
Nissan 28401	BMW GS 95003-2
NDS 02 OEM LV 124	GS 95024-2-1
LV 124 (2013-02)	GS 95026
Volkswagen VW 80000	QV 65013 (2010-06)
GMW 3172	Chrysler CS-11979
DC-10842 Fiat 9.90110	Iveco 16-2103 Rev.15 (2010)
PF-9326Cummins14269(982022-026)Daimler Chrysler DC-10615	
Hyundai/Kia ES 95400-10, Rev. D Hyundai ES 39110-00	

Technical Features

- It can be controlled by the upper computer software
- It can be used in conjunction with a (0-80V) DC power supply to achieve the testing purpose
- Interrupt waveform time can be freely edited
- High integration dual-module combination
- The signal line module can adapt to high-speed communication
- The minimum drop time can be set to 1μs

Technical Parameters

Power line switch parameters	
Power switch	2-way switch: -DC + power line; -DC - Ground wire
EUT voltage	$\pm 80V$
Maximum current of EUT	50A/100A optional (HY-PISSU 80-50, HY-PISSU 80-100)
S2 Discharge resistors	open circuit, 0Ω , 0.1Ω , 1Ω , 100Ω
Current direction	Unidirectional
Switching time	<200ns
Rising edge/Falling edge	Achieve a rising/falling edge of 200ns in the open-circuit state
Interruption time	$1\mu s \sim 60s$
Signal line switch parameters	
Number of channels	16 independent channels can be switched among each other
EUT power supply	$\pm 50V$, DC/5A
Switching method	Automatic switching
Test mode	Supports single-channel and multi-channel simultaneous tests
Interruption time	$1\mu s \sim 60s$
Rising/falling edge	The 100Ω load rising/falling edge simultaneously meets <200ns
Safety	Short-circuit protection function
General parameters	
Working power supply	220V/1A
Upper computer interface	RS-485/232, LAN
Appearance Size	19-inch rack-mounted 2U model 430(W)*500(D)*88(H)mm
Product weight	about 5kg
Temperature performance	Operating temperature: 0-50°C; Storage temperature: -20°C to 50°C
Humidity performance	Working humidity: 20% - 90%RH, no dew formation; Storage humidity: 10% - 95%RH, no dew formation
Product image	