AC&DC Power Source

HY-7637-P5ASU/P5BSU
Load Dump

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HY-7637 Series Product Information, Version 4.03

Product Brief

The HY-7637-P5ASU/P5BSU Load Dump is specifically designed for automotive electronic immunity tests. This test simulates the transient phenomenon of load throw-off, that is, the transient generated when the battery is disconnected (in a low power state) while the alternator is generating charging current and there are still other loads on the alternator circuit. The product fully complies with the requirements of the P5 pulse in the latest standards of ISO7637-2, ISO16750-2 and GB/T 21437.2.

Note: The device does not have a built-in DC power supply for EUT use inside. It only has a coupling and decoupling network, so the DUT power supply must be connected from the outside. It is stipulated that the DC power supply voltage required for the DUT should be ⩽30V and the current ⩽30A.

Product Features /Compliance Standards

- 10.1-inch color touch screen operation
- Utilizes imported program-controlled high-voltage power supply with stable performance
- Capable of generating amplitude-limited load dump pulses
- Built-in adjustable source impedance
- Meet the testing requirements of more customers
- Built-in RJ45 and RS232 interfaces enable remote printing of reports
- The pulse duration can reach up to 1200ms(with an internal resistance of 2Ω)
- Built-in 60V/30A coupling

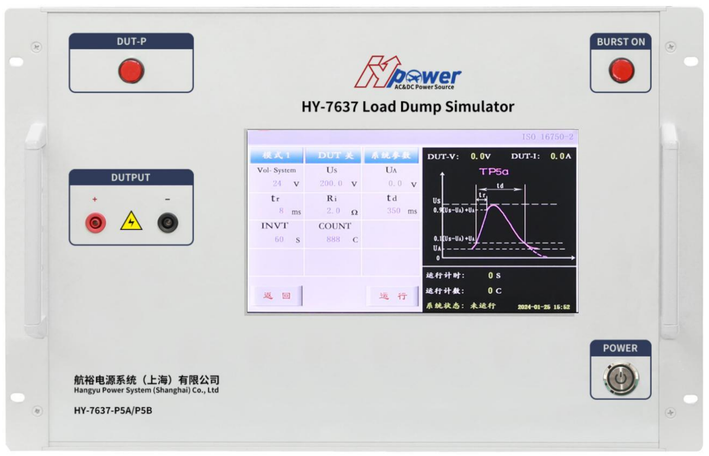
- ISO 16750-2
- ISO 7637
- SAE J1113-11
- GB/T21437.2
- GMW3100
- 36-00-808/-K
- MES-PW-67600
- 28401NDS02
- ES-XWT-1A278-AC

Technical Parameters

Pulse5a is suitable for 12V, 24V and 42V systems	
Output Voltage (Us)	12V system: 40V~110V
	24V/42V system: 100V~210V
Voltage Step	1V
Voltage Accuracy	±5%
Output Impedance (Ri)	12V system: 0.5~10Ω
	24V/42V system: 0.9~10Ω
Pulse Width (Td)	12V system: 40~1200ms
	24V/42V system: 100~1200ms
Rise Time (Tr)	5~10ms adjustable
Time Interval	12V system: 30~9999s (40V~110V)
	24V/42V system: 60~9999s (180V~210V)
Number of Tests	1~9999C
Pulse5b is suitable for 12V, 24V and 42V systems	
Output Voltage (Us)	12V system: 40V~110V
	24V/42V system: 100V~210V
Clamping Voltage (Us)	20~Us
Voltage Step	1V
Output Impedance (Ri)	12V system: 0.5~10Ω
	24V/42V system: 0.9~10Ω
Pulse Width (Td)	12V system: 40~1200ms
	24V/42V system: 100~1200ms
Rise Time (Tr)	5~10ms adjustable
Time Interval	12V system: 30~9999s (40V~110V)
	24V/42V system: 60~9999s (110V~210V)
Number of Tests	1~9999C

General parameters	
Triggering mode	Automatic trigger
Overcurrent and short-circuit protection	Support
Overheat protection	Support
Secondary development	Supports RS232 and RJ45 control, and optional software remote control is available
Coupling and decoupling network	Built-in
DUT voltage	DC 0~60V
DUT current	30A
Operating environment	Temperature: 10°C to 40°C, Humidity: 30% to 70%
Instrument power	200W
Equipment power supply	AC220V±10%，50/60Hz
Appearance Size	7U 449(W)*550(D)*310(H)mm
Instrument weight	≈25kg

Front Panel & Rear Pane



HY-7637-P5ASU/P5BSU front panel

HY-7637-P5ASU/P5BSU rear panel

1. DUT-P indicator light: DUT power indicator light. It lights up when DUT is turned on.
2. 10.1-inch touch screen: All parameter settings and functions are realized through this display.
3. BURST ON: High-voltage indicator light of the instrument. It lights up when the instrument is in operation.
4. POWER switch: Power switch, used to connect or disconnect the working power of the instrument.
5. OUTPUT (+) OUTPUT (-): TP5/TP5b DUT positive and negative polarity power output.

1. Fan: Instrument cooling fan
2. AC IN socket: Input socket for power supply of the instrument, AC 220V ±10% 50/60Hz
3. FUSE fuse: Main power supply fuse for the host
4. S.G grounding terminal: The instrument needs to be grounded during use
5. INPUT (+) INPUT (-): EUT power positive/negative input terminals, connect to the positive/negative output terminals of the external DC power supply
6. RJ4 communication port: For communication with the upper computer software (optional)
7. TEM temperature and humidity port: Temperature and humidity sensor port. Used for collecting data and displaying it on the screen
8. RS23 communication port: For communication with the upper computer software (optional)
9. Product nameplate: Product name, model, number, and contact phone number