



Automotive Power Failure Simulator

PFS XXA1 Series

- VW 80000
- LV 124
- GMW 3172

Features

- > 5.7-inch color TFT touch screen
- > Support short interruption tests
- > Switching time: ≤ 200 ns (required by GMW3172 Clause 9.2.18); ≤ 1 μ s (required by LV124, VW 80000)
- > Independent grounding loop switch:
 - DC+ power supply line switch,
 - DC- ground wire switch
- > Support electronic short-circuit protection
- > Rated voltage DC 80 V
- > Standard test program

Introduction

The PFS XXA1 Series Vehicle Power Fault Simulator complies with GMW3172 Clause 9.2.18, LV 124 and VW 80000. Equipped with solid-state semiconductor switches, it limits voltage rise/fall time ≤ 1 μ s for voltage dip and short interruption simulation. Adjustable output impedance faithfully reproduces supply faults: high impedance for open circuit, low impedance for short circuit, with compliant waveforms across all resistive loads.

Operation is manual or via Ethernet and AutoLab software. The DC switch rated up to 80 V, supports 48 V electrical system testing.

Application Areas



Technical Parameters

Input Voltage	0 ~ 80 V	
Switch	2 line switch: DC+ power cord, DC- grounding wire	
Rated Current	PFS 6050A1: 50 A PFS 6075A1: 75 A PFS 60100A1: 100 A	
Switching Time	≤ 200 ns (GM3172 9.2.18) ≤ 1 μ s (LV124, VW 80000)	
Output Impedance	High impedance / Low impedance	
Switch Impedance	Power cord: < 50 m Ω	
Built-in Switch	Short-circuit switch (DC+ & DC-) Impedance < 100 m Ω	
Dip Duration (t_d)	1 μ s ~ 1 h	
Repetition Time	1 μ s ~ 1 h	
Trigger Mode	Automatic and manual	

General Parameters

Display Screen	5.7-inch TFT touch screen
Working Power	AC 110/220 V, $\pm 10\%$, 50 Hz/60 Hz
Dimension	19-inch/ 4 U rack, 450 (W)*190 (H)*620 (D) mm
Weight	Approx. 30 kg
Ambient Temperature	15 °C ~ 35 °C
Relative Humidity	45% ~ 75%
Atmospheric Pressure	86 kPa ~ 106 kPa

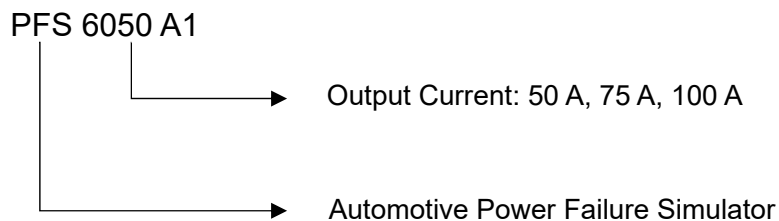
Standard Accessories

Main Unit (1 pc), User Manual, Test Cable, Fuse, Calibration Resistors PFS-R1 Ω , PFS-R10 Ω , PFS-R100 Ω , PFS-R1000 Ω

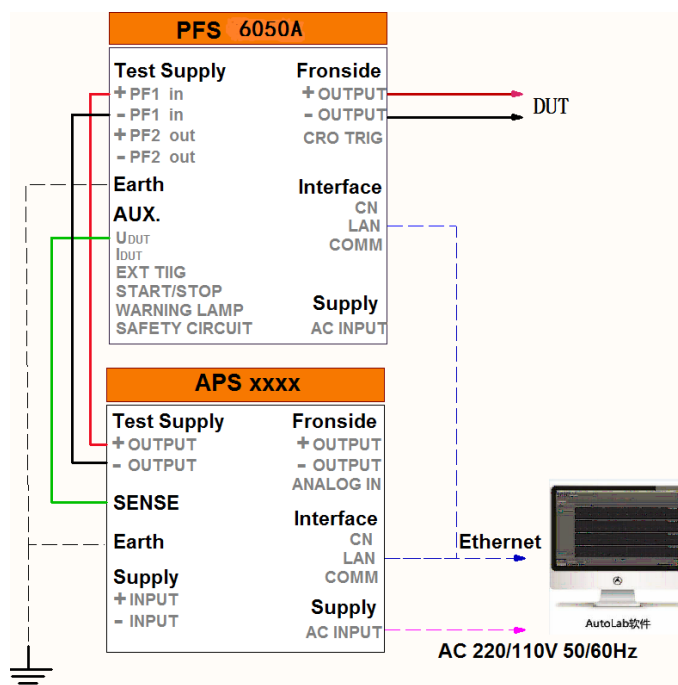
Optional Accessories

1	Remote Control Software	Model: AutoLab > Support Windows 7/8/10 /11 operating systems > Supports Ethernet > Supports scheduling and test sequence, easy for operation > Supports single test and sequence test reports printing, and user-defined templates > Supports emergency stop for safe test	
2	Signal/Data Line Failure Simulator	Model: DFS 4002A Complies with test requirements for pulse E10, E13, E14 per LV 124 and pulse E48-09 per LV 148 (German OEM specification).	

Naming Rules



Test Connection Diagram



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