



Signal Line Fault Simulator

DFS 5005A

- VW 80000
- LV 124
- ISO 16750-2

Features

- > 48 independent channels with individual ON/OFF control
- > Rated current 100 μ A ~ 2 A per channel and the peak current up to 5 A
- > For open-circuit fault testing of automotive CAN, LIN, and other signal lines
- > Support remote control from via AutoLab host software for automated testing

Introduction

The DFS 5005A Signal Line Fault Simulator is designed for automotive signal line open-circuit fault testing, complying with ISO 16750-2 Clause 4.9, VW 80000 E13, and LV 124 E13 requirements. It features 48 independently controlled channels with a rated current range of 100 μ A ~ 2 A per channel and a peak current of up to 5 A.

The DFS 5005A is widely used for open-circuit fault testing of automotive CAN/LIN and other automotive signal lines, helping verify system reliability and fault tolerance under wiring fault conditions.

Application Areas



Technical Parameters

Channels	48 independently controlled channels for programmable selection
DUT Voltage	Max. ± 50 V DC
DUT Current	100 μ A ~ 2 A per channel (at 25 °C)
Current Direction	Bidirectional
Interruption Duration t_d	1 μ s ~ 1 h (10% $\pm$ 1 μ s)
Repetition Rate	100 μ s ~ 1 h (10% $\pm$ 1 μ s)
T_{rise}/T_{fall}	<1 μ s (@1 k Ω ; @1 Ω , U = 2 V)
Switch Impedance	<500 m Ω
Peak Current	5 A

General Parameters

Working Power	AC 110 V ~ 240 V $\pm$ 10%, 50/60 Hz
Fuse	10 A
Max. Power Consumption	500 W
Communication Mode	Ethernet LAN, RJ45
Working Status Indication	Front panel LED indication and LCD display
Grounding Method	Flat grounding wire
Dimension	4U rack, 445 (W)*193 (H)*670 (D) mm (Incl. handles and feet)
Weight	Approx. 16 kg
Ambient Temperature	15 ~ 35 °C
Relative Humidity	45% ~ 75%
Atmospheric Pressure	86 kPa ~ 106 kPa

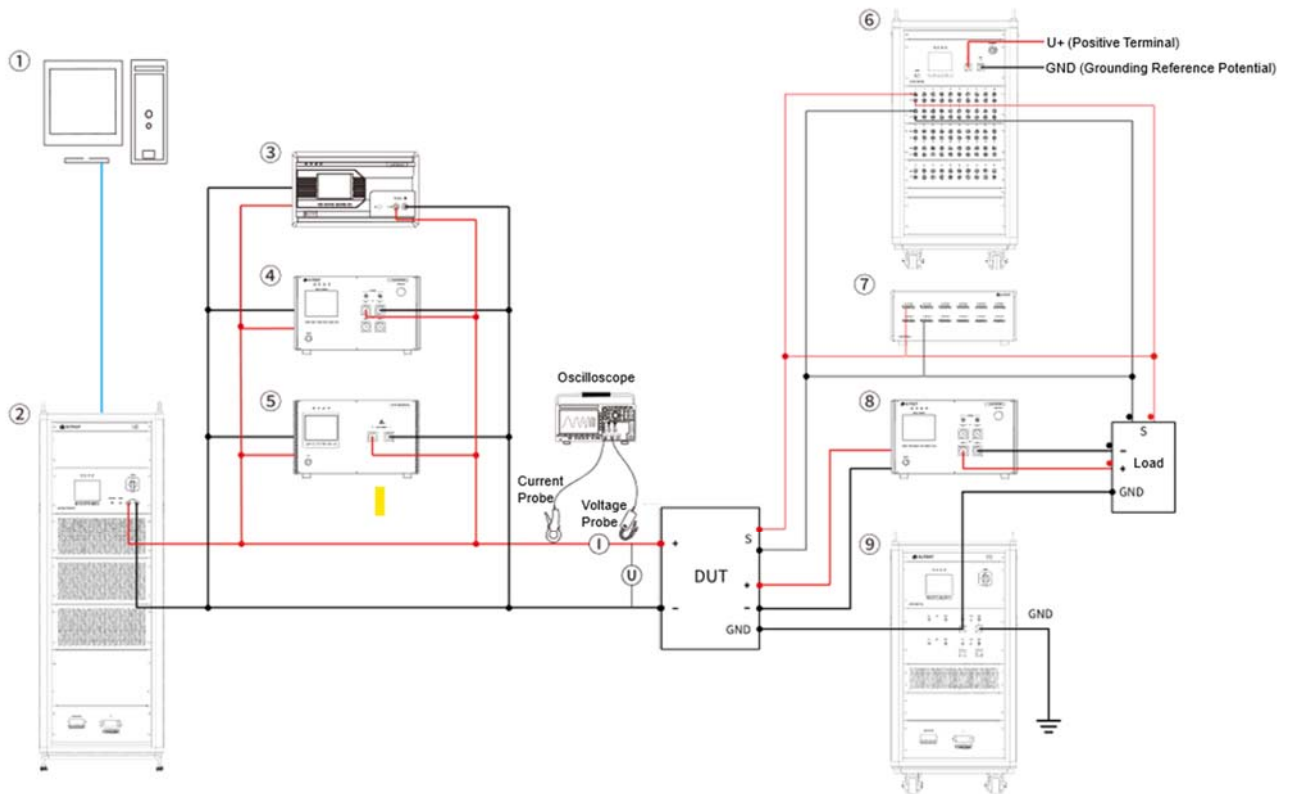
Standard Accessories

Power Cord, Data Line Calibration Resistor (CFS R1 Ω -01, CFS R1000 Ω -01), Grounding Wire, Fuse, Connector, Network Cable, User Manual

Optional Accessories

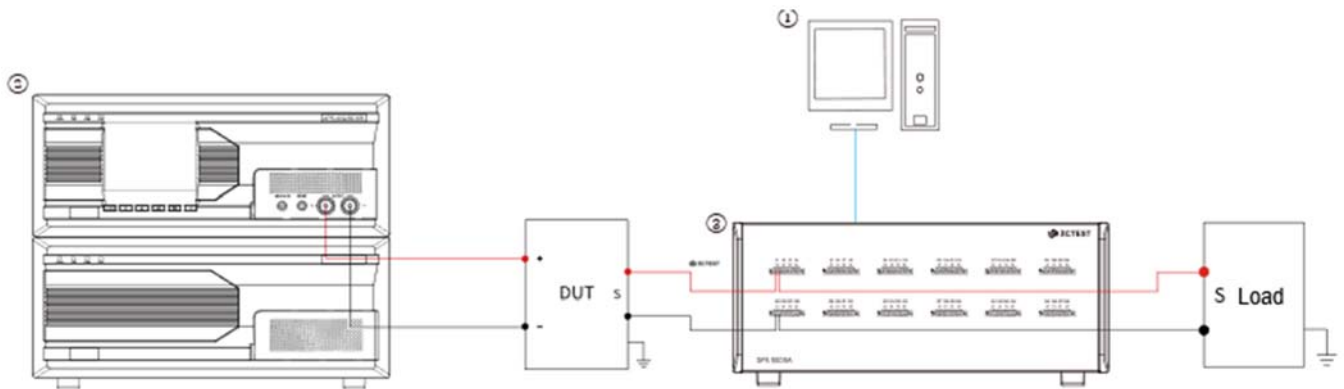
1	Automotive Immunity Test Software (this product needs to be used with this software)	Model: AutoLab > Support windows 7/8/10/11 > Easy operation with an intuitive and user-friendly UI > Comprehensive functions and built-in standard test libraries allow users to easily configure customized test programs.	
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Test System Setup



- ① PC software AutoLab
- ② Four-Quadrant Power Supply Voltage Variation Simulator APS Series
- ③ Load Dump Pulse Simulator LDS Series
- ④ Power Network Simulator PNS Series
- ⑤ Automotive Power Failure Simulator PFS Series
- ⑥ Short-Circuit Fault Simulator BOB 50C50
- ⑦ Signal Line Fault Simulator DFS Series
- ⑧ Power Network Simulator PNS Series
- ⑨ Ground Offset Simulator GOS Series

Connection Diagram



- ① PC software AutoLab
- ② Four-Quadrant Power Supply Voltage Variation Simulator APS Series
- ③ Signal Line Fault Simulator DFS 5005A

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