Voltage Drop Simulator Battery Supply Simulator and DC Voltage Source

APSxx series

Datasheet

In Compliance with

> ISO 7637-2
> ISO 16750-2
> BMW 600 13.0 (T1)
> BMW 600 13.0 (T2)
> BMW GS 95002 (2010)
> BMW GS 95003-2
> BMW GS 95024-2-1 2010
> GB 28046.2
> GMW3172 July 2010
> GMW3172 June 2015
> VW TL82066 2006-11
> VW 80000 2013-06
> Peugeot B21 7110 July 2008
> Peugeot B21 7110 July 2005
> Ford EMC-CS-2009rev1
> Ford ES-XW7T-1A278-AC Oct 2003
> Volvo STD 515-0003 2008
> SMTC 3800001 2014
> MBN 10284-4 2011
> MBN 10 284-2 2008
> Mazda MES PW 67600
> JEELY J7110982A 2016
> QFPT2800001 2011
> FIAT 7-Z0441
> FIAT 7-Z0444 April 2008

Introduction

APS series can be used as battery supply simulation and DC voltage source. During test in test lab, APS series can replace vehicle battery. Pulse 2b, Pulse 4, sine wave noise and other complicated voltage variation test can be conducted by APS series simulator as per ISO 7637/16750. It can simulate multiple battery supply waveforms as per international standards and multiple automotive manufacture standards. Also, as a powerful DC source, it can supply power for DUT during automotive transient pulse test, which can meet 42 V、24 V and12 V supply voltage. APS series can also be used as power amplifier for magnetic field immunity test.

Features

> 5.7 inch color touch screen
> Test voltage up to 60V
> Test current up to 30 A
> high impulse current capacity
> low output impedance
> Powerful DC voltage source
> Automatic voltage compensation with external control of simulated input waveform
> Quick response, the bandwidth up to 300 kHz
> Pulses 4 and 2b as per ISO 7637-2:2004
> Voltage variation test as per ISO 16750-2:2006
> Pre-programmed test routines to simulate various supply waveforms
> To simulate various supply waveforms, e.g. superimposed nose
> Ethernet, RJ45, PC control, and test report documentation and print

Application Areas

> Automotive
> Military
> Avionics
> Communication

General Parameters

Output voltage	Single polarity output: 0~60 V
Voltage resolution	±0.2 V
Output current	0 A ~30 A
Analog signal input	BNC
Sense signal input	BNC
Source impedance	10 mΩ ~ 200 mΩ or without inner impedance
Voltage compensation resolution	±0.1 V
Max. compensated voltage	4 V
Voltage deviation	＞90%, recovery time＜10 μs
Voltage fluctuation	Ur＜0.2 V P-P, min. frequency: 400 Hz
Rise time	＜3 μs
Sine signal output	Frequency up to 300 kHz（as per Vpp and output current of waveform）
External signal input	0 ~ 10 V
output	DUT supply: high current connector
Serial port	LAN Ethernet RJ45
enlarging scale of external signal	1:10
Supply voltage	AC 220 V，±10%，45-65 Hz（Or AC 110 V can choose）
Temperature	15 ~ 35 ℃
Humidity	45%--75% RH（no condensation）

APS series Models

Simulator and power amplifier	High resolution programmable DC source	parameters	size
1、Supply voltage of 40V			
APS 40C05	internal	DC 40V 5A max, 15A continuous 500ms	19”/4U
APS 40C10	internal	DC 40V 10A max, 15A continuous 500ms	19”/4U
APS 40C15	internal	DC 40V 15Amax; 15A long time	19”/4U
APS 40C20	DCP 40C20	DC 40V 20A max, 30A continuous 500ms	19”/8U
APS 40C30	DCP 40C30	DC 40V 30A max, 33A continuous 500ms	19”/8U
APS 40C30.1	DCP 40C30.1	DC 40V 30A max, 60A continuous 500ms	19”/8U
2、Supply voltage of 60V			
APS 60C10	DCP 60C10	DC 60V 10A max, 20A continuous 500ms	19”/8U
APS 60C20	DCP 60C20	DC 60V 20A max, 30A continuous 500ms	19”/8U
APS 60C20.1	DCP 60C20.1	DC 60V 20A max, 40A continuous 500ms	19”/8U
APS 60C30	DCP 60C30	DC 60V 30A max, 36A continuous 500ms	19”/8U
APS 60C30.1	DCP 60C30.1	DC 60V 30A max, 60A continuous 500ms	19”/8U

Basic Equipment

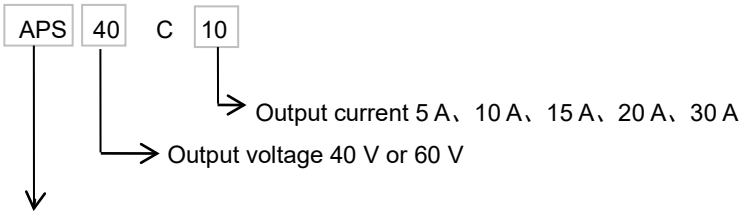
Simulator, test cable, power cord, fuse, factory test report, warranty report and user manual

Optional Accessory

1.PC control software AUTO Lab

With PC installed WIN XP and WIN7, it can be easily operated to make the measurement, based on the customized test program. It can identify any device for AUTO Lab test with automatic configuration. It can easily generate test reports.

Naming rules:



APS series can support external input signals, max. response frequency 300 kHz, current up to 30 A

*) There is a large amount of inrush current for some of the test products (eg motor equipment, exhaust fans, wipers, air conditioners, etc.) or in the presence of large capacitive energy storage fittings. This inrush current is 3-10 times of normal current or even greater. If the customer's inrush current is not confirmed, our company's CTM series of current test module can be used to test the working current value to obtain the inrush current, so you can choose a more appropriate APS series of products.

**) APGxx series The output voltage range of the APS is 0 to 60 V and the output current range is 0 to 400 A. The Max output frequency of sinusoidal signal is 30 kHz；The instrument power is large enough to meet most of the test requirements

APSxx series The output voltage range of the APS is 0 to 60 V and the output current range is 0 to 30 A. The Max output frequency of sinusoidal signal is 30 kHz；

APSxxD series is a four quadrant power supply. The maximum output voltage of the product is 80 V. The difference between positive and negative voltage output shall not exceed 100 V. The product line meets the 48 V test system. The product output current range is 0 to 30 A.The sinusoidal signal output frequency up to 300 kHz.

The test connection diagram: