

Low-Frequency DC Signal Source (0 Hz - 250 kHz)

LFS 200

Datasheet



In Compliance with

- > Chrysler CS-11809
- > Chrysler CS-11979
- > DaimlerChrysler DC-10615
- > DaimlerChrysler DC-11224
- > DaimlerChrysler DC-11224 Rev.A
- > Forder EMC-CS-2009.1
- > MAN 3285
- > Tata TST/TS/WI/257
- > GMW 3172
- > SAE J1113-2
- > EMC-CS-2010JLR V1.1

Introduction

Low-frequency DC signal source LFS 200 can generate sine wave, to simulate ripple noise, in compliance with many relevant standards of automobile manufacturers. With the control software AutoLab, it can also generate non-sine wave, customized signal, and magnetic field (if used together with radiation coils or Helmholtz coils).

Features

- > High capacity: sine wave max frequency 250 kHz; output voltage max 140 V p-p, 50 V SRM; output current max 5 A SRM
- > Built-in low-frequency amplifier of 250 W
- > Adjustable DC bias voltage
- > Control software: AutoLab
- > Optional integrated voltage meter (10 Hz – 250 kHz)

Application Areas

- > Automotives

Technical Parameters		
	Power Amplifier	Signal Source
Frequency Range	DC 250 kHz	DC 10 Hz - 250 kHz (sine wave)
Output Power	250 W (nominal)	N/A
Output Voltage	50 V RMS, max 120 V (0 – 100 kHz); 30 V RMS, max 120 V (100 kHz – 250 kHz);	±10 V
Output Current	5 A RMS (0 – 200 kHz); 4 A RMS (200 kHz – 250 kHz);	N/A
Output Impedance	30 mΩ at 1 kHz	N/A
Protection System	Short-circuit protection, superheating protection;	N/A
DC Bias Voltage	N/A	0 – 10 V adjustable, in control of external DC amplifier

General Parameters	
Power Supply	AC 110 V / 220 V, 50 / 60 Hz (The default configuration is 220 V, 50 Hz for Mainland China)
Input Power	Max 500 W
Connector Type	Ethernet RJ45 for PC control or connection with PAWG 100
Operating Temp.	15 °C - 35 °C
Operating Humidity	45% - 75%
Dimension	19", 8 U
Weight	Approx. 18 kg

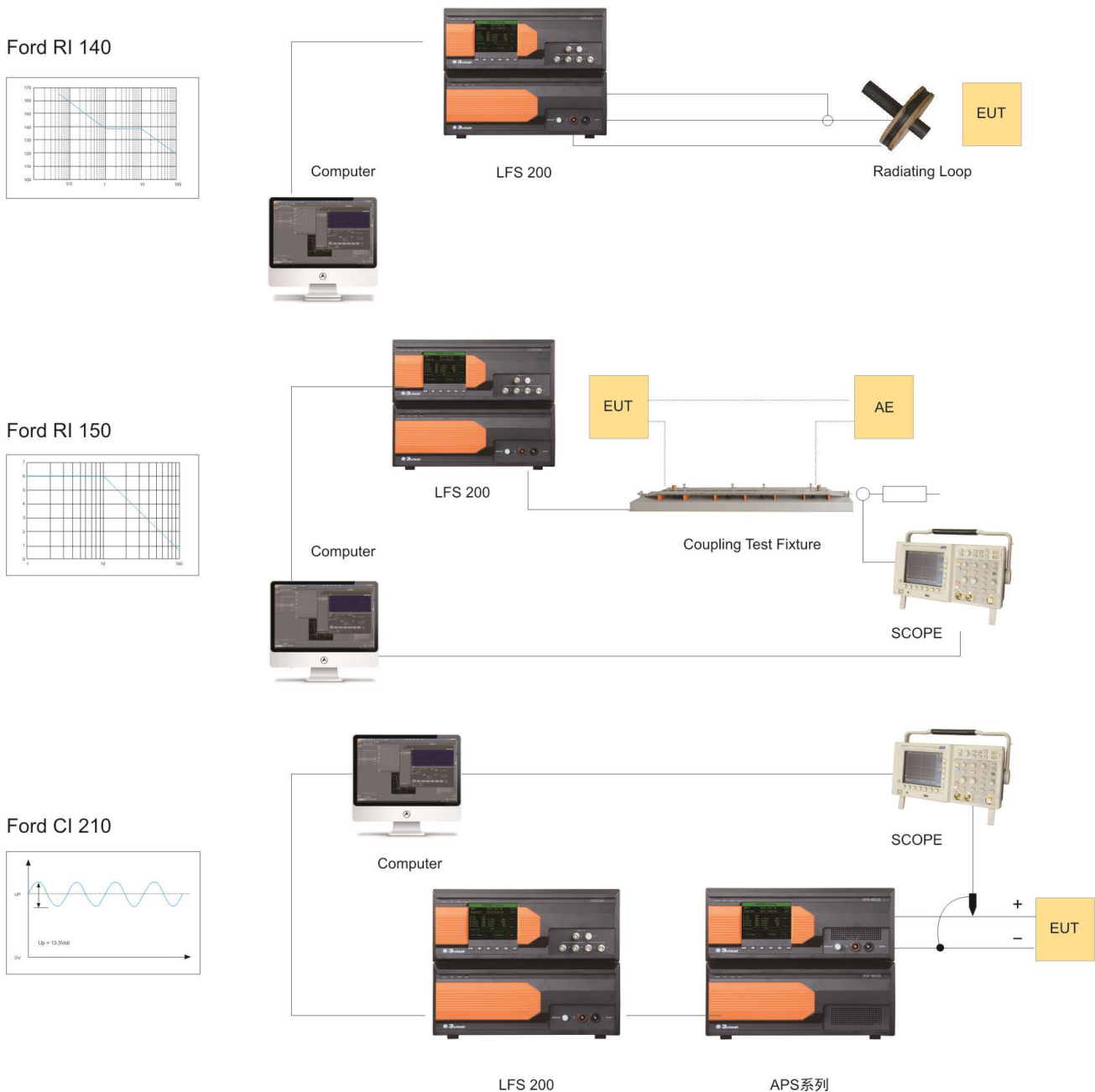
Standard Accessories				
1	Radiation Ring	TBR 100	1 pc	120 mm, for magnetic field tests, In compliance with Ford EMC-CS:2009.1, RI 140
2	Magnetic Field Sensor	TBM 100	1 pc	To measure magnetic field strength
3	Transformer Set	CN 200	1 set	Consisting of two audio transformers (the two primary / input sides are in cascade connection, while the two secondary / output sides are in parallel connection), and one adjustable resistor of 0.5Ω / 250 W, used for low-frequency conducted disturbances tests as per Ford EMC-CS-2009.1 Fig. 18-6 Ground offset.
4	Quality Guarantee		1 pc	N/A
5	Factory Inspection Report		1 pc	N/A
6	User Manual		1 pc	N/A

Optional Accessories		
1	Measuring Unit	Built-in type, options: voltage measure, current measure, magnetic field measure
	Frequency Range	10 Hz – 250 kHz
	Measurement Accuracy	Better than 5%
	Disconnected Ahead Of The Pulse	Used together with external current clamp; 10 mV / A : 1 mA – 30 A RMS; 100 mV / A : 10 mA – 300 A RMS;
	Voltage Measurement	17 mV – 70 V RMS

Equipment Connection Diagram

1. RI 140, RI 150, CI 210.

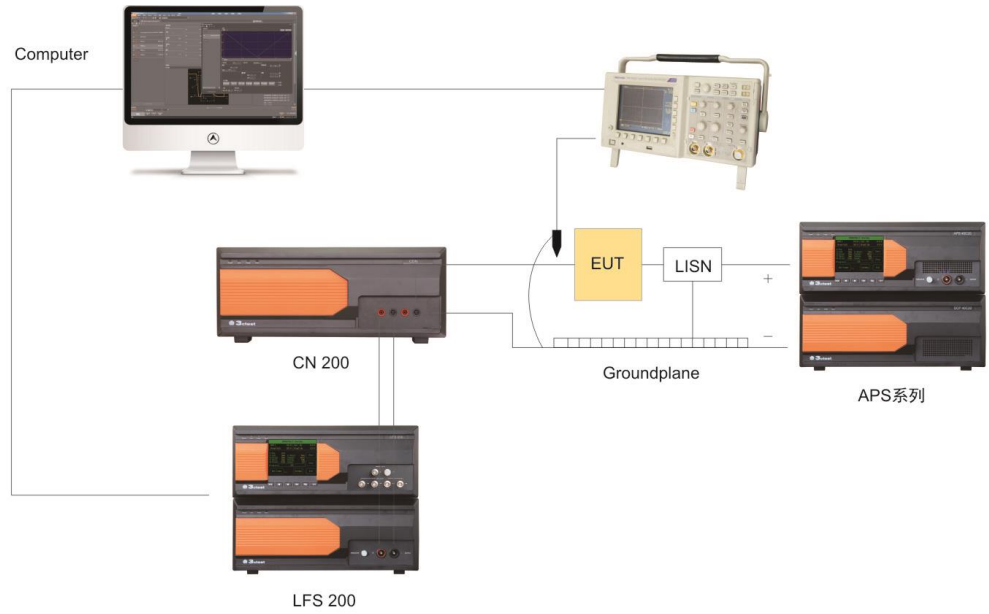
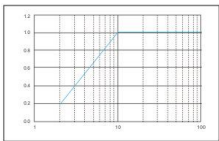
LFS 200 can be used to perform magnetic field tests as per RI 140 together with radiating ring and current monitor clamp, to perform continuous disturbances tests as per RI 150 together with current injection clamp and clamp fixture. LFS 200 can also generate control signal to drive power voltage variation simulator like APS 40C30 to perform continuous disturbances tests on power supply cables as per CI 210.



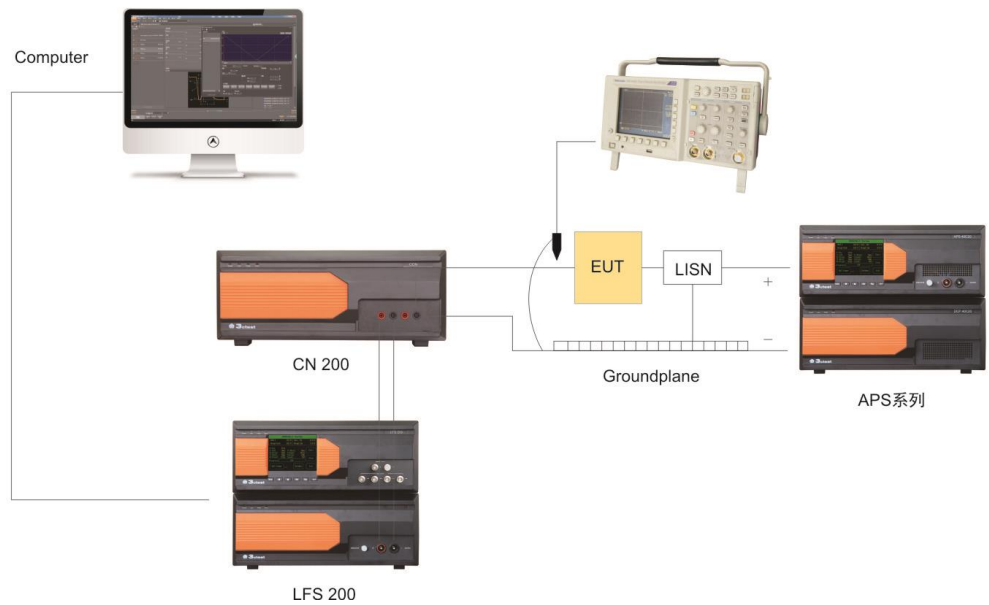
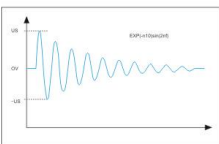
2. Immunity to Ground voltage offset.

LFS 200 can be used to generate both continuous and transient disturbances when controlled with software AutoLab as per EMC-CS-2009.

Ford CI 250
Continuous Disturbance



Ford CI 250
Continuous Disturbance





SUZHOU 3CTEST ELECTRONIC CO., LTD.

Add.: No. 99 E'meishan Road, SND, Suzhou, Jiangsu Province, China

Tel: +86 (0)512 6807 7192 Fax: +86-512-68079795

Sales Email: globalsales@3ctest.cn Service Email: service@3ctest.cn

www.3c-test.com