

# VDS 200N SERIES

## VOLTAGE DROP SIMULATOR - BATTERY SUPPLY SIMULATION AND DC VOLTAGE SOURCE



### FOR TESTS ACCORDING TO ...

- › Audi (Reference vehicles)
- › BMW - (Airbag ECU)
- › BMW 600 13.0 (Part 1)
- › BMW 600 13.0 (Part 2)
- › BMW GS 95002 (1999)
- › BMW GS 95002 (2001)
- › BMW GS 95003-2
- › BMW GS 95024-2-1 (2010-01)
- › Case New Holland ENS0310
- › Chrysler CS-11809 (2009)
- › Chrysler CS-11979
- › Chrysler PF-9326
- › Cummins 14269 (982022-026)
- › DaimlerChrysler DC-10615
- › DaimlerChrysler DC-10842
- › DaimlerChrysler PF-10541
- › DIN 72300-2
- › EN 300329
- › EN 300340
- › EN 300342-1
- › EN 301489-1
- › ...





### VDS 200N - BATTERY SUPPLY SIMULATOR AND DC VOLTAGE SOURCE

The VDS 200N series is used to simulate the various battery supply waveforms recommended by international standards and by car manufacturer requirements. Especially the manufacturer requirements are an important area covered by the VDS 200N series as there is a large variety of requirements. Secondly, the VDS 200N series serve as powerful DC voltage supplies for the DUT during the tests with automotive transients. The VDS 200N series covers all three supply voltage categories. Their current capability ranges up to 200A depending on the model and your application.

### HIGHLIGHTS

- › Voltage up to 60V
- › Current up to 200A (peak up to 1,000A)
- › Bipolar-amplifier models available
- › Low output impedance
- › Powerful DC voltage source
- › Pulses 4 and 2b (ISO 7637-2/ISO 16750-2)
- › Pre-programmed test routines to simulate various supply waveforms

### APPLICATION AREAS

-  AUTOMOTIVE
-  TELECOM
-  MILITARY
-  AVIONICS

## TECHNICAL DETAILS

## MODEL OVERVIEW

## AVAILABLE VDS 200N-MODELS

VDS 200N10	Voltage Drop Simulator, 60V/10A
VDS 200N15	Voltage Drop Simulator, 60V/15A
VDS 200N30	Voltage Drop Simulator, 60V/30A
VDS 200N30.1	Bipolar Voltage Drop Simulator, 60V/30A and 30V/50A
VDS 200N50	Voltage Drop Simulator, 60V/50A
VDS 200N50.1	Bipolar Voltage Drop Simulator, 60V/50A and 30V/85A
VDS 200N100	Voltage Drop Simulator, 60V/100A
VDS 200N150	Voltage Drop Simulator, 60V/150A
VDS 200N200	Voltage Drop Simulator, 60V/200A

## TECHNICAL DETAILS

## VDS 200N10

Output voltage	0V - 60V
Output current	0A - 10A, continuous
Peak current	15A
Frequency range	DC to 100kHz *)
Supply Voltage	115/230V
Dimensions	19"/6HU
Weight	app. 49kg

## VDS 200N15

Output voltage	0V - 60V
Output current	0A - 15A, continuous
Peak current	15A
Frequency range	DC to 100kHz *)
Supply voltage	115/230V
Dimensions	19"/6HU
Weight	app. 49kg

## TECHNICAL DETAILS

## VDS 200N30

Output voltage	0V - 60V
Output current	0A - 30A, continuous
Peak current	70A for max. 500ms
Frequency range	DC to 100kHz *)
Supply voltage	230V (US-type 208V)
Dimensions	19"/9HU
Weight	app. 69kg

## VDS 200N30.1

Output Range I	
Output voltage	-5V - +30V
Output current	50A continuous
Peak current	150A for max. 200ms
Output range II	
Output voltage	-5V - +60V
Output current	30A continuous
Peak current	90A for max. 200ms
Reverse power	1,200Watt continuous, up to nominal current
Frequency range	DC to 100kHz *)
Supply voltage	3x400V (US-type 3x208V)
Dimensions	19"/12HU
Weight	app. 65kg

## VDS 200N50

Output voltage	0V - 60V
Output current	0A - 50A, continuous
Peak current	100A for max. 500ms
Frequency range	DC to 100kHz *)
Supply voltage	3x400V (US-type 3x208V)
Dimensions	19"/12HU
Weight	app. 114kg

## TECHNICAL DETAILS

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VDS 200N50.1	
Output range I	
Output voltage	-5V - +30V
Output current	85A continuous
Peak current	220A for max. 200ms
Output range II	
Output voltage	-5V - +60V
Output current	50A continuous
Peak current	150A for max. 200ms
Reverse power	2,400Watt continuous, up to nominal current
Frequency range	DC to 100kHz *)
Supply voltage	3x400V (US-type 3x480V)
Dimensions	19"/16HU
Weight	app. 120kg

VDS 200N100	
Output voltage	0V - 60V
Output current	0A - 100A, continuous
Peak current	150A for max. 500ms
Frequency range	DC to 100kHz *)
Supply voltage	3x400V (US-type 3x480V)
Dimensions	19"/16HU
Weight	app. 150kg

VDS 200N150	
Output voltage	0V - 60V
Output current	0A - 150A, continuous
Peak current	150A
Frequency	DC to 100kHz *)
Supply voltage	3x400V (US-type 3x480V)
Dimensions	19"/25HU
Weight	app. 400kg

## TECHNICAL DETAILS

VDS 200N200	
Output voltage	0V - 60V
Output current	0A - 200A, continuous
Peak current	200A
Frequency range	DC to 100kHz *)
Supply voltage	3x400V (US-type 3x480V)
Dimensions	19"/34HU
Weight	app. 450kg

## TECHNICAL DETAILS

## COMMON DATA (ALL MODELS)

GENERAL	
Source impedance	$Z_i = <10\text{mohm}$
Voltage deviation	$<1\text{V}$ with resistive load (including inrush current) recovering 63% of its maximum excursion within 100us
Ripple voltage	$U_r <0.2\text{Vp-p}$ , frequency min. 400Hz
Sinusoidal signal capability vs. Frequency *)	Vpp max. 16V up to 20kHz Vpp max. 10V up to 30kHz Vpp max. 6V up to 50kHz
*)	Vpp max. 3V up to 100kHz via Analog In, controlled by AutoWave/AMP 200Nx only
*)	VDS 200N30.1 and VDS 200N50.1: Vpp max. 65V resp. 35V up to 50kHz with respect to the selected voltage range  Vpp max. 3V up to 100kHz via Analog In, controlled by AutoWave/AMP 200Nx only
Fuses	Depending on VDS 200N model

## TRIGGER

Automatic	Automatic release of the events
Manual	Manual release of a single pulse
External	External release of a single pulse

## OUTPUT

DUT Supply +/-	Safety laboratory or high current connectors
Ext. trigger	5-15V TTL; BNC connector
CRO Trigger	5V TTL-signal for oscilloscope

## COMMON DATA (ALL MODELS)

## TEST ROUTINES FOR ARBITRARY WAVES

DC source	Max. 60V; current depending on VDS 200N model
Functions	Sine Wave Sweep Sine Wave (Cranking) Clipped Load Dump Jump Start Extern GM 9105P Pulse 4 Drop and Jump pulse
Standard Test routines	ISO 7637, Pulses 2b and 4 ISO 16750-2 Jaso Test 1
Service	Service, Setup, Self test

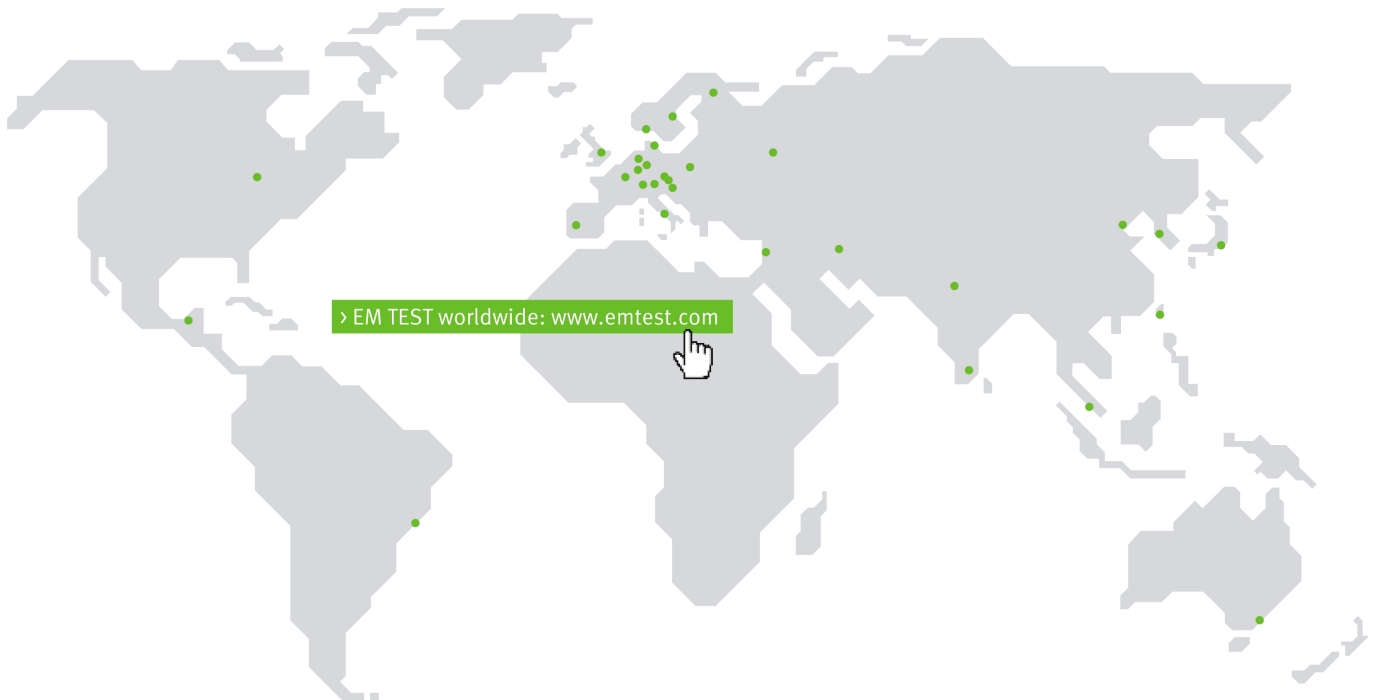
## INTERFACE

Serial interfaxe	USB
Parallel interface	IEEE 488, addresses 1 - 30
Remote control	To connect an external signal generator (10kohm): 0-10V / 0-50kHz max. 0.5V(p-p) / 0-100kHz

## OPTIONS

AutoWave	Arbitrary generator for more complex test requirements
iso.control	Software to control the test, including standard library, test report facility and data conversion generator

# COMPETENCE WHEREVER YOU ARE



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