

AES 5500 AUTOMOTIVE EMISSIONS SYSTEM FOR ISO 7637-2



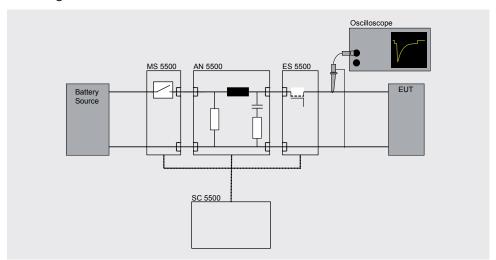
- The only complete, compliant solution for ISO 7637-2 emissions testing
- Clean, reliable 100 A operation with very low voltage drop
- Industry standard relay footprint for a wide selection of relays (one 100 A relay included)
- Separate control station with automatic, manual or external triggering of the switching behavior

The AES 5500 is a system of electronic and mechanical switches, an artificial network, and a unique control station designed for emissions testing to ISO 7637-2. Having gone through meticulous development and intensive beta testing, the AES 5500 contains unique features and uncompromising quality and conformity found nowhere else. Consisting of a four-part solution, the user has complete control over where, when and how the switches can be placed and controlled, including the necessary drive voltages for the relays.

The 100 A connectors are carefully placed and countersunk to allow precise cabling between the switches, the artificial network and test bench and allows for the electronic or mechanic switches to be placed at any point before or after the artificial network. Multiple mechanical switches may also be utilized at the same time as required. This careful attention to detail for switch placement and cable length means that the numerous manufacturer standards can also be met. The AES 5500 features a rugged construction with unpainted underside for good earth contact, precise switching control and numerous monitoring locations. A counter for the relay and LED indicators for both electronic and mechanical electronic switches are provided.

Two drawers are available for accessory storage. The AES 5500 has temperature controlled fans for quiet operation and a thermal shutdown feature.

Block diagram





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Technical specifications

Complete system 1)	
Battery current	100 A
Inrush current 2)	1000 A, 10 ms; 300 A, 1 s
Transient voltage	440 V
Shunt resistor (R _s)	10, 20, 40, 120 Ω, Ext
Trigger modes	External, internal, manual
Battery off time (t _d)	10 ms – 10 s
Repetition rate	10 ms – 10 s
Input voltage	85 – 264 VAC, 47 – 63 Hz
Available relay voltage	12, 24, 42 V
Electronic switch	
Switching time Δt_s	300 ns ±20% ³⁾
Voltage drop	<1 V @ 25 A
Artificial network	
Inductance	5 μH
Capacitance	0.1 μF
Resistance	50 Ω
Impedance	As per ISO 7637-2
Connectors	100 A MC type, countersunk, 50 mm above ground plane
Housing	steel, unpainted underside for good ground contact
Indicators	counter on relay, LED indicator on electronic switch
1) With supplied relay or electronic sv	vitch
2) Electronic switch, non repetitive. Fe	or relays, consult manufacturer's documentation
3) With test load	
Accessories	
Included: 4 x 60 mm cable, MC conne	ector
Included: 4 x 0 mm pin, used when the housings will be pushed together (for zero millimeter distance)	
Optional: INA 5031 – 100:1 high voltage probe compliant to ISO 7637-2	
	panana adapters (only available in red)
Optional: INA 5550-TL – Reference load (R = 0.6 Ω , L = 50 μ H)	

Optional: MC 5550 – Additional unit for further relay options

Optional: Various inserts for MC 5550 for industry standard relay footprints

