

# CA ISO

### CALIBRATION SET FOR AUTOMOTIVE TRANSIENTS



### FOR TESTS ACCORDING TO ...

- > ISO 16750-2
- > ISO 7637-1:1990
- > ISO 7637-2:1990
- > ISO 7637-2:2004
- > ISO 7637-2:2011

### **AUTOMOTIVE TEST PULSE VERIFICATION UNDER LOADED CONDITIONS**

In accordance with the pulse verification requirements given in Annex C of ISO 7637-2:2011 and Annex A of ISO 16750-2:2012, test pulses generated by automotive transient generators need to be verified both under no-load (open circuit verification) and loaded conditions with specified loads. The values of the load resistors is specified and are equal to the generator's internal source impedance defined for the corresponding test pulse.

The CA ISO is a resistor box containing all load resistors required to verify micropulse and load dump generators according to international standards and manufacturer requirements.

### HIGHLIGHTS

- > One single load resistor box
- > Includes all required load resistor values
- > Highly accurate resistors (+/-1%)
- > High temperature stability
- > Resistors with very low inductance
- > Resistor values 0.5ohm, 1ohm, 2ohm, 4ohm, 10ohm, 20ohm and 50ohm

### **APPLICATION AREAS**







### **TECHNICAL DETAILS**

### **BENEFITS**

### **SELECTION OF LOAD RESISTORS**

The set of load resistors has been well selected in order to meet the wide range of source resistors specified in various national/international standards and vehicle manufacturer specifications.

The following load resistors are most used:

- 0.5 Ohm for Load Dump pulse verification as per a number of manufacturer specifications
- 1.0 Ohm for Load Dump pulse verification as per a number of manufacturer specifications
- 2.0 Ohm for verification of pulse 2a and pulse 5 as per ISO 7637-2 and various manufacturer specifications
- 4.0 Ohm for verification of pulses 1, 2 and Load Dump pulse 5 as per various manufacturer specifications
- 10.0 Ohm for verification of pulses 1 and 2 as per ISO 7637-2 and various manufacturer specifications
- 20.0 Ohm for verification of pulse 1 as per ISO 7637-2 and various manufacturer specifications.

All load resistors are non-inductive and have a tolerance better than 1% as per standard requirements. They show sufficient power dissipation for the transient pulse energy.

### **USE OF CA ISO**

The CA ISO verification box is directly plugged into the CDN outputs of the transient generator. The required load resistor is selected by the bridge connector. The waveform across the load resistor is best measured by a 100:1 voltage probe with sufficient bandwidth and voltage capability. EM TEST recommend a bandwidth of 20MHz minimum and a voltage measuring capability of 1,000V.





### **TECHNICAL DETAILS**

## **CA ISO CALIBRATION SET**

| LOAD RESISTORS FOR MICROPULSE AND LOAD DUMP PULSE VERICATION |  |
|--|--|
| Built-in resistor values                                     | 0.5ohm, 1ohm, 2ohm, 4ohm, 10ohm,<br>20ohm, 50ohm, selectable   |
| Resistor tolerance   | +/- 1%   |
| Connectors   | 4mm safety lab connectors  |
|  | Fits to all EM TEST automotive<br>micropulse generators, Series MPG<br>200 and UCS 200 and all EM TEST<br>Load Dump generators, Series LD<br>200 |

| OPTIONS  |   |
|----------|---|
| Adapters | To connect the CA ISO to high-current coupling networks |



# **COMPETENCE WHEREVER** YOU ARE



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Information about scope of delivery, visual design and technical data correspond with the state of development at time of release. Subject to change without further notice.

