



# High-Voltage Noise Simulator

## HNS 200

■ Toyota TSC0502G Fig.29

### Features

- > 5.7-inch color touch screen
- > Equipped with DUT voltage and current monitoring and overcurrent protection
- > Built-in high-voltage noise module
- > Integrated coupling network rated at 60 V, 30 A
- > Ethernet and RJ45 interfaces, used for PC remote control and test reports printing

### Introduction

The HNS 200 HV Noise Simulator complies with Toyota TSC0502G Fig.29 specifications to replicate HV noise waveforms occurring in automotive electrical systems. Custom arbitrary waveform generation is available per customer requirements.

Depending on the model variant, the built-in coupling network is rated for a Max. current of 100 A. The HNS 200 can work with APS-series equipment to provide a common central output terminal for the DUT. All individual simulators are interconnected via data buses and connected to remote PCs over Ethernet, establishing a complete integrated test system.

### Application Areas



## Technical Parameters

| Test Mode                          | Continuous Mode                                                            | Burst Mode          |
|------------------------------------|----------------------------------------------------------------------------|---------------------|
| Pulse Amplitude (V <sub>PP</sub> ) | 5 V ~ 250 V                                                                |                     |
| Pulse Frequency                    | 1 kHz ~ 50 kHz                                                             | 100 kHz ~ 1,000 kHz |
| Burst Frequency                    | None                                                                       | 1 Hz ~ 100 Hz       |
| Pulses per Burst                   | None                                                                       | 1 ~ 10              |
| Test Duration                      | 1 s ~ 9,999 s                                                              |                     |
| Coupling Network Rating            | DC 60 V 30 A                                                               |                     |
| Pulse Period                       | 1 s ~ 9,999 s                                                              |                     |
| Test Count                         | 1 ~ 9,999                                                                  |                     |
| Trigger Mode                       | Auto, manual, external Trigger                                             |                     |
| Test and Control (Trigger Circuit) |                                                                            |                     |
| Output                             | Output via 50 Ω coaxial connector for tests with capacitive coupling clamp |                     |
| Coupling Mode                      | Positive battery terminal (for power supply line test)                     |                     |
| CRO                                | 5 V trigger output for oscilloscope sync                                   |                     |

## General Parameters

|                     |                                            |
|---------------------|--------------------------------------------|
| Working Power       | AC 110 V/220 V, $\pm 10\%$ , 45 Hz ~ 60 Hz |
| Dimension           | 4U rack, 450(H) mm * 190(D) mm * 620(W) mm |
| Weight              | Approx. 20 kg                              |
| Ambient Temperature | 15°C ~ 35°C                                |
| Relative Humidity   | 35% ~ 85%, RH (no condensation)            |

## Optional Accessories

|   |                           |                                                                                                                                                                         |                                                                                       |
|---|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1 | Capacitive Coupling Clamp | <p>Coupling capacitance:<br/>100 pF ~ 1,000 pF, DC 5 kV</p> <p>Withstand voltage: &gt; 5 kV (1.2/50 <math>\mu</math>s)</p> <p>Dimension: 1,040 mm * 140 mm * 110 mm</p> |  |
|---|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|

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