osi1309 Series

100–225 kV, 5–100 ns, maximum single-shot energy 10 kJ



Product introduction

The osi1309 series Marx high-voltage pulse generator consists of a pulse generator and a matched rack-mounted charging power supply. Charging supplies can be selected from osi1216, osi1211, osi1209, osi1206 and related models. These supplies have digital voltage/current indication and fit a 19-inch standard rack, providing smooth linear high-voltage output ramping. The osi1309 Marx generator front panel has DC high-voltage input, high-voltage pulse output and trigger-signal input ports.

Product features

- Output voltage 100–225 kV
- Pulse width 5–100 ns
- Voltage and current adjustment
- Customization available to user requirements
- Rise time <100 ns
- Overvoltage and output short-circuit protection
- Digital voltage/current display

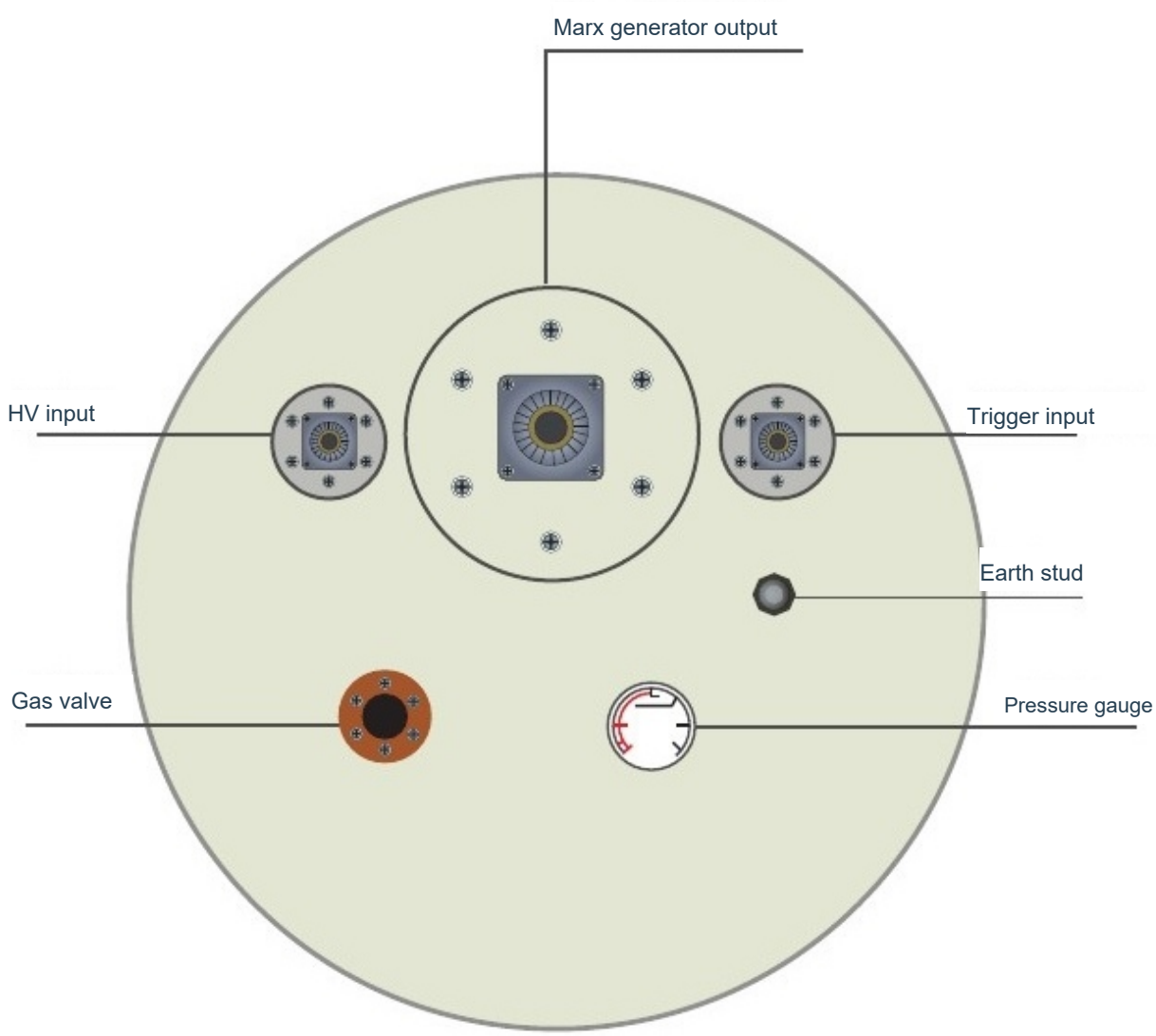
Specifications

Parameter	Specification
Output voltage	100–225 kV.
Output energy	Maximum single-shot energy 10 kJ.
Maximum pulse current	225 kA.
Frequency	1 Hz.
Pulse width	5–100 ns; pulse width customizable. Tested with an oscilloscope and voltage divider (high-voltage probe) under 50 Ω high-voltage cable conditions.
Rise time	<100 ns, used with 50 Ω high-voltage cable.
Triggering	Manual/host-computer control via fiber-optic interface.
Insulation	SF6.
Pulse generator	Sealed Marx generator with gas-filling port.
Dimensions	Height 710 mm; maximum outside diameter 380 mm.

Interface definitions

Interface	Function
Center upper port	Marx generator output
Upper left port	High-voltage input
Upper right port	Trigger signal input
Lower left port	Gas-filling valve
Lower right gauge	Pressure gauge
Right stud	Earth post

Interface location diagram

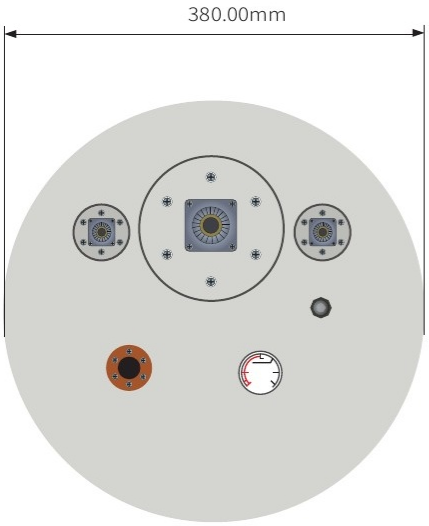


Typical applications

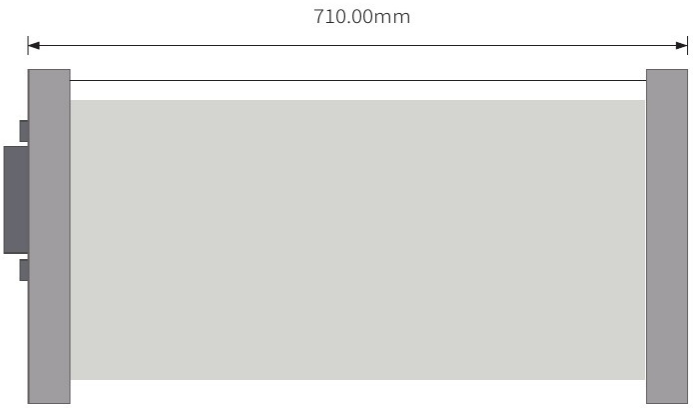
Trigger power supplies; scientific experiments, etc.

Outline dimensions

Dimensions in mm.



Outside diameter



Overall height

Final dimensions may vary; actual product dimensions govern.

Outside diameter 380 mm; overall height 710 mm. Final product dimensions may vary; actual product dimensions govern.