osi1303 Series

6 kV, 10 A, 3–50 μs, RT ≤200 ns, square-wave pulses



Product introduction

The osi1303 series is a compact high-performance high-voltage pulse power supply delivering nearly ideal square waves at a fixed pulse voltage, with a maximum output of 6 kV. The standard model uses an external optical trigger to control output voltage, with trigger delay below 300 ns and jitter below 100 ns. Custom configurations can change the trigger method, provide continuous pulse output or offer adjustable pulse width.

Product features

- Selectable maximum pulse output voltage 1–6 kV
- Selectable output pulse width 1–100 μs
- Rise time <200 ns
- Fall time <200 ns
- Ultra-compact dimensions
- Maximum instantaneous pulse power 2.4 MW
- Maximum pulse power up to 60 kW
- Trigger delay <300 ns
- Jitter <100 ns
- Customization available to user requirements

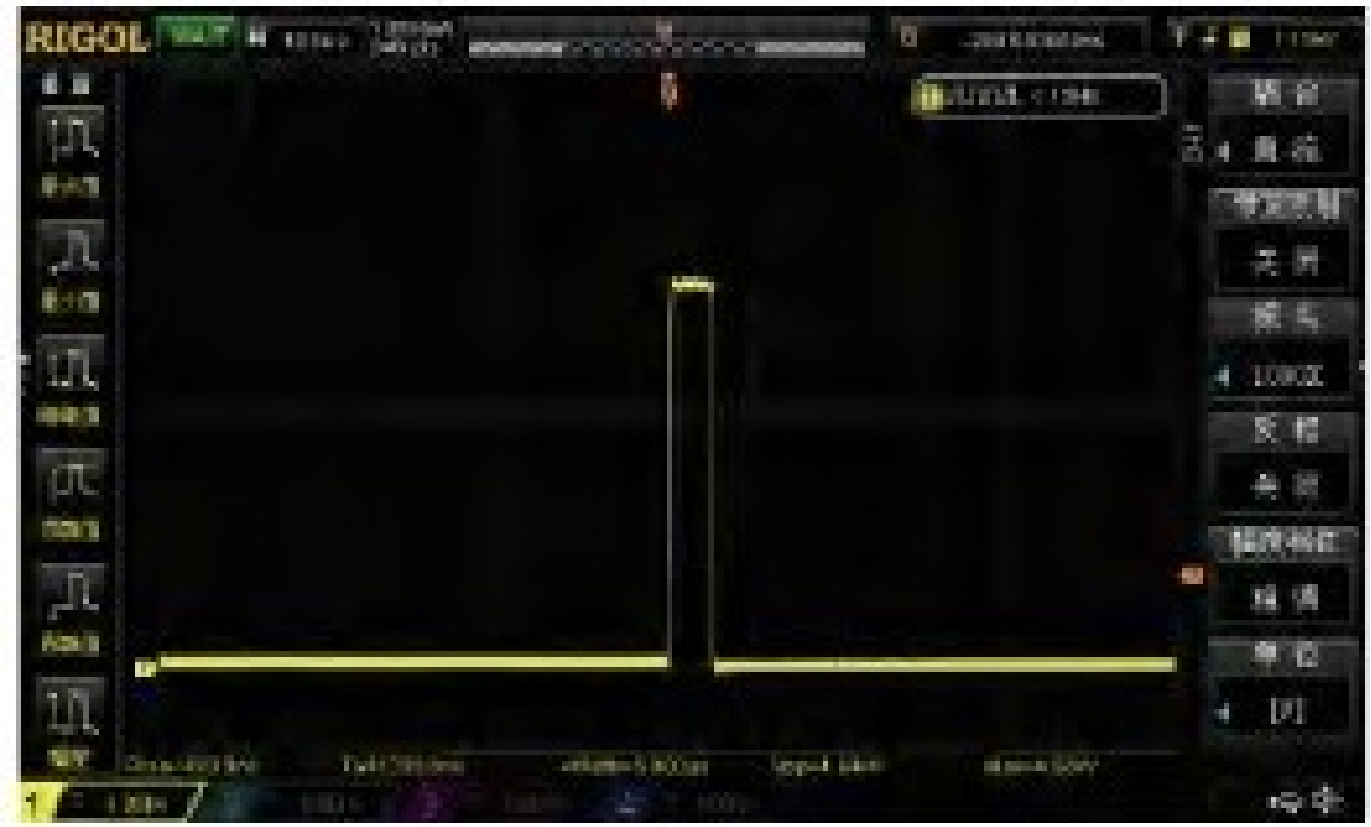
Specifications

Parameter	Specification
Input	24 VDC ±10%.
Output pulse voltage	Selectable fixed voltage 1–6 kV, with fine adjustment.
Pulse width	Selectable fixed width 1–100 μs.
Maximum instantaneous pulse current	>400 A.
Pulse current	>150 A.
Instantaneous pulse power	>2.4 MW.
Pulse power	>60 kW.
Pulse rise time	<200 ns.
Pulse fall time	<200 ns.
Output frequency	Single shot; repetitive operation optional.
Pulse control	External trigger mode, 5 V trigger level; optical or level triggering selectable.
Pulse voltage fluctuation	<2% at rated output.
High-voltage cable	High voltage is output through a BNC connector; the cable with BNC connector is 1 m long.
Ambient temperature	Operating: 0°C to +45°C. Storage: −20°C to +80°C.
Dimensions	75 mm wide, 35 mm high, 364 mm deep.
Weight	Approximately 1.5 kg.
Fiber-optic interface	External optical signals can trigger pulse ON and pulse OFF.

Input/output control terminals

Terminal	Signal
DC+	+28 V input
−	+28 V ground
ADJ	Voltage adjustment
IN	Optical signal input
HV	High-voltage output
/	/

Output waveform

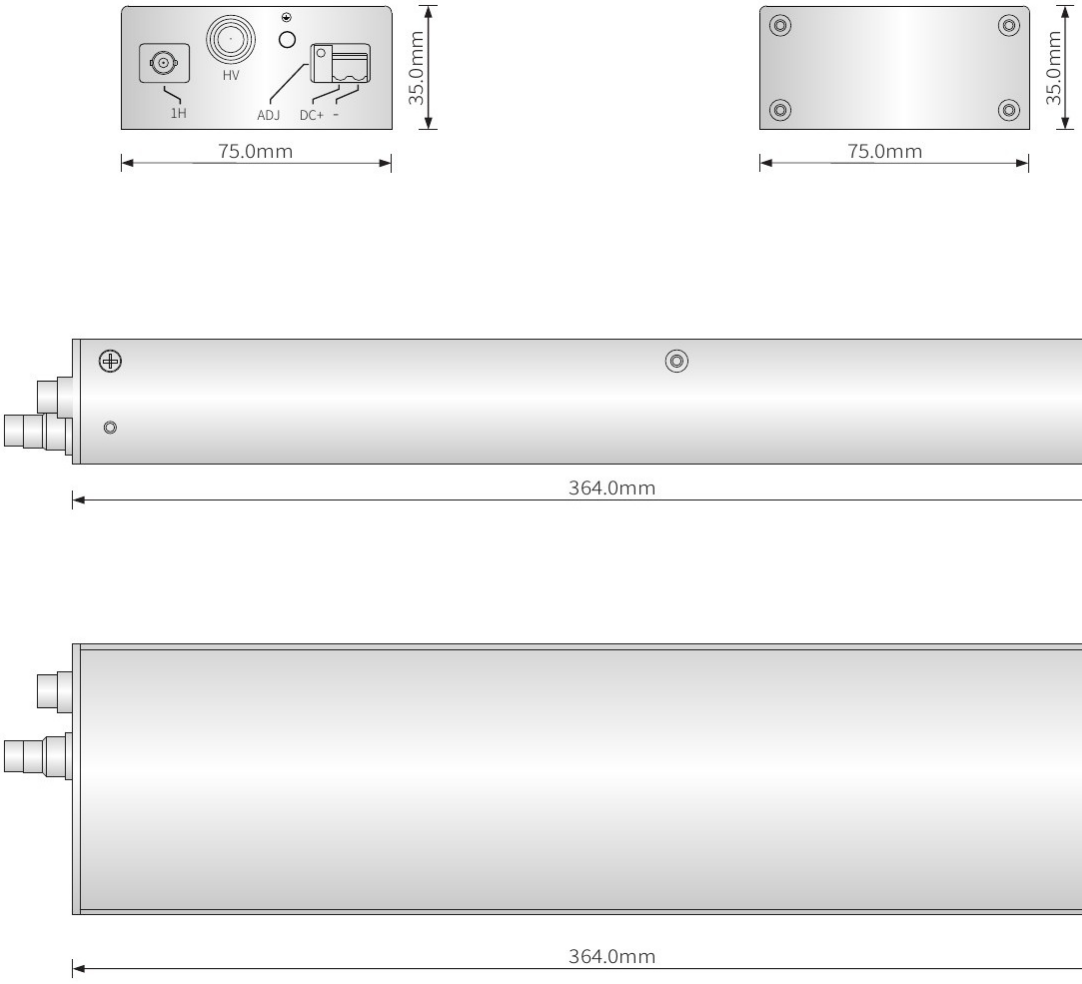


Typical applications

Plasma implantation; dielectric withstand testing; pulsed electric fields; dielectric barrier discharge (DBD), etc.

Outline dimensions

Dimensions in mm.


HV
1H
ADJ
DC+
-
35.0mm
75.0mm
35.0mm
75.0mm
35.0mm
364.0mm
75.0mm
364.0mm