

Surge Generator for MIL-STD 1275F

The generator PG1275F is specially designed for conducted susceptibility / transient tests to voltage surge and spikes of 28 Vdc electric circuits in military vehicles according to the MIL-STD 1275F.

The maximum permanent current is 16 A. This value can be extended to 400 A using the optional external diode module DM400. The current is also limited by the external 5 μ H LISN. Different models of LISN are available. The generator can be controlled by a computer through its RS232 or USB interface. A control software is proposed to assist the operator in the measurement of the transient parameters.



PRELIMINARY SPECIFICATIONS

Type	PG1275F
Standard	MIL-STD-1275F
Transients supported	injected voltage spikes, injected voltage surge
Vehicle generator and EUT operating voltage	28 V typ, 23 V min, 33 V max.
Spikes max open circuit voltage	250 V
Spikes maximum stored energy	250 mJ
Spikes rise time	≤ 50 ns typ, open circuit
Spikes frequency	20 kHz < f < 500 kHz depends on the LISN used
Spikes output connectors	2 x 4 mm safety socket
EUT operating current for spikes	depends on the optional LISN
Surge charging & open circuit voltage	100 V max.
Surge maximum stored energy	1210 J
Surge output impedance	< 45 m Ω (DC) + 300 μ H
Surge pulse duration	500 - 505 ms (including tail)
Surge output connectors	2 x 4 mm safety socket
EUT operating current for surges	16 A max. 400 A with optional DM400 diode module. Also limited by the optional LISN.
Remote control interface	RS232 and USB
Operating temperature	10 – 40 °C
Mains operating voltage	100 – 130 Vac or 210 – 264 Vac / 50 – 60 Hz, configurable with voltage selector
Power rating	100 W
Dimensions	610 x 450 x TBC mm (L x W x H)
Weight	about 25 kg

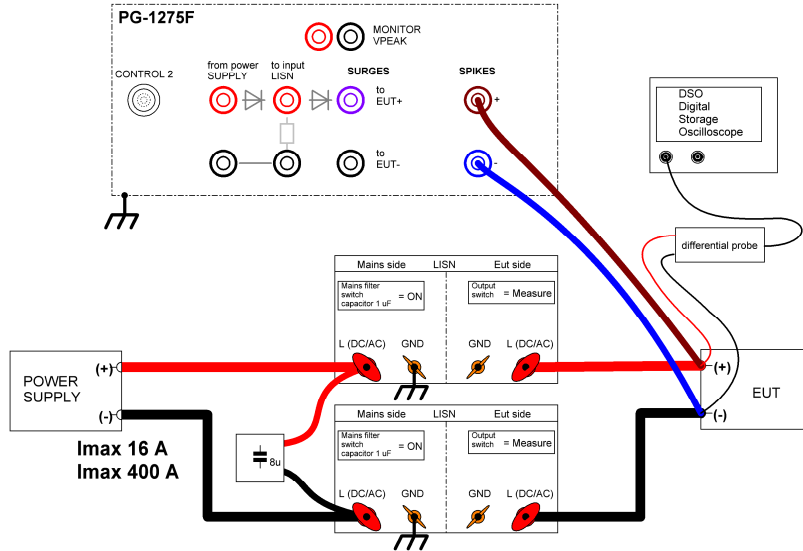
Optional 400 A decoupling diode module

Type	DM400
Maximum continuous current	400 A
Connector	large binding posts
Dimensions	350 x 180 x 170 mm (L x W x H)
Weight	1.6 kg

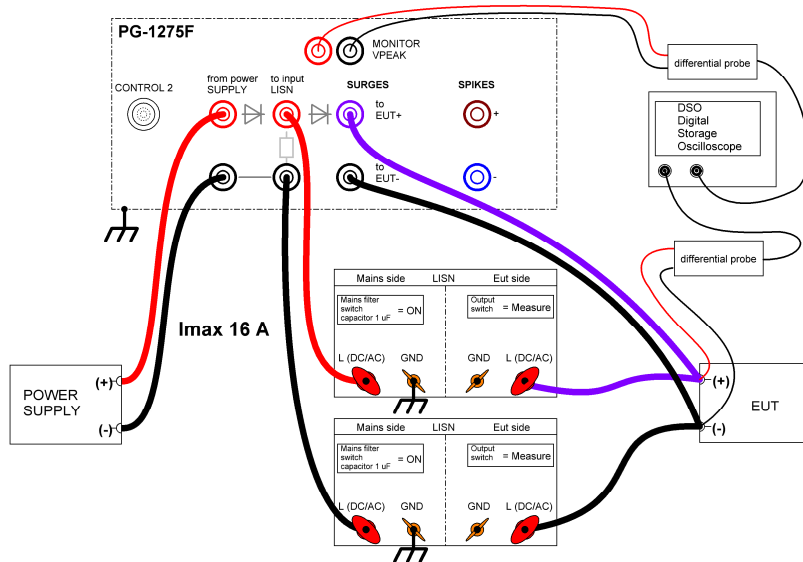


Examples of test setup's

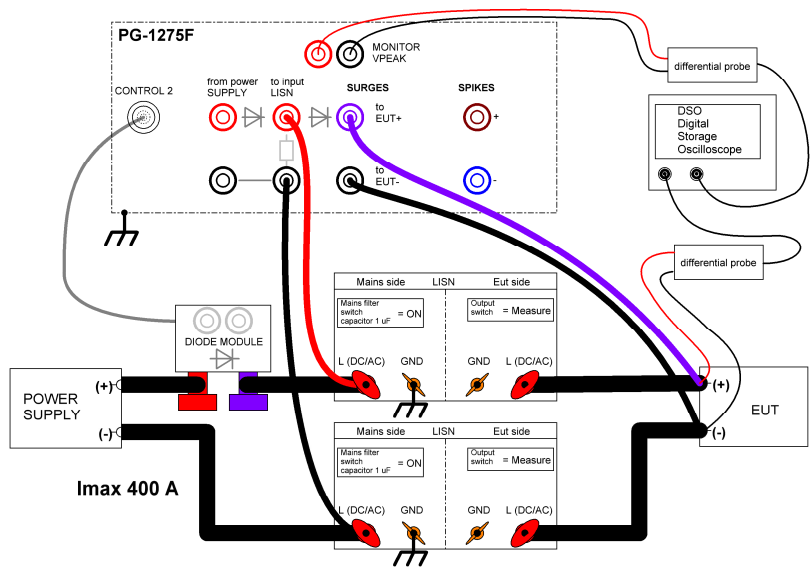
Injected voltage spikes



Injected voltage surge up to 16 A



Injected voltage surge up to 400 A



Ordering information

TYPE	DESCRIPTION
PG1275F	Spikes and surge generator according to MIL-Std-1275F, incl. internal 16 A decoupling diode, 19" rack version

Related products / accessories

TYPE	DESCRIPTION
SW-1275F	Automation software application for MIL-STD 1275F test setup
DM400	External 400 A decoupling diode module for surge tests on high current power leads, compatible with the generators PG1275E and PG1275F.
Other accessories	A full set of test accessories (LISNs, differential voltage probe, oscilloscope) can be included, as required.