

# 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  $\mu$ 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                            | $\leq 50$ ns typ, open circuit  |
| Spikes frequency                            | 20 kHz < f < 500 kHz<br>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 $\Omega$ (DC) + 300 $\mu$ 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.<br>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   |

Sales Partner:



**ABSOLUTE EMC** LLC.  
Covering sales in North America  
United States, Mexico, & Canada

absolute-emc.com  
Phone: 703-774-7505  
info@absolute-emc.com

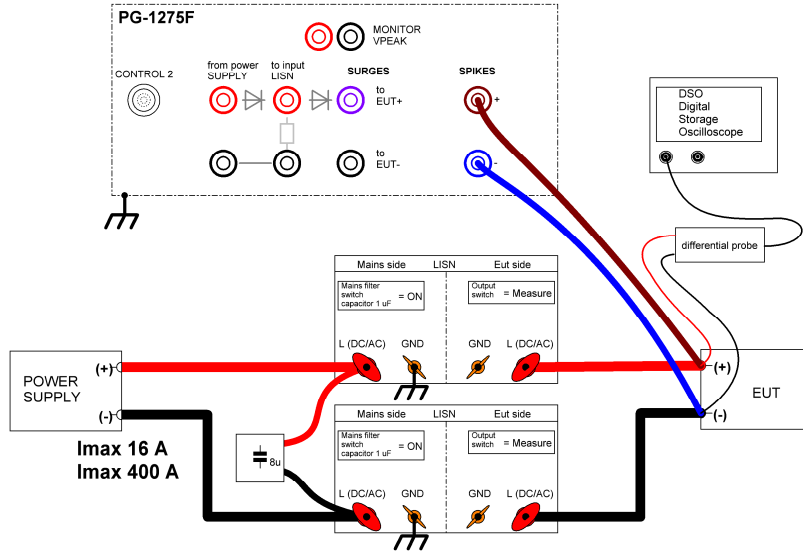
# Optional 400 A decoupling diode module

|                            |                                |
|----------------------------|--------------------------------|
| 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                         |

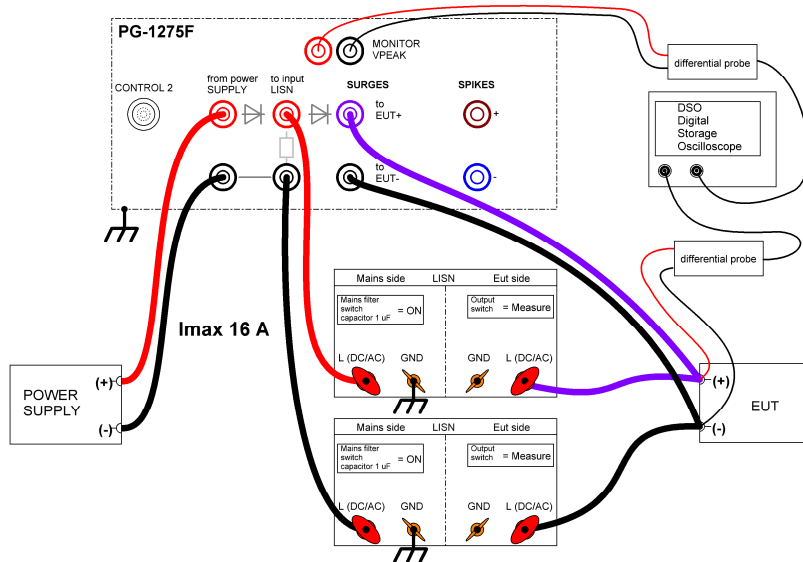


## Examples of test setup's

### Injected voltage spikes



### Injected voltage surge up to 16 A



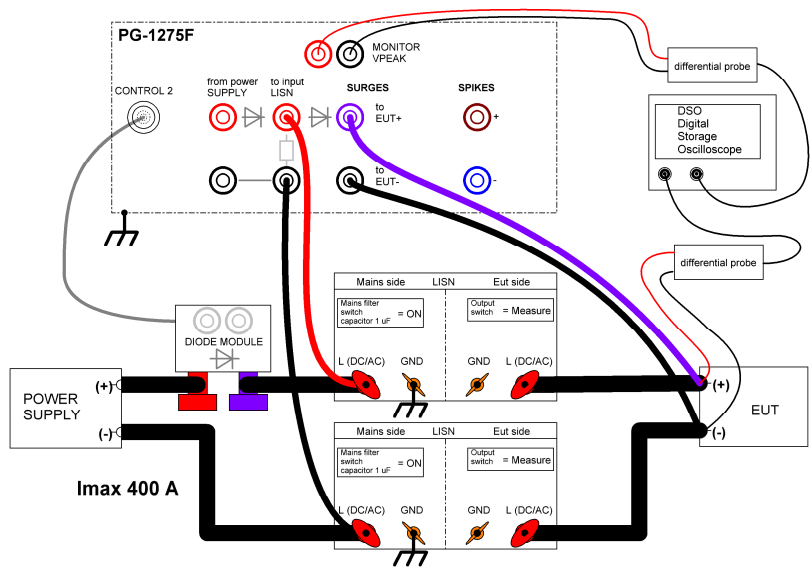
Sales Partner:



**ABSOLUTE EMC** Llc.  
Covering sales in North America  
United States, Mexico, & Canada

absolute-emc.com  
Phone: 703-774-7505  
info@absolute-emc.com

### Injected voltage surge up to 400 A



### Ordering information

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

### Related products / accessories

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