

# 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                                                                             |


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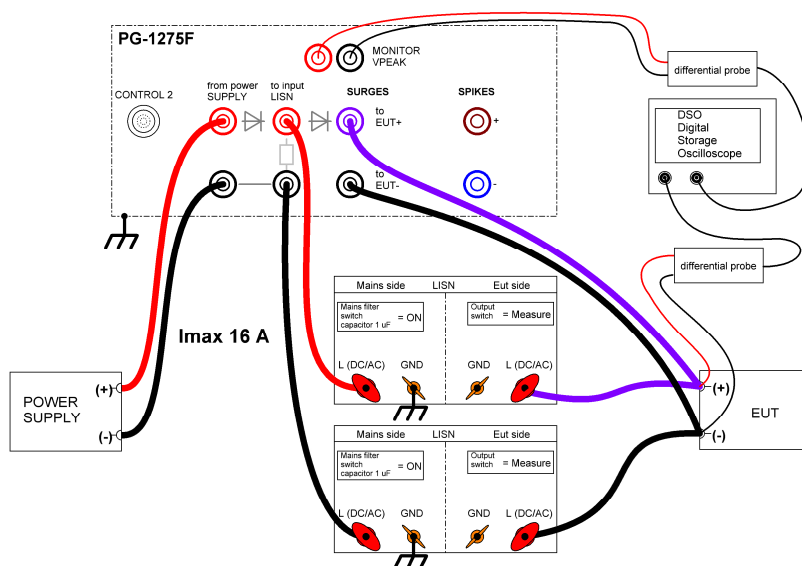
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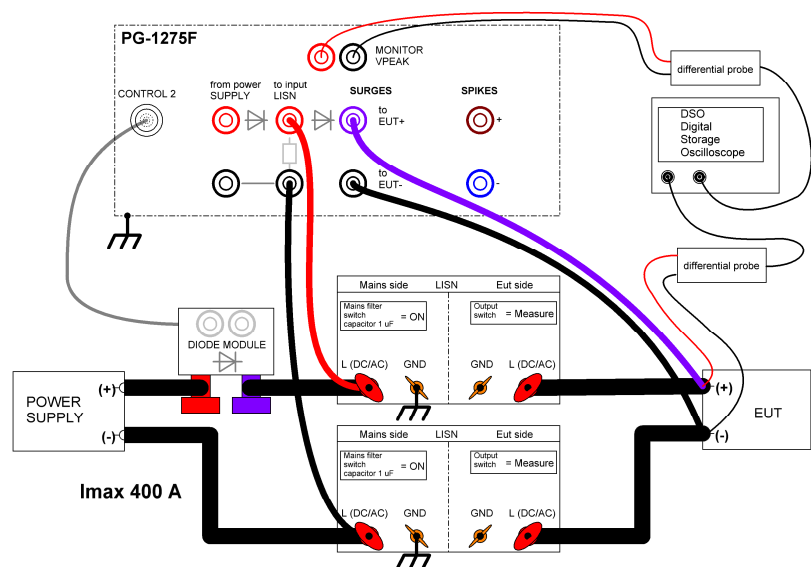
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Injected voltage surge up to 400 A



### 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.                          |