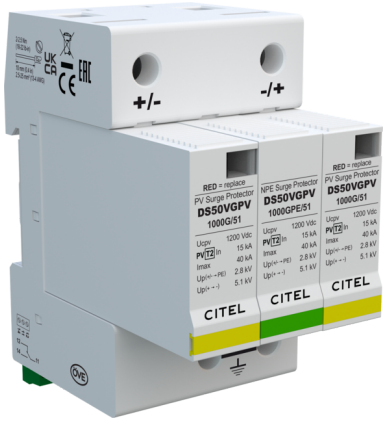
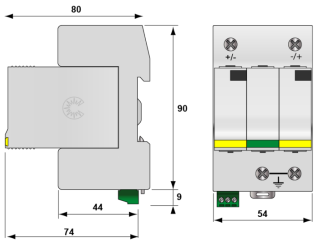
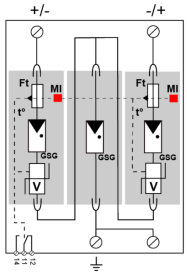
# Type 2 PV surge protector

## DS50VGPVS-1000G/51




- Type 2 surge protector for photovoltaic
- VG technology
- 1000 Vdc
- No leakAge, no operating currents
- Improved life expectancy
- In/Imax : 15 / 40 kA
- Common/Differential mode protection
- Remote signaling
- IEC 61643-31, EN 61643-31, EN 50539-11, UL1449 ed.5 compliance




V: High-energy varistor
GSG: Specific gas tube
Ft: Thermal fuse
C: Remote signaling contact
t°: Thermal disconnection system
MI: Disconnection indicator

| Electrical Characteristics | | |
|---|---|---|
| SPD type | IEC | 2 |
| Network | | PV network 1000 Vdc |
| Nominal PV voltage | Uocstc | 1000 Vdc |
| Max. PV operating voltage | Ucpv | 1200 Vdc |
| Residual Current<br>Leakage current to Ground | Ipe | None |
| PV Permanent Operating current<br>Current consumption at Ucpv | Icpv | None |
| Follow current | If | None |
| Nominal discharge current<br>15 x 8/20 µs impulses | In | 15 kA |
| Max. discharge current<br>max. withstand @ 8/20 µs by pole | Imax | 40 kA |
| Total Maximum discharge current<br>max. total withstand @ 8/20 µs | Imax Total | 60 kA |
| Current withstand short circuit PV | Iscpv | 15 000 A |
| Connection mode(s) | | +/-/PE |
| Protection mode(s) | | Common/Differential mode |
| Protection level +/-<br>@ In (8/20µs) | Up | 5.1 kV |
| Protection level +/PE (-/PE)<br>@ In (8/20µs) | Up | 2.8 kV |
| **Mechanical Characteristics** | | |
| Technology | | VG Technology (MOV+GSG) |
| Connection to Network | | By screw terminals: 2.5-25mm² |
| Format | | Plug-in modular box |
| Mounting | | Symmetrical rail 35 mm (EN 60715) |
| Housing material | | Thermoplastic UL94 V-0 |
| Operating temperature | Tu | -40/+85°C |
| Protection rating | | IP20 |
| Failsafe mode | | Disconnection SPD of the PV line |
| Disconnection indicator | | 2 mechanical indicators |
| Spare module(s) | | DSM50VGPV-1000G/51 |
| Remote signaling of disconnection | | Output on changeover contact |
| Dimensions | | See diagram |
| Weight | | 0.306 kg |
| **Disconnectors** | | |
| Thermal disconnector | | Internal |
| Back-up protection device | | Without |
| **Standards** | | |
| Standards compliance | | IEC 61643-31 / EN 61643-31 / EN 50539-11 / UL1449 ed.5 |
| **Part number** | | |
| 481311 | | |