



# CITEL

## Type 1+2 PV surge protector

### DS50VGPV-1000/12KT1



- Type 1+2 surge protector for Photovoltaic
- VG Technology
- No leakage, no operating currents
- Improved life expectancy
- Impulse currents  $I_{imp}/I_{total}$ : 6.25/12.5 kA (10/350 $\mu$ s)
- Common/Differential mode protection
- Pluggable module
- Remote signaling
- UL1449 ed.5 compliance
- IEC 61643-31, EN 61643-31 certified



Electrical Characteristics		
SPD type		1+2
Network		PV network 1000 Vdc
Nominal PV voltage	Uocstc	1000 Vdc
Max. PV operating voltage	Ucpv	1200 Vdc
Residual Current		
Leakage current to Ground	Ipe	None
PV Permanent Operating current	Icpv	None
Current consumption at Ucpv		
Follow current	If	None
Nominal discharge current	In	15 kA
15 x 8/20 $\mu$ s impulses		
Max. discharge current	I <sub>max</sub>	40 kA
max. withstand @ 8/20 $\mu$ s by pole		
Total Maximum discharge current	I <sub>max</sub> Total	60 kA
max. total withstand @ 8/20 $\mu$ s		
Impulse current by pole	I <sub>imp</sub>	6.25 kA
max. withstand 10/350 $\mu$ s by pole		
Total lightning current	I <sub>total</sub>	12.5 kA
max. total withstand @ 10/350 $\mu$ s		
Current withstand short circuit PV	I <sub>scpv</sub>	15 000 A
Protection mode(s)		Common/Differential mode
Protection level +/- @ In (8/20 $\mu$ s)	Up	5.8 kV
Protection level +/-PE (-/PE) @ In (8/20 $\mu$ s)	Up	4.5 kV
Mechanical Characteristics		
Technology		VG Technology (MOV+GSG)
Connection to Network		By screw terminals: 2.5-25mm <sup>2</sup>
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
Disconnection indicator		3 mechanical indicators
Spare module(s)		DSM50VGPV-1000/12KT1 + DSM50VGPV-1000PE/12KT1
Remote signaling of disconnection		output on changeover contact
Dimensions		See diagram
Weight		0.450 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
Certification		TUV
Part number		485373

