

# Type 2 PV Surge Protectors

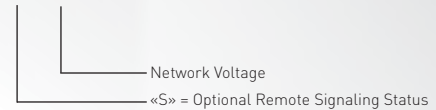
## DS50PV Series



DS50PV-1000

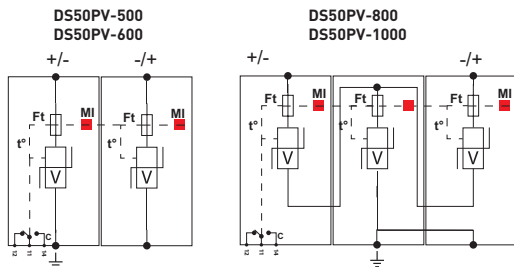
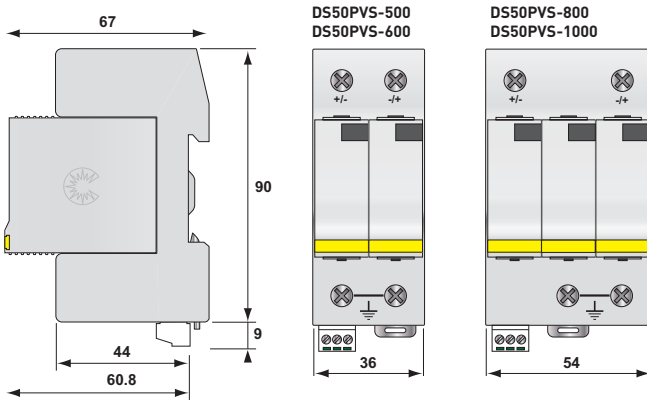
- **Type 2 DC Power Surge Protector for PV Systems**
- **Designed with High Energy MOV's**
- **Modular Design for Ease of Maintenance**
- **Integrated Status Indicator Window**
- **$I_{max}$  : 40 kA /pole at 8/20 $\mu$ s**
- **$I_n$  : 20 kA /pole at 8/20 $\mu$ s**
- **UL 1449 3rd Edition Recognized**

### DS50PVS-xxx



## Dimensions and Electrical Diagram

(in mm)



GSG: Gas-Filled Spark Gap  
 V: High energy MOV  
 MI: Disconnection indicator  
 Ft: Thermal fuse  
 t\*: Thermal disconnection mechanism  
 C: Contact for remote signal (option DS50PVS-xxx)

## Characteristics

CITEL part number	DS50PV-500	DS50PV-600	DS50PV-800	DS50PV-1000
Maximum PV Voltage	Uocstc 500 Vdc	600 Vdc	800 Vdc	1000 Vdc
Protection Mode *	CM/DM	CM/DM	CM/DM	CM/DM
Maximum Operating Voltage	Ucpv 530 Vdc	680 Vdc	840 Vdc	1060 Vdc
Current Withstand Short-Circuit	Iscwcpv >1000 A	>1000 A	>1000 A	>1000 A
Operating Current to the Voltage Ucpv	Icpv < 0.1 mA	< 0.1 mA	< 0.1 mA	< 0.1 mA
Leakage Current to the Voltage Ucpv	Ipe < 0.1 mA	< 0.1 mA	< 0.1 mA	< 0.1 mA
Nominal Discharge Current 15 x 8/20 $\mu$ s Impulses	$I_n$ 20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current 8/20 $\mu$ s Withstand	$I_{max}$ 40 kA	40 kA	40 kA	40 kA
Protection Level (at In)	Up <1.8 kV	<2.5 kV	<3 kV	<3.6 kV

### Disconnecter

Thermal Disconnecter internal

### Mechanical Characteristics

Dimensions	see diagram
Connection	by screw terminal : 4-25 mm <sup>2</sup>
End of Life Mode	disconnection of the SPD from PV line
Disconnection Indicator	by mechanical indicator
Remote Signaling of Disconnection	Option DS50PVS-xxx
Mounting	symmetrical rail 35 mm
Operating Temperature	-40/+85 °C
Protection Class	IP20
Housing Material	Thermoplastic UL94-V0

### Standards Compliance

prEN50539- 11: Europe	PV Surge Protection - Class I and II Testing
UL1449 3rd Edition: USA	Type 4, for use in type 2 locations

### Part Number

DS50PVS-500	480112
DS50PVS-600	480411
DS50PVS-800	480212
DS50PVS-1000	480312

(\* ) CM = Common mode (+/PE or -/PE) - DM = Differential mode (+/-)

