

Type 2 PV Surge Protectors

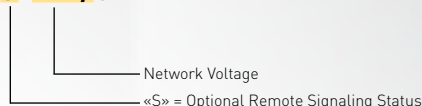
DS50PV/G Series



DS50PVS-800/G

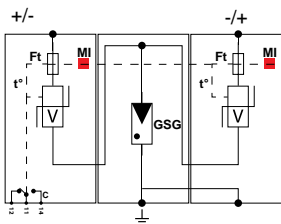
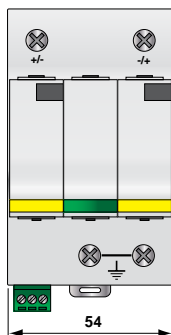
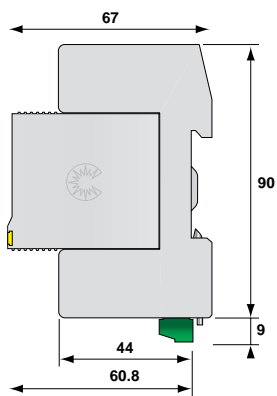
- **UL Type 4 CA DC SPD for PV Systems**
- **MOV and GSG Protection Technology**
- **Modular Design for Ease of Maintenance**
- **Integrated Status Indicator Window**
- **Zero Leakage Current**
- **I_{max} : 40 kA/pole at 8/20μs**
- **I_n : 20 kA/pole at 8/20μs**
- **UL 1449 3rd Edition Recognized**

DS50PVS-xxx/G



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		DS50PVS-500/G	DS50PVS-800/G	DS50PVS-1000/G
Maximum PV voltage	Uocstc	500 Vdc	800 Vdc	1,000 Vdc
Protection mode *		CM/DM	CM/DM	CM/DM
Maximum operating voltage	Ucpv	600 Vdc	960 Vdc	1060 Vdc
Current withstand short-circuit	Iscwpv	>1,000 A	>1,000 A	>1,000 A
Operating current to the voltage Ucpv	Icpv	< 0.1 mA	< 0.1 mA	< 0.1 mA
Leakage current to the voltage Ucpv	Ipe	none	none	none
Nominal discharge current 15 x 8/20 μs Impulses	I _n	20 kA	20 kA	20 kA
Maximum discharge current 8/20 μs withstand	I _{max}	40 kA	40 kA	40 kA
Protection level (at I _n)	U _p	<1,800 V	<2,400 V	<3,000 V

Disconnecter

Thermal disconnecter : internal

Mechanical Characteristics

Dimensions	see diagram
Connection	by screw terminal : 4-25 mm ²
End of life mode	disconnection of the SPD from PV line
Disconnection indicator	by mechanical indicator
Remote signaling of disconnection	Option DS50PVS-xxx/G
Mounting	symmetrical rail 35 mm
Operating temperature	-40/+85 °C
Protection class	IP20
Housing material	Thermoplastic UL94-V0

Standards Compliance

EN50539- 11: Europe	PV Surge Protection - Class I and II Testing		
UL1449 3rd Edition: USA	Type 4 CA	Type 4 CA	Type 4CA

Part Number

DS50PVS-500/G	480141
DS50PVS-800/G	480241
DS50PVS-1000/G	480341

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



Type 2 PV Surge Protectors

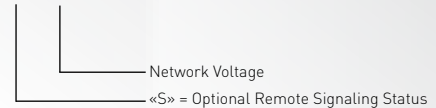
DS50PV Series



DS50PV-1000

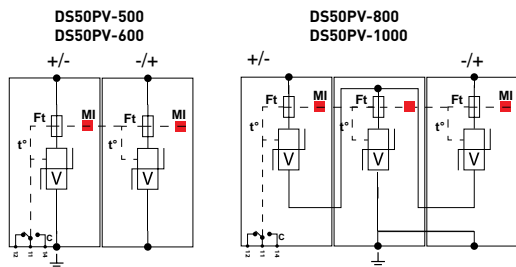
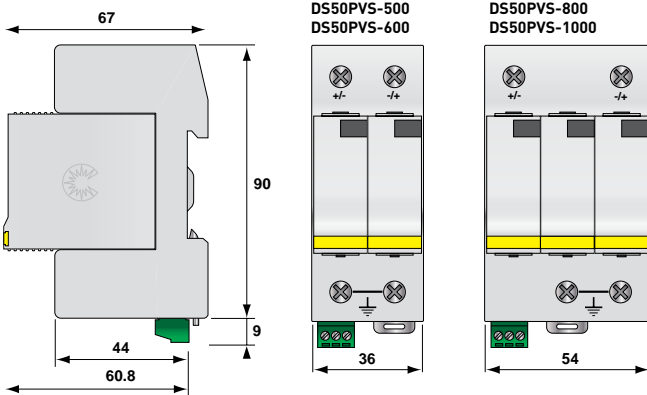
- **UL Type 4 & 1 CA DC SPD's for PV Systems**
- **Designed with High Energy MOV's**
- **Modular Design for Ease of Maintenance**
- **Integrated Status Indicator Window**
- **Imax : 40 kA /pole at 8/20µs**
- **In : 20 kA /pole at 8/20µs**
- **UL 1449 3rd Edition Recognized**

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	DS50PVS-500	DS50PVS-600	DS50PVS-800	DS50PVS-1000
Maximum PV voltage	Uocstc 500 Vdc	600 Vdc	800 Vdc	1,000 Vdc
Protection mode *	CM/DM	CM/DM	CM/DM	CM/DM
Maximum operating voltage	Ucpv 530 Vdc	670 Vdc	840 Vdc	1,060 Vdc
Short-circuit current rating	Scrr >1,000 A (Iscwpv)	100,000 A	>1000 A (Iscwpv)	100,000 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 µs Impulses	In 20 kA	20 kA	20 kA	20 kA
Maximum discharge current 8/20 µs Withstand	Imax 40 kA	40 kA	40 kA	40 kA
Protection level (at In)	Up <1,800 V	<2,500 V	<3,000 V	<3,600 V

Disconnecter

Thermal disconnector internal

Mechanical Characteristics

Dimensions	see diagram
Connection	by screw terminal : 4-25 mm ²
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 CA	Type 1 CA	Type 4 CA	Type 1 CA

Part Number

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

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

