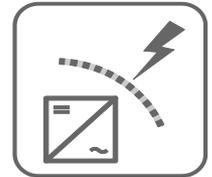


# SURGE PROTECTION



- > The CORE1 is prepared for surge protection modules Type 2 – at the PV inputs as well as the AC output.
- > Two new retrofit packs are available AC\_SPD\_KIT-10  
DC\_SPD\_KIT-40

## PV inputs

- > 9 modules (6x PV+, 2x PV-, 1 PV-PE)
- > monitoring via communications board

Surge Ratings:  $I_{Total} = 50 \text{ kA}$  (8/20 $\mu\text{s}$ )  
EN/UL Category: Type 2 / Type 1CA  
Protective Elements: High Energy MOV  
Housing: Pluggable Design  
Compliance: EN 50539-11:2013 + A1:2014  
UL 1449, 4th edition



## AC output

- > 4 modules (L1/L2/L3/N)
- > not monitored – less likely, central detection at AC mains possible

Network Systems: TT, TN-S  
Mode of Protection: L-N, N-PE  
Surge Ratings:  $I_n = 20 \text{ kA}$  (8/20 $\mu\text{s}$ )  
IEC/EN/UL Category: Class II / Type 2 / Type 1CA  
Protective Elements: High Energy MOV and GDT  
Housing: Pluggable Design  
Compliance: IEC 61643-11:2011  
EN 61643-11:2012  
UL 1449, 4th edition



## Surge protection for Ethernet?

- > not foreseen due to high cost – 3rd party adapter solutions

# SINGLE LINE DIAGRAM

