

Application note

Using a 4-20mA loop

This note shows the connection of a 4-20mA loop to SIRA System arresters. The aim is to protect the acquisition and monitoring systems from transient voltages transmitted by the cables of the loop.

4-20mA loop

Protecting acquisition equipment can be made with 3-lines surge protectors such as SP-101 product family.

The r_{DC} serial resistance causes a maximum voltage drop of 16 mV on channel A and 8mV on channel C.

The choice of SP-101-22 arrester requires that the power supply is limited to 24V.

If the transmitter is damaged and falls to short-circuit, the SP-101-22 module limits the current flow thanks to its thermal protection.

