Media converter with controllable PoE, PDOR
Applications and features

PC-PMCRP101-GE & PC-BTPMCRP101-GE

The two media converters PC-PMCRP101-GE and PC-BTPMC101-GE have the PDOR function (PD Optical Reboot). This function allows the PoE output of the media converter to be switched off and on remotely.
When the 'PDOR' DIP switch on the media converter is set to 'ON', the following mechanism is activated:

- Figure 1:
  An IP camera ④ is connected to a media converter ③ via a fibre optic link **A** to a central switch ①.
- Figure 2
  As soon as the optical connection **A** to the media converter ③ is interrupted, the media converter switches off the PoE power supply at its copper port by means of the PDOR function. This turns off the IP camera ④.

The interruption of the optical connection can be caused intentionally, for example by disabling the corresponding port on the central connected switch. However, it is also possible that the connection is interrupted unintentionally, for example by a broken fibre optic cable.
As soon as the optical connection is restored, the media converter reactivates the PoE power supply at its copper port.
This way, a terminal device connected to the media converter, such as a surveillance camera, can be remotely switched on and off. This can be used to force a camera to restart. In certain cases, there may be legal reasons, for example for data protection reasons, to switch a camera off completely.

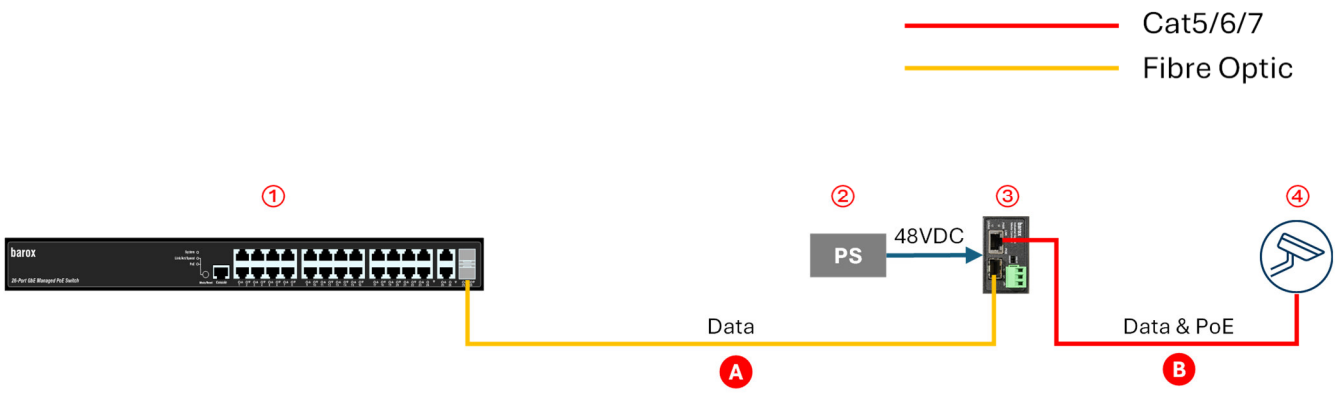

Figure 1: Camera connection with media converter

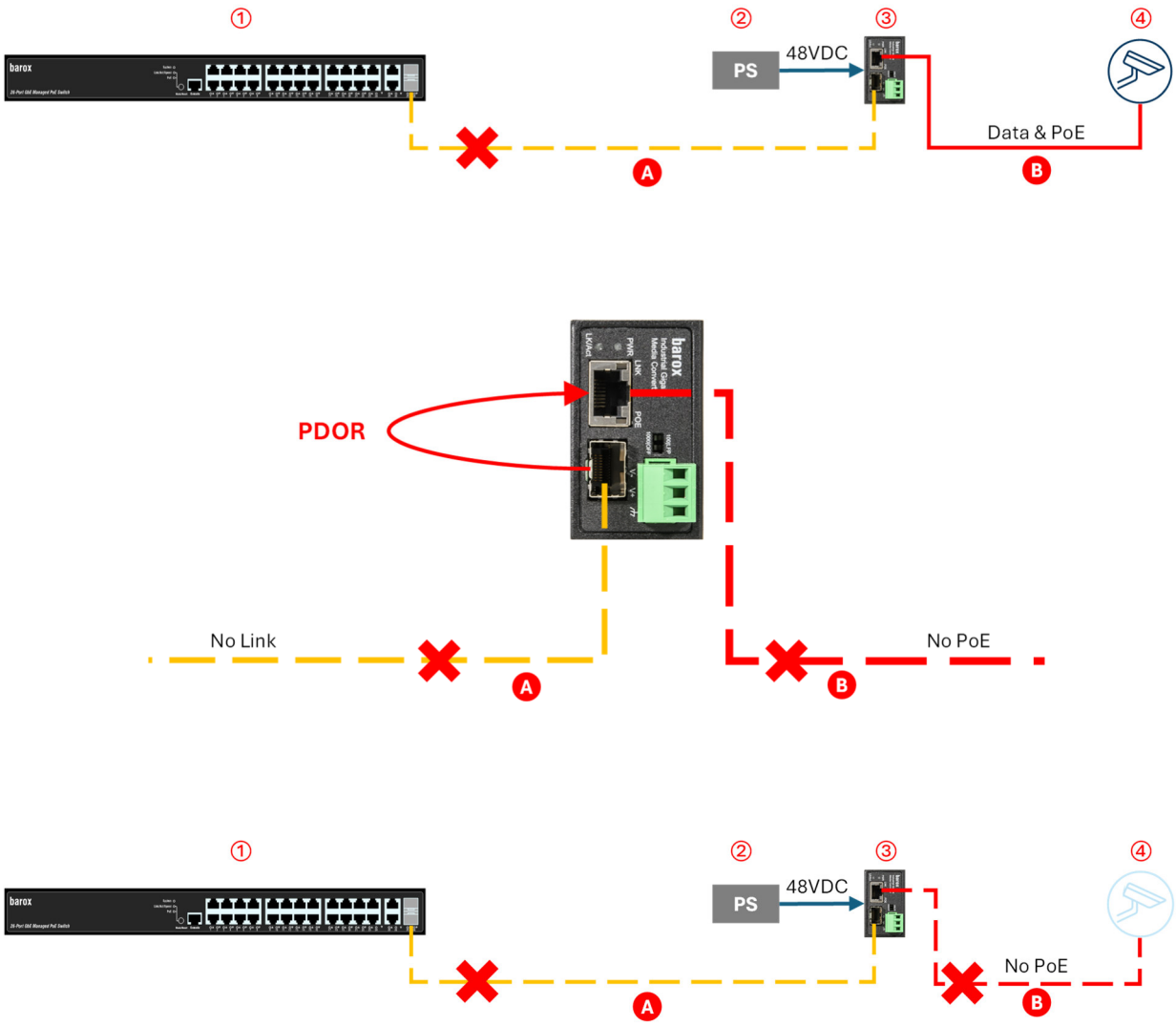

Figure 2, camera shutdown due to fibre optic interruption

Automatic camera reboot through SFP autochecking

From spring 2025, the RY-LGSO25-24 and RY-LGSO25-28 switches will be expanded to include the SFP autochecking function. Combining this function with the PDOR function of the media converters described above allows the monitoring and automatic restart of IP cameras. The optical ports of the switches mentioned can be configured to regularly ping the connected IP camera. If the camera does not respond within a certain time, the optical port is switched off for a predefined time. The PDOR function of the connected media converter then also switches off the power supply to the camera and switches it back on after the predefined time, i.e. the camera reboots. At the same time, the switch reports this incident, e.g. by sending an email.

Overview of the media converters with the PDOR and of the switches with SFP autochecking

Product	Image	Remarks
PC-PMCRP101-GE		industrial media converter 1x10/100/1000TX PoEaf/at 1xSFP 100M/1G
PC-BTPMCRP101-GE		industrial media converter 1x10/100/1000TX PoEaf/at/bt 1xSFP 100M/1G
RY-LGSO25-24		Switch managed, 19", 1HE 4x10/100/1000TX, Combo 24xSFP 100M/1G
RY-LGSO25-28		Switch managed, 19", 1HE 4x10/100/1000TX, Combo 24xSFP 100M/1G & 4xSFP/SFP+ 1G/10G