

Approximate backup time - assumptions for calculations

- 1) Approximate backup time is based on the assumed power consumption of the following receivers.

Camera:

Analog HD camera – 5W

PoE IP – 5W

DVR and NVR with hard drive:

4-channel recorder - 20W

8-channel recorder - 25W

16-channel recorder - 30W

- 2) The calculations assume that cameras are connected to the power supply outputs in the following way:
 - If the PoE IP switch is used, then the cameras are connected to all of its ports.
 - If the power supply with voltage distribution strip is used, then the cameras are connected to all of its ports.
- 3) The calculations take into account the electricity consumption for own needs.
- 4) The calculations take into account the energy efficiency of the used voltage converters (when used in the power supply/switch).
- 5) The basic formula for calculations.

$$t = \frac{0,8 \times C}{Iz + I}$$

t – Approximate backup time [h]

0.8 – The coefficient taking into account the decrease in battery capacity due to aging.

C – Battery capacity [Ah]

Iz – Current consumption by PSU systems [A]

I – Current drawn from the power supply [A]

- 6) The calculations take into account the decrease in battery capacity as a function of the current drawn:

C20 = 100% of the battery capacity

C10 = 95% of the battery capacity

C5 = 85% of the battery capacity

C1 = 60% of the battery capacity