



**S108-C
v1.0
S108-C 10-ports switch for 8 IP cameras
in the enclosure**



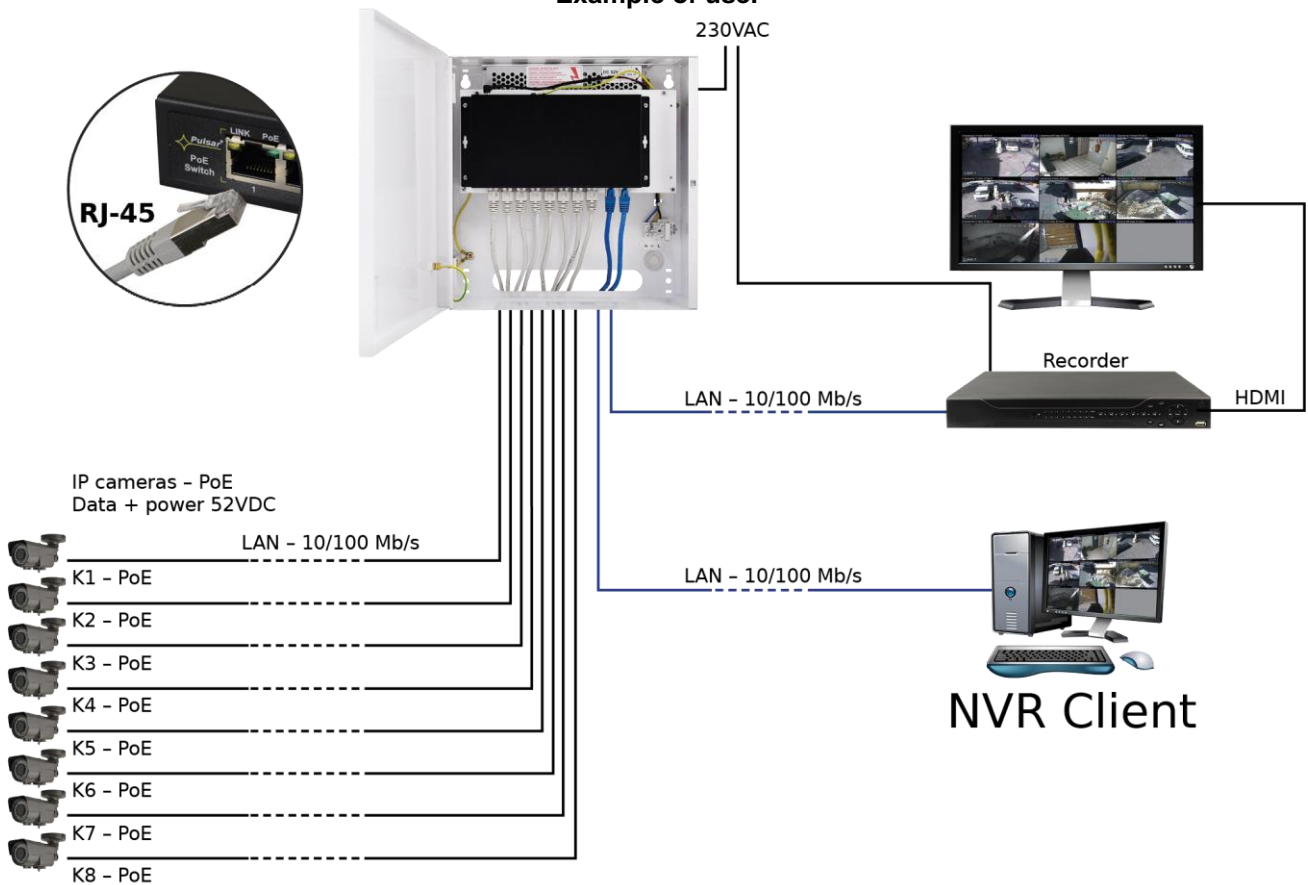
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Supercedes the edition: -----

EN**

Features:

- Switch 10 ports 10/100Mb/s
- 8 PoE ports 10/100Mb/s (data transfer and power supply)
- 2 ports 10/100Mb/s (UpLink)
- 30W for each PoE port, supports devices complaint with the IEEE802.3af/at (**PoE+**) standard
- Supports auto-learning and auto-aging of MAC addresses (1K size)
- LED indication
- Metal enclosure – color white RAL 9003
- warranty – 2 year from the production date

Example of use.



1. Technical description

1.1. General description.

The S108-C is a complete kit to build the CCTV system based on IP cameras. The switch and power supply unit are housed in a metal enclosure.

Automatic detection of any devices powered in the PoE/PoE+ standard is enabled at the 1 – 8 ports of the switch. The UP LINK ports is used for connection of another network device via RJ45 connector. The LEDs at the front panel indicate the operation status (description in the table below).

The PoE technology ensures a network connection and reduces installation costs by eliminating the need to supply a separate power cable for each device. This method allows supplying other network devices, such as IP phone, wireless access point or router.

1.2 Block diagram.

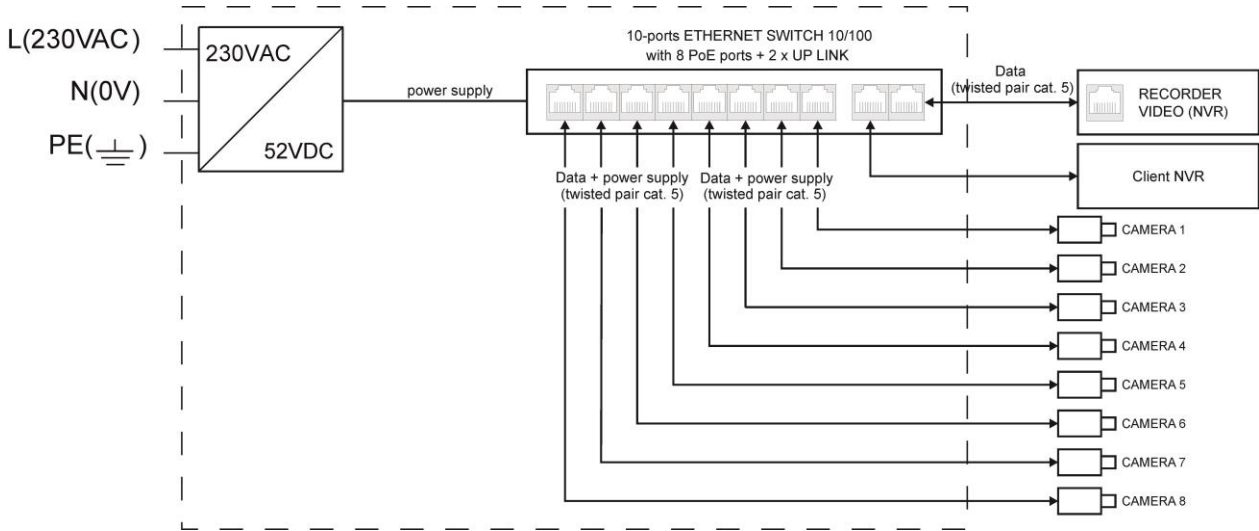


Fig. 1. Block diagram.

1.3 Description of components and connectors.

Table 1. (See Fig. 2)

Component No. (Fig. 2)	Description
[1]	Switch
[2]	Switch mode buffer power supply unit (PS-1504830) 52VDC/150W
[3]	Potentiometer adjusting the output voltage of the power supply (48÷53V)
[4]	LED light – power supply operation indication
[5]	T 6,3A / 250V fuse socket

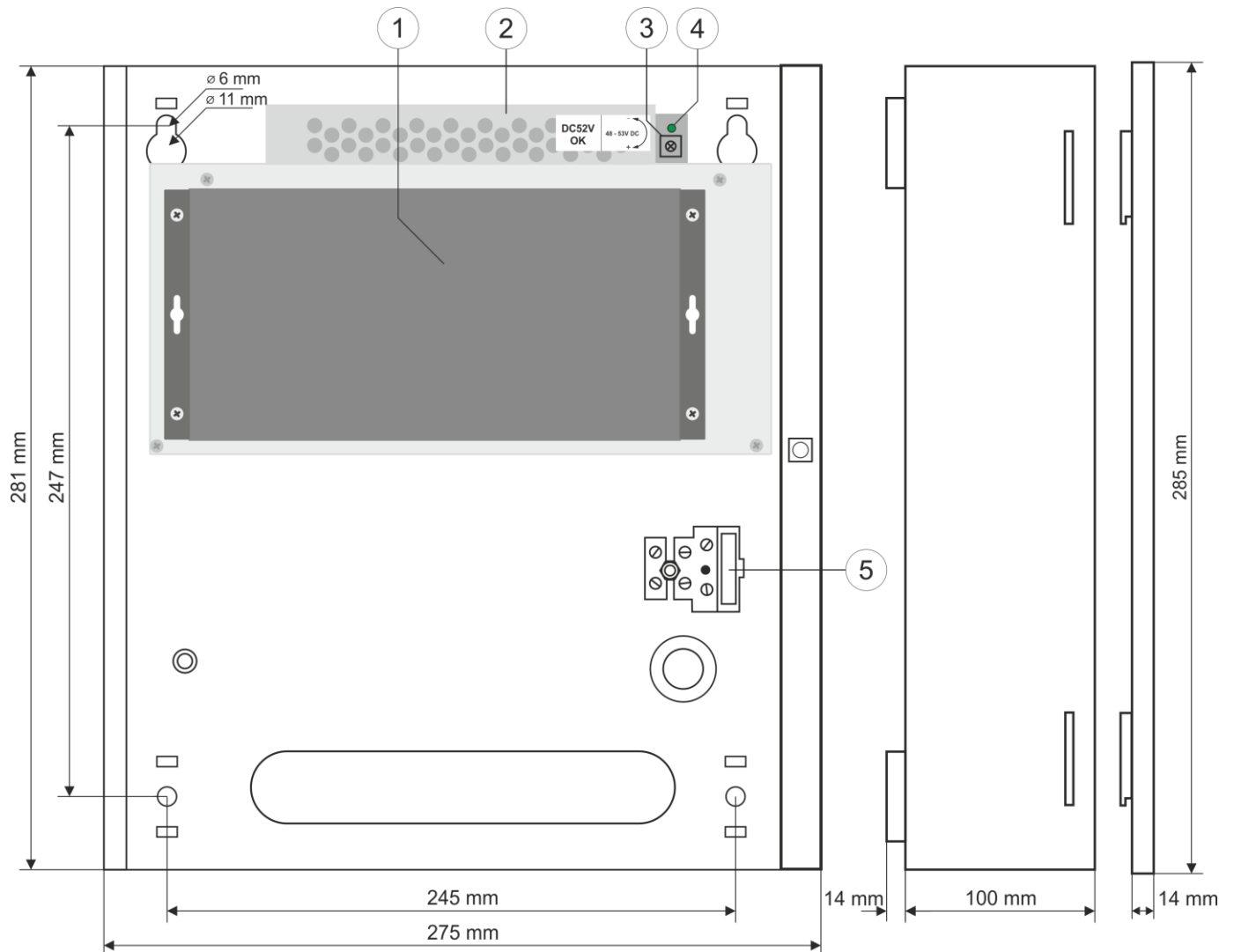


Fig. 2. The enclosure view.

Table 2. (See Fig. 3)

Component No (Fig. 3)	Description
[1]	8 x PoE ports (1÷8)
[2]	2 x UPLINK port
[3]	52VDC power supply socket

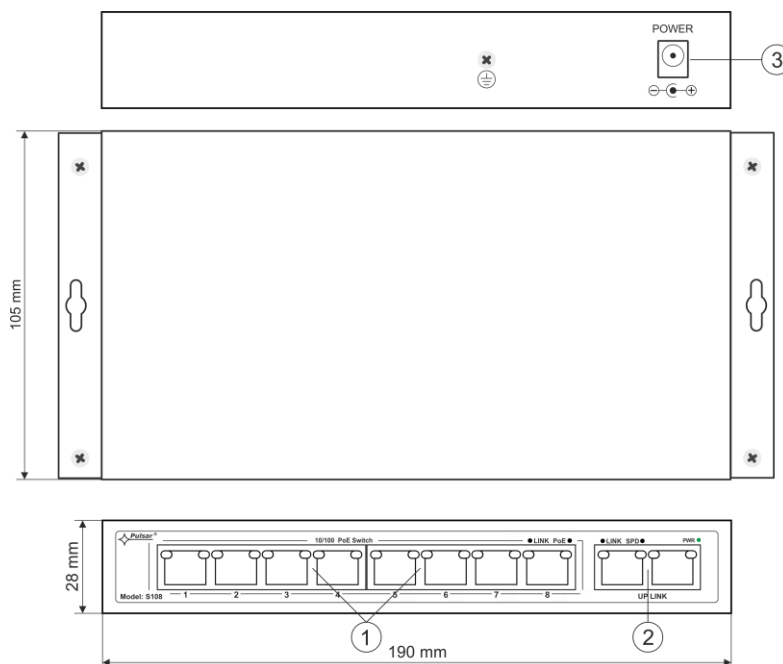
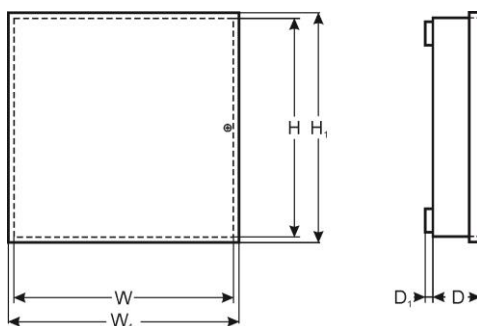


Fig. 3. The view of the switch.



1.4 Technical parameters (Table 3)

Table 3.

Ports	10 ports 10/100Mb/s (8 x PoE + 2 x UP LINK) with connection speed auto-negotiation and MDI/MDIX Auto Cross)
PoE power supply	IEEE 802.3af (1÷8 ports), 52V DC / 30W at each port * Used pairs 4/5 (+), 7/8 (-)
Protocols, Standards	IEEE802.3, 802.3u, 802.3x CSMA/CD, TCP/IP
Bandwidth	1,6Gbps
Transmission method	Store-and-Forward
Output current at the PoE ports (RJ45)	8 x 0,6A Σ I=2,3A (max.)
Optical indication of operation	Switch power supply; Link/Act; PoE Status
Power supply	176 ÷ 264VAC 50Hz/ 1,1A/230VAC
Operating conditions	temperature -10°C ÷ 40°C, relative humidity 5% - 90%, no condensation
Dimensions	W=275, H=281, D+D1=102+14 [+/- 2mm] W1=280, H1=285 [+/- 2mm]
Enclosure	Steel plate, DC01 1,0mm color white RAL 9003
Closing	Cheese head screw x 1 (at the front)
Notes	The enclosure does not touch the assembly surface so that cables can be led.
Gross/Net weight	3,1/3,3 kg
Protection class EN 60950-1:2007	II (second)
Storage temperature	-20°C ÷ 60°C
Declarations	CE

* The given value of 30W per port is the maximum value. The total power consumption should not exceed 120W when all PoE ports are being used.

2. Installation

2.1. Requirements

1. The device should be mounted by a qualified installer, holding relevant permits and licenses (applicable and required for a given country) for 230V/AC and low-voltage installations.
2. The device shall be mounted in confined spaces, according to the environment class II, with normal air humidity (RH=90% max. without condensation) and the temperature from -10°C to +40°C.
3. The switch shall work in a vertical position that guarantees sufficient convectional air-flow through ventilating holes of the enclosure. Before installation, prepare a Switch'a load balance. The given value of 30W per port is the maximum value referring to a single output. **The total power consumption should not exceed 120W when all PoE ports are being used.** The increased demand for power is particularly evident in the case of cameras with heaters or infrared illuminators - when launching these features, the power consumption increases rapidly, which may adversely affect the operation of the switch. As the device is designed for a continuous operation and is not equipped with a power-switch, therefore an appropriate overload protection shall be guaranteed in the power supply circuit. Moreover, the user shall be informed about the method of unplugging (usually through assigning an appropriate fuse in the fuse-box). The electrical system shall follow valid standards and regulations.

2.2. Installation procedure

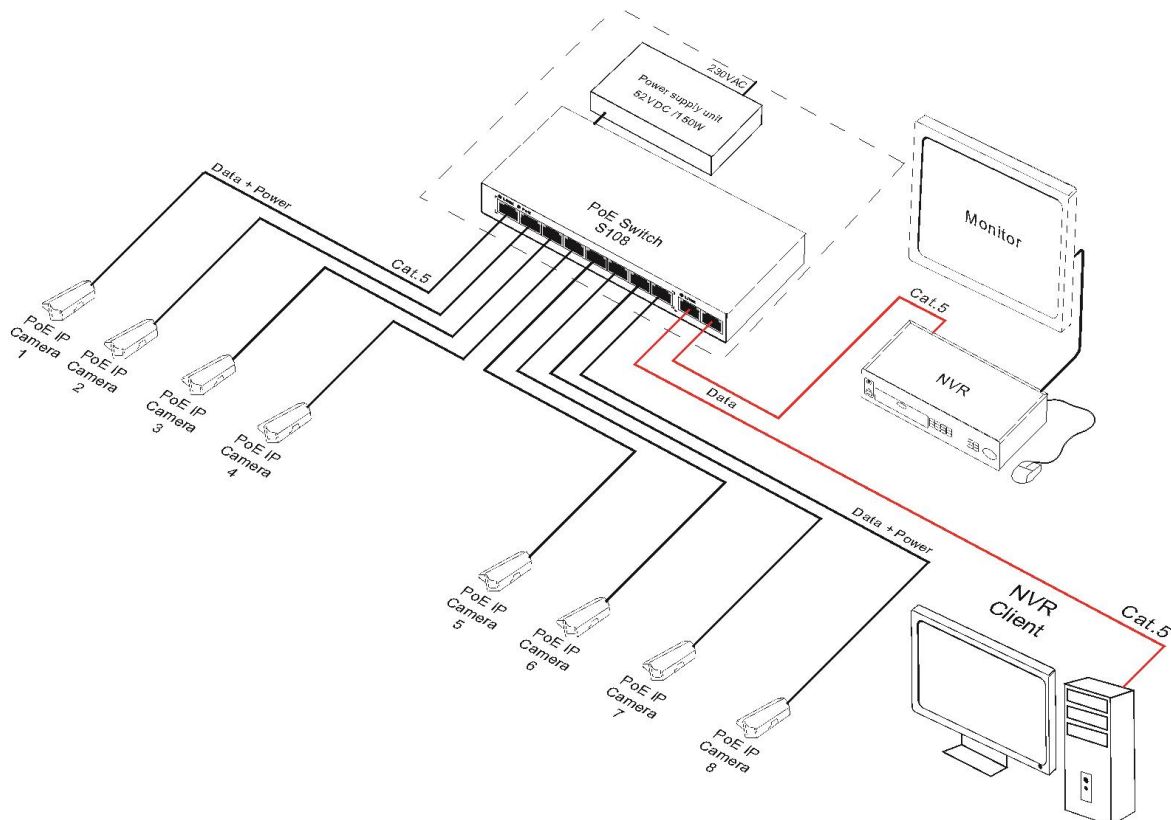
1. Before installation, cut off the voltage in the 230V power-supply circuit.
2. Mount the PSU in a selected location and connect the wires.
3. Connect the power cables (~230Vac) to L-N clips of the PSU.

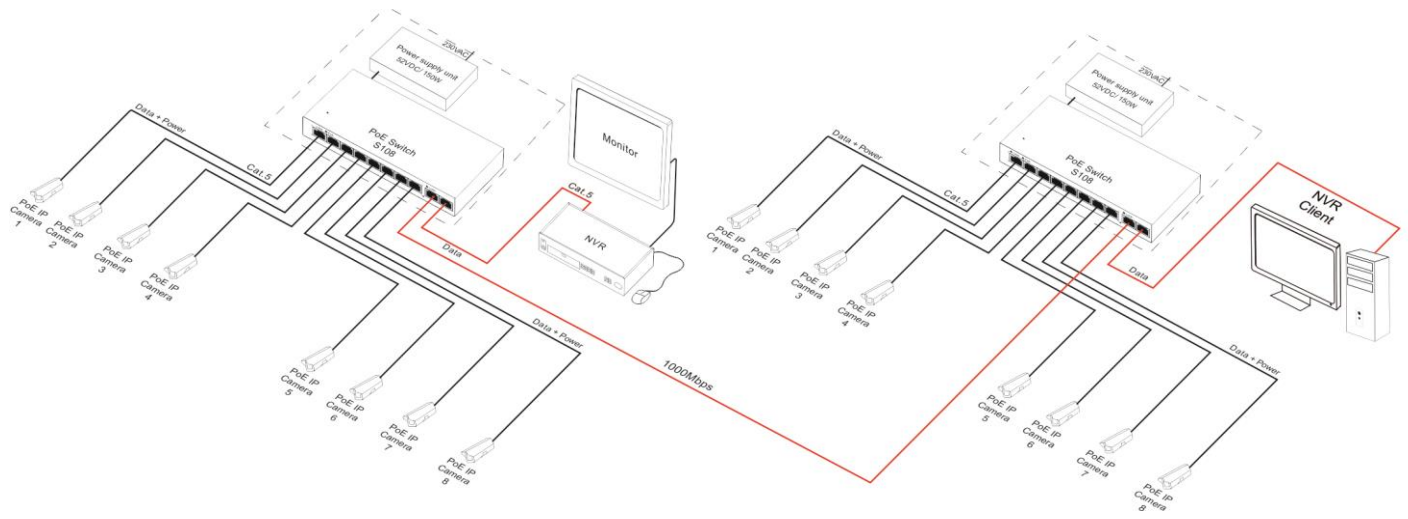


The shock protection circuit shall be performed with a particular care, i.e. the yellow and green wire coat of the power cable shall stick to one side of the terminal - marked with '⚡' symbol on the PSU enclosure. Operation of the PSU without the properly made and fully operational shock protection circuit is UNACCEPTABLE! It can cause a device failure or an electric shock.

4. Connect the ground wire to the terminal marked with the ⚡ symbol (power supply module connector). Use a three-core cable (with a yellow and green PE protection wire) to make the connection. Lead the cables to the appropriate clips through the insulating bushing of the connection board.
5. Connect the power (~230V).
6. Connect the camera cables to the RJ45 connectors (PoE connectors)
7. Check the optical indication of the switch operation.
8. After installing and checking proper working, the enclosure can be closed.



Connection schemes







3. Optical indication.

OPTICAL INDICATION OF THE SWITCH'S POWER SUPPLY (1+8)

<p>GREEN LED LIGHT (PoE) Indication of the PoE power supply at the RJ45 ports</p> 	<p>OFF - no power supply at the RJ45 port (the device is not connected or not compliant with the IEEE802.3af standard) ON – power supply at the RJ45 port Blinking – short-circuit or output overload</p>
<p>YELLOW LED LIGHT (LINK) The connection status of LAN devices, 10/100Mb/s and data transmission</p> 	<p>OFF - no connection ON - the device is connected; 10/100Mb/s Blinking – data transmission</p>

OPTICAL INDICATION AT THE UPLINK PORTS

<p>GREEN LED LIGHT</p> 	<p>Applies only to the right side port: No light (OFF) - No supply voltage of the switch ON - the switch is powered, correct operation</p>
<p>YELLOW LED LIGHT (LINK) The connection status of LAN devices, 10/100Mb/s and data transmission</p> 	<p>OFF - no data transmission ON - the device is connected 10/100Mb/s Blinking – data transmission</p>



WEEE LABEL

Waste electrical and electronic equipment must not be disposed of with normal household waste. According to the European Union WEEE Directive, waste electrical and electronic equipment should be disposed of separately from normal household waste.

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