

# Lightware Redundancy Solutions

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White Paper

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Lightware Visual Engineering

## Lightware Redundancy Solutions

One of the most crucial factors in reducing or possibly eliminating system downtime is to ensure that power is always available to vital network elements. The best method to achieve this is to ensure that an effective power redundancy solution is implemented in the system. An efficient redundancy solution can help minimize, or even almost fully eliminate system downtime.

The specific configuration of a power redundancy solution may vary from one application to the next, but the basic idea behind all power redundancy solutions is the same: to provide an option to switch to a back-up power source in case the primary power source becomes unavailable. In such redundancy applications it is important to have the secondary source to be fed from a different power line.

## Provide Redundant Power Sources for Devices without Redundant Power Supplies



Though most methods aim to provide redundancy in power sourcing, Lightware also offers further safety and security in the form of CPU redundancy, where a second, backup CPU can take the computing tasks over from the primary unit when it fails.

Most manufacturers in the pro AV industry have some sort of a redundancy technology available, however, while most of these systems provide secondary power source, even more than two sources, the malfunctioning power adapters can only be exchanged and/or fixed in factory. Some systems are just too bulky, or their integration into a bigger system is just too deep which makes it quite a task to remove it and take it back to the place of manufacture for servicing. This brings forward the need for a system where these failing primary parts of the equipment can be changed without causing a break in operation: hot swapping and hot plugging consist in replacing or adding components without stopping or shutting down the system. More specifically, hot swapping describes replacing components without interruption to the system, while hot plugging describes the addition of components that would expand the system without significant interruption to the operation of the system.

Lightware's modular matrix systems, the MX line and the 25G Hybrid matrix switchers are both available with redundancy options, also including the CPU module. As an added extra, 25G Hybrid matrix series offer hot-swapping for these redundant systems. The MX line 80R, 65R and 33R chassis include factory built-in power redundancy.

You may learn more about the MX and the 25G modular matrix switchers, redundancy and hot swapping on the Lightware.eu website:

<http://www.lightware.eu/products/by-function/modular-matrix-frames/1203-mx-fr80r>

<http://www.lightware.eu/products/by-function/modular-matrix-frames/1204-mx-fr65r>

<http://www.lightware.eu/products/by-function/modular-matrix-frames/1202-mx-fr33r>

<http://www.lightware.eu/mx-cpu2>

<http://www.lightware.eu/25g-psu-1600>

<http://www.lightware.eu/25g-cpu>