![Hirschmann - A Belden Brand logo]

Do Hirschmann network devices support Safety applications like PROFISAFE?

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""Safety"" - in short - means that in case of a communication failure the whole application ""moves"" to its safe state. This safe state is defined depending on the application. It could mean that any movement stops immediately, or that a specific movement stops and reverses a bit - always depending on what might be the right behavior to protect life or to reduce the injury or at least to not make it worse than it already is.

An application is based on one or more controllers communicating with their sensors and actuators using a network to exchange information. These controllers even supervise this communication. A safe behavior demands that the controller always recognizes an irregular condition and reacts according a defined rule set. This also demands that such a safe application always demands the availability of such a controller, which means that such a controller must never fail. Because electronic can fail, this demands for a redundant controller. The sensors and actuators also must be designed such that a failure never can harm humans.

In case of communication, a controller loosing the contact to its slaves will start a procedure which leads to a state which is appropriate for the respective situation. Therefore the network has no effect on the safety. But to support a high availability it might be a good idea to design a redundant network.

Summary: networking products are not concerned by safety demands but might support safety apps offering redundancies.