

Supporting Elevators with the ISONAS IP-at-the-door Access Control System.

Panel-Free Access Control for Elevators

Elevator access control is easily implemented by the ISONAS PowerNet™ Reader-controllers and the Crystal Matrix™ software package.

Multiple elevators are supported, with service capability for more than 250 floors.

The system provides the ability to completely control floor access, based on the personnel's authorizations and time schedules.

The ISONAS access control system's configuration profiling feature allows multiple elevators to share common access control rules.

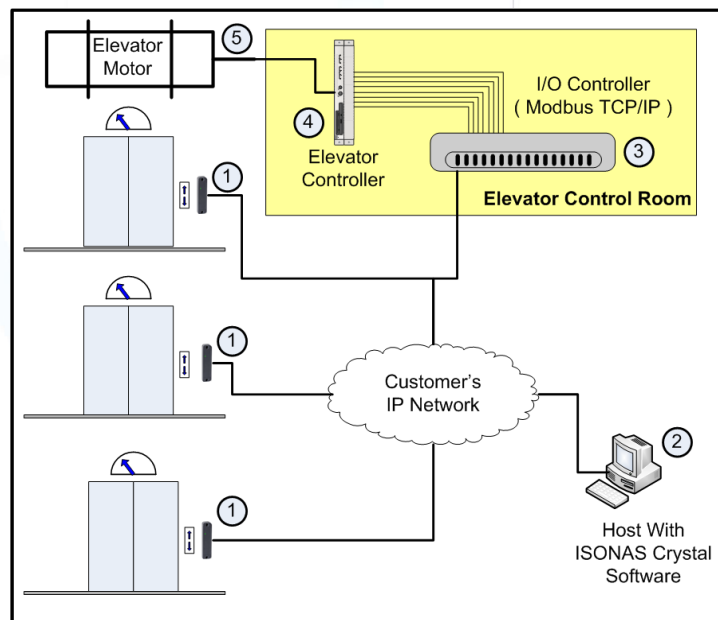


Figure 1: Solution Topology

Elevator Solution Components

- | | |
|----------------------------------|--------------------------------|
| 1) Associated Reader-Controllers | 3) Digital I/O module (Modbus) |
| 2) Host computer | 4) Elevator Controller |
| | 5) Elevator Motor |

Elevator Solution Description

Individual reader-controllers are installed where the user accesses the elevator. The Crystal Matrix™ software determines which floors are to be enabled. The enabling of the individual floors of the elevator is done by the Digital I/O module's relay contacts which are connected to the elevator controller's inputs. Digital I/O modules are industrial off-the-shelf devices that use the factory-automation protocol "Modbus TCP/IP".

Network Connectivity to the Elevator Car

Often, the customer is interested in having a reader-controller installed within the elevator car. Many elevators do not have TCP/IP connectivity into the elevator car itself.

Figure 2 illustrates one recommended method available to provide the IP data connection at the elevator car.

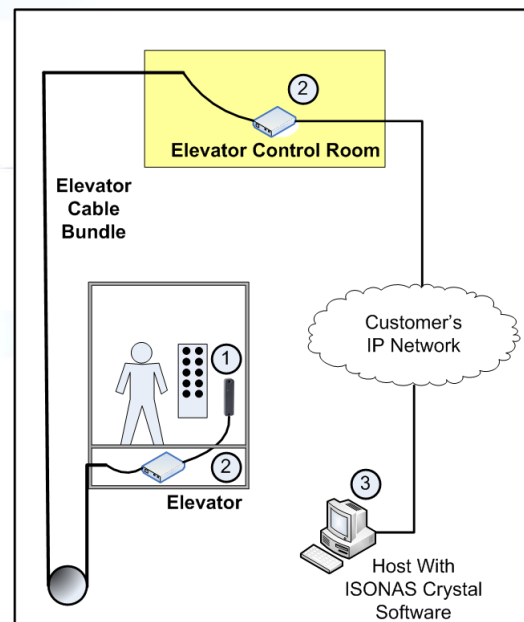


Figure 2:

Network Connectivity Components

- 1) PowerNet Reader-Controller
- 2) Ethernet Extenders (Pair)
- 3) Host computer

Ethernet extenders are common networking devices that pass the required TCP/IP data over a pair of copper wires that are located within the elevator's cable bundle.

Please contact your ISONAS account representative for the list of currently supported Digital I/O modules and detailed installation instructions.