## MUSEUM

# Helvar

SOLUTIONS Energy efficient lighting, Lighting

control, Blind control, DALI PRODUCTS

Router 910: 31 Relay Units: 248 Blind controllers: 224 MultiSensors: 55 Input units: 94 Touch panels: 2

### MUSE Trento, Italy

#### Project Background

The Science Museum of Trento is one of the most innovative museums in Italy. Mixing scientific information and practical experimentation, it launched a new way of interacting with the public. MUSE is entirely designed and created with the objectives of raising the standard of quality of life and promoting energy savings.

Helvar was the chosen partner in this prestigious project, where an efficient lighting system was required to meet the stringent sustainability criteria, but also to play an integral part in the architectural concept.

#### What did the customer say?

"The human element, along with light, playfulness and joy, are the fundamental dimensions of this architecture", says Renzo Piano. "In these rooms with alternating areas of light and shade, everyone is welcome. Architecture should be joyous – it must tenaciously cultivate the idea that the meeting places of culture and civilization are meeting places of shared joy", muses Piano.

#### Helvar meets the needs

The entire building was wired with Helvar's DALI systems. The router units create information hubs for controlling the lighting and the motorised blinds. The ingenious architecture of the museum uses the natural light that comes through the buildings extensive windows and large skylight in the central area. All levels of the building even the lowest floors receive sunlight, leaving only a few areas in the shade which then enables the programmed lighting scenes to use artificial lighting where necessary. One of the most important elements is minimising the operating costs and CO2 emissions.

The lighting system is left with the task of keeping the general lighting levels constant. With the help of MultiSensors, the intensity of the light fluctuations is adjusted continuously during the day depending on the amount of natural light available. Energy efficiency is also aided by the motorised blinds controlled by a Helvar sensor system that monitors temperatures and solar radiation. The entire system is connected to the Building Management System, allowing centralised management and constant monitoring of energy consumption and functionality. Helvar lighting systems integrate seamlessly with all building automation systems in this high-tech museum.