Automation Control

Horiso's control options for Rack Arm Systems can be set to suit building or individual user requirements at various levels of sophistication and comfort. Control options can be installed either by hardwired or wireless control, depending on the most suitable option for each project. From basic switch or remote control, to time scheduled automation, through to integration with building management systems, multiple options with scalability are available.

Additional automation features can be included, such as: linked blind control, individual user programming, and weather sensor-based automation for temperature and wind conditions.

Intelligent automation with predictive sun tracking can be achieved using advanced building environmental modelling which assesses and implements programmed automation, based on a building's geographical location, its shadowing by surrounding buildings, and its solar path positioning.

Automation control options include:

- Switch/remote/Wi-Fi tablet and device control
- Time scheduled automation response settings
- Temperature and wind control
- BMS and A/V integration
- Advanced building environmental modelling
- Sun tracking

Standard Control

Standard Switch and Remote control

Hardwired or wireless control for opening, titling and closing functionality.

Standard Automation

Time scheduled response settings

Responsive base control opens at scheduled times. Flexible scheduling set daily, weekly, monthly or yearly.

Sensors

Strategically placed sensors allow the system to react to weather conditions by automatically closing. Sensors monitor brightness/illuminance, wind, rain and temperature, set to programmed threshold values.

Group Control

Linked systems can be controlled in unison for zonal control.

Common Automation Features

Wi-Fi operated tablet and device control

Hardwired or wireless control for opening and closing movement plus tilting functionality.

Integrated Software

Flexible scheduling, Access Control – User and Group control, history and logging for analytics, system status and overrides, visual interaction with custom floorplans and dashboard views available.

BMS and A/V Integration

Systems communicate directly with BMS/AV systems. Each device is treated as a separate node in the network and given its own unique address.

- Horiso automation systems are BACnet native devices so they integrate and communicate directly with BMS systems for improved reliability and resiliency

Advanced Intelligent Automation

Advanced intelligent automation adds an additional level of sophistication to standard automation with predictive automated control. Louvre systems operate proactively with advanced building environmental modelling algorithms.

Advanced Building Environmental Modelling

Detailed modelling on a building's geographical coordinates, solar path trajectory, overshadowing, reflected glare and sun-blocking from surrounding buildings is assessed for sun tracking control and placement of sensors.

- Strategically placed sensors allow the system to determine overcast, bright overcast, and clear sky conditions
- Detailed modelling for complex shadows in unique building layouts

Sun Tracking

Automated proactive sun tracking tilts louvres predictively at various angles throughout the day to control glare and solar heat gain. The sun tracking is programmed to the building's advanced environmental modelling solar path algorithms.

- Sun angle of incidence algorithm takes into account:
- Geographic location
- Fenestration orientations
- Daylight harvesting
- Control of solar heat gain