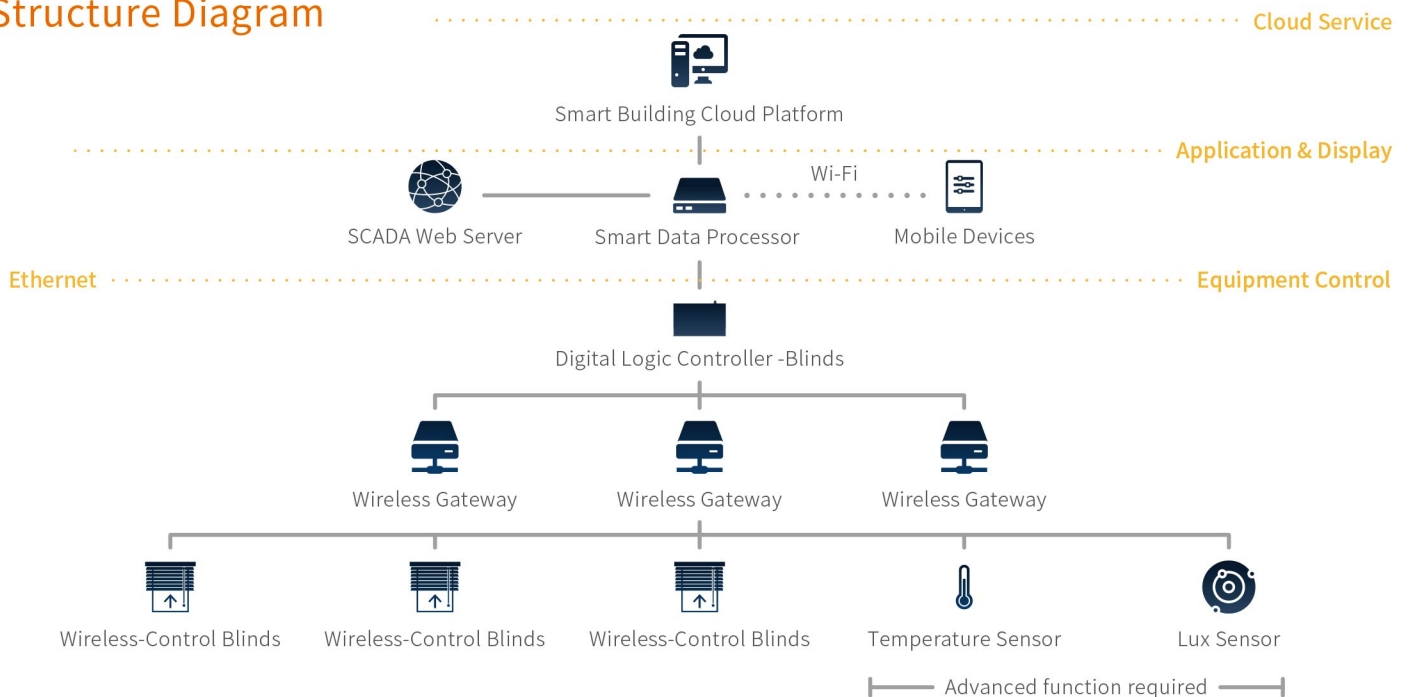




To control the position of the blinds by the algorithm, which is based on the outdoor illuminance, indoor and outdoor temperature, and the solar altitude angle & the azimuth angle of sun where the building is located, for meeting the setting requirements, and can also be controlled by linking with smart lighting system and HVAC optimization system to optimize the energy-saving and comfort.

Smart Blinds System

Structure Diagram



System Features



Wireless Network Architecture

Using Mesh Network, you can easily complete single or group control in a freely definable way without adding the blinds cable wiring.



Scheduling

Users can set different blinds position for each space via a tablet or the web page.



0-100% Open Adjustment

Blinds position can be adjusted from 0% to 100%, and can feedback instant position information.



Outdoor Sunlight Introduce Control

Users can set direct sunlight exposure length, and the system will control the position of blinds according to the location of the space and the sun angle information.



Indoor Energy-Saving Optimization Control

The system can comprehensively compare the external cooling load with the energy saving of the internal lighting and sunlight to control blinds position.

System Functions

System	Function	Description
Basic	Wireless control	Remote control via the mobile devices App.
	Single/Group control	Each blinds is equipped with a wireless control module that can be single or group and from 0% to 100% position control.
	Scheduling	blinds position setting for different areas and time (can be matched with sunrise/sunset time)
Advanced In/outdoor environment sensing module is required	Sunlight introduce control	Users can set direct sunlight exposure length, and the system will adjust blinds position according to the change of the sun angle at different times to keep the set of the indoor sunlight depth.
	Energy-saving optimization control	The system automatically control the optimal blinds position based on the external cooling load and the energy saving of the sunlight adjustment (with the smart lighting system).

Product Specifications



Digital Logic Controller -Blinds

Dimension (L×W×H)	168×107×65 mm
Power requirement	5V~24V DC
Memory	2GB PRDDR4
Core processor	NXP I.MX8M Series
Video output	HDMI

Communication interface	USB 2.0 x 2 Mini PCIE card
Protocol	RJ-45 x 2, 10 / 100 / 1000 Mbps Ethernet 802.11 AC WLAN BT communication



Wireless Gateway

Dimension (L x W x H)	85×85×25 mm
Power requirement	DC 24V / PoE
Protocol	IEEE 802.15.4 Wi-Fi Ethernet



Temperature Sensor

Dimension (L x W x H)	56×56×12.5 mm
Power requirement	DC 24V / 5V mini USB
Temperature	0-50°C
Protocol	IEEE 802.15.4 Mesh Network



Wireless AI/AO Converter

Dimension (L x W x H)	130×100×35 mm
Power requirement	AC 100 - 240V DC 12V / 24V

Protocol	IEEE 802.15.4
Specification	4AO+4AI AO: 10V PWM / 0-10V / 0-20mA AI: 0-10V / 0-20mA



Blinds Wireless Control Module

Dimension (L x W x H)	42.2×20.6×11 mm
Power requirement	DC 5V

Communication interface	3.3V UART TTL
Supported	Baudrate : 9600, 19200, 38400, 57600, 115200 Parity : None, Odd Stop Bits : 0, 1

The appearance of the product may be subject to slightly change.