

# MechoNet™ Wireless Daylight Sensor (WDS) and Controller

**No wires. No batteries. No complications.**

## Room-level or total building automation with daylight control on MechoNet

MechoSystems' Wireless Daylight Sensor with EnOcean® wireless technology monitors daylight coming through the curtainwall without the clutter and hassle of managing

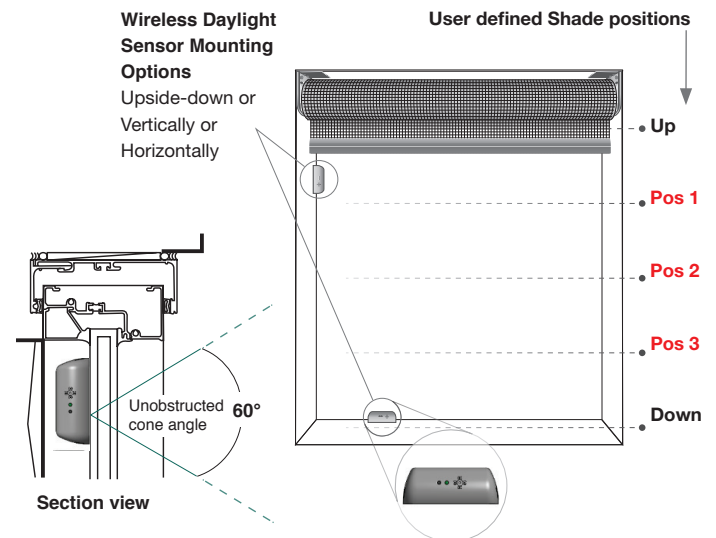
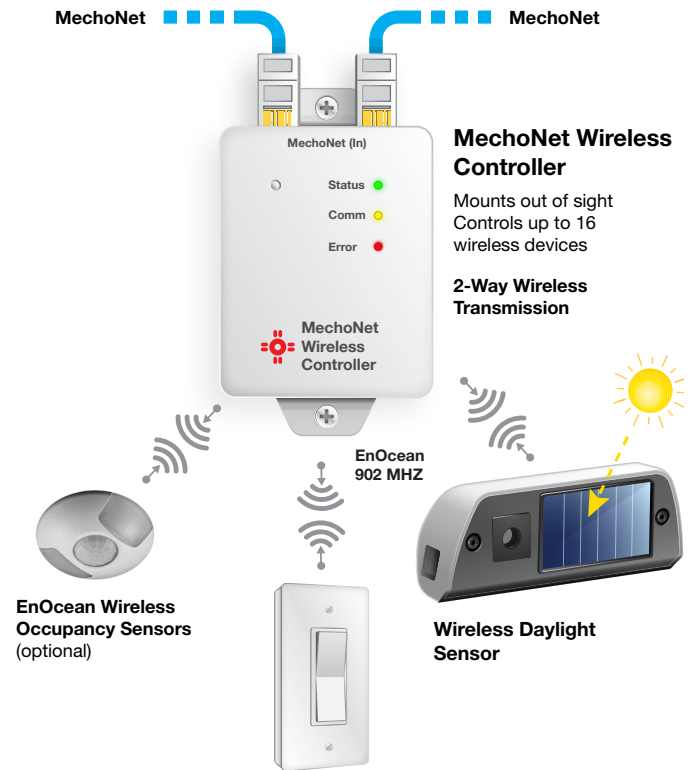
cables and batteries. This sustainable solution harvests energy from the sun to power its ultra-low energy internal electronics. The controller sits on the bi-directional MechoNet communication network.

### Features and benefits:

- EnOcean wireless technology.
- 2, 3, 4 or 5 customizable stop positions.
- Each controller manages up to 16 EnOcean devices.
- Form factor: nests against the mullion and is less obtrusive than a round sensor.
- Monitors daylight coming through the curtainwall.
- Photopic and sensitive to human comfort.
- No wires. No batteries.
- WDS is solar-powered photovoltaic (PV).
- WDS automatically converts light to energy for power.
- WDS is able to withstand millions of recharges.
- Has ultra-low power requirements with reliable EnOcean-based, 2-way wireless messaging.
- Peel-and-stick sensor mounts horizontally, vertically, and upside-down on the mullion, without any screws.
- Available in white, grey, and black.
- Night mode allows customized shade positioning when lux levels dip below a predefined value.
- Override capability with timed automation mode return.

### Applications:

- Automated shade positioning with user defined intermediate stop points based on adjustable brightness thresholds.
- Integrated window-covering, lighting, and HVAC control.
- Scalable daylight measuring of motorized window coverings to optimize comfort, views, and energy conservation.
- Stand alone system or relays sensor data up to SolarTrac® to provide local brightness control in support of whole-building automation.
- Daylight harvesting and code compliance. (e.g. LEED®, ASHRAE 90.1-2010, Title 24-2013, IECC2012, IgCC 2012)
- Excellent for new construction, home, or commercial building control.

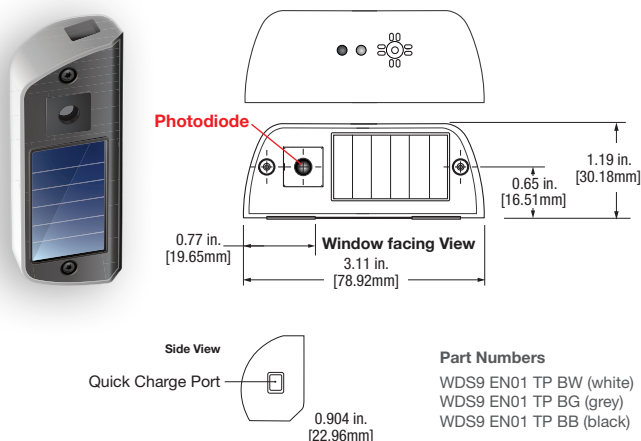


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## Wireless Daylight Sensor

Mounts in any direction, unobtrusively, on the mullion

### Dimensions



**Part Numbers**  
 WDS9 EN01 TP BW (white)  
 WDS9 EN01 TP BG (grey)  
 WDS9 EN01 TP BB (black)

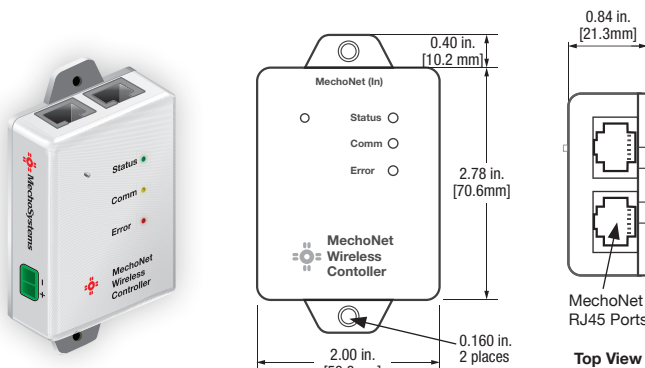
### Specifications

Size	3.1 in. L x 1.2 in. H x 0.9 in. D
Color	White, Gray, Black
Power	Low light solar power (PV)
Wiring	Wireless
Frequency	902MHz, EnOcean
EnOcean Equipment Profile	A5-06-04 For Curtainwall Brightness Sensor
Wireless Range*	Maximum 80 ft. (24m) unobstructed
Certifications	FCC part 15 Class B Compliant
Temperature	-4-140 deg. F (0-60 deg. C)
Photosensor	Daylight spectrum, photopic
Sensitivity	0-65 Klux
Photosensor FOV	Horizontal: 60 degree cone angle Up: 30 degree; Down: 30 degree

## MechoNet Wireless Controller

Mounts out of sight

### Dimensions



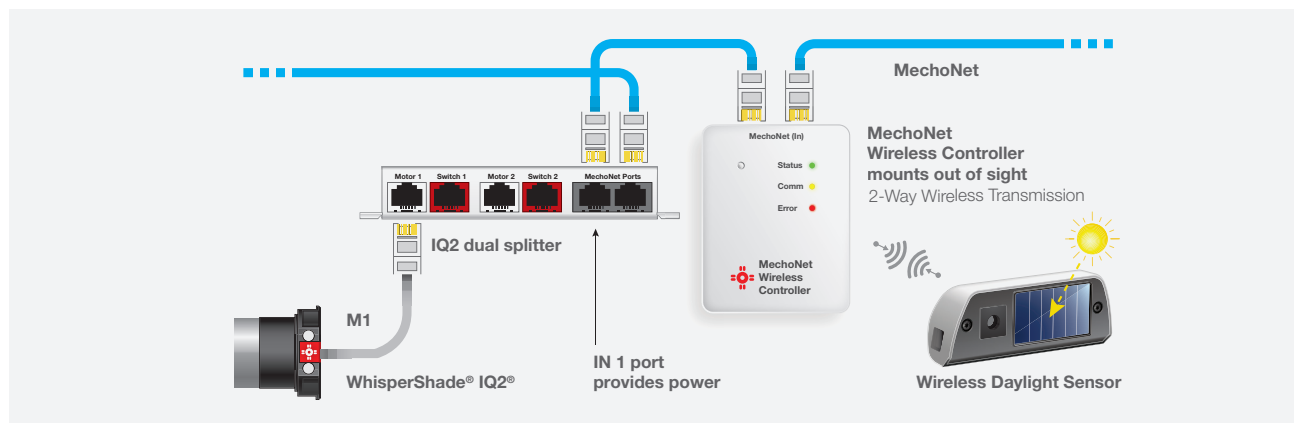
**Part Number**  
 MWC9 EN01 TP WH

### Specifications

Size	3.6 in. L x 2.4 in. H x 0.9 in. D
Color	White
Power	12-28VDC, 100mA
Wiring	MechoNet: Cat-5/6. RJ45, 4000 ft. (1,219m) total. 250 devices max.
Frequency	902MHz, EnOcean
Wireless Range*	Maximum 80 feet (24 m) unobstructed
Certifications	FCC part 15 Class B Compliant
Controls	Up to 16 Sensors or other EnOcean devices

CAT5/6 USOC Crimp		
Pin 1	Brown/White	RS-485 Net A
Pin 2	Green/White	V+
Pin 3	Orange/White	Common
Pin 4	Blue	Up
Pin 5	Blue/White	Mid Position
Pin 6	Orange	Down
Pin 7	Green	FB
Pin 8	Brown	RS-485 Net B

\* Wireless signals may be impacted by metal columns, mullions, or other structures typically used in and around the curtainwall. As such, the Wireless Rocker Switch should be located as close as possible to the MechoNet Wireless Controller. For optimal performance, up to 25 ft. (8m) is the recommended range.



⚠ Make sure the mounting location does not enable building and glazing features like overhangs, mullions, louvers, or frit to obstruct or cast shadows on the sensor's field of view.



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