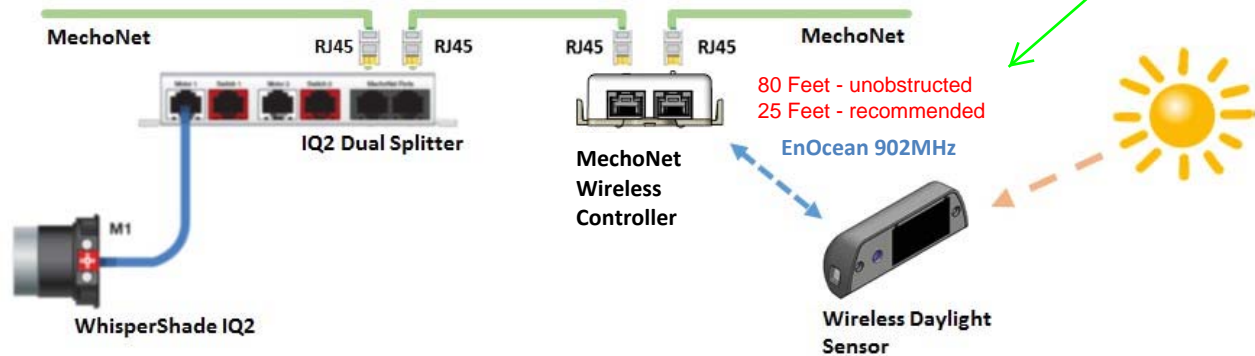


# Wireless Daylight Sensor

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

Please note these requirements



## Features

- Wireless photosensor monitors daylight coming through the curtainwall.
- Photopic response sensitive to human comfort.
- No wires! No batteries!
- Integrated solar cell powers the sensor from available daylight (> 200 lux).
- Ultra-low power EnOcean RF communication to the Wireless Daylight Controller for MechoNet control.

## Product Overview

### Description

MechoSystems' newest addition brings automated daylight control direct to MechoNet™! Solar-powered and equipped with a wireless 2-way communication network, the Wireless Daylight Sensor makes adding daylight control at the curtainwall a breeze for any MechoNet project! Peel-n-stick daylight sensors mount inconspicuously to the window mullion horizontally, vertically or even upside down. The sensors communicate to a MechoNet Wireless Controller located conveniently in the pocket or ceiling and connected to MechoNet for power and network connectivity. The controller may be configured to move shades directly or by communicating conditions to SolarTrac®.

### Operation

The sensor is powered by renewable solar energy and utilizes supercapacitors in order to store surplus charge. Supercapacitors charge quickly and withstand millions of charge/recharge cycles without any loss of storage capacity. They eliminate concerns of managing replacement battery stock, scheduling replacement activities to avoid unplanned downtime, or requiring specific disposal/recycling procedures.

Key to the sensor's operation is its ultra-low operating power afforded by the sensor's EnOcean® 2-way RF transceiver. The sensor monitors the daylight level and thermal condition at the curtainwall, and then

relays it up to the controller using the EnOcean protocol. The controller logs the data to support analytics, and can be setup to either feed information over MechoNet to a whole building automation controller like SolarTrac®, or it can be configured to operate the shades directly based on the local conditions using internally configured settings and addresses. In addition to sensors, the MechoNet Wireless Controller can also receive data and/or commands from other EnOcean devices such as batteryless keypads, occupancy sensors, magnetic door and window sensors, lighting controllers, thermostats, etc. Up to 20 wireless EnOcean sensors and/or devices can be hosted by each controller enhancing local operation without adding any cables.

### Key Applications

- Automated window covering control optimizing the balance between comfort, view and energy conservation.
- Daylight harvesting and code compliance. (ie. LEED, ASHRAE 90.1 – 2010, Title 24-2013, IECC 2012, IgCC 2012)
- Integrated window covering, lighting and/or hvac control.
- Scalable automation control solutions from single office to SolarTrac building control.
- Retrofit or new construction home or building control projects

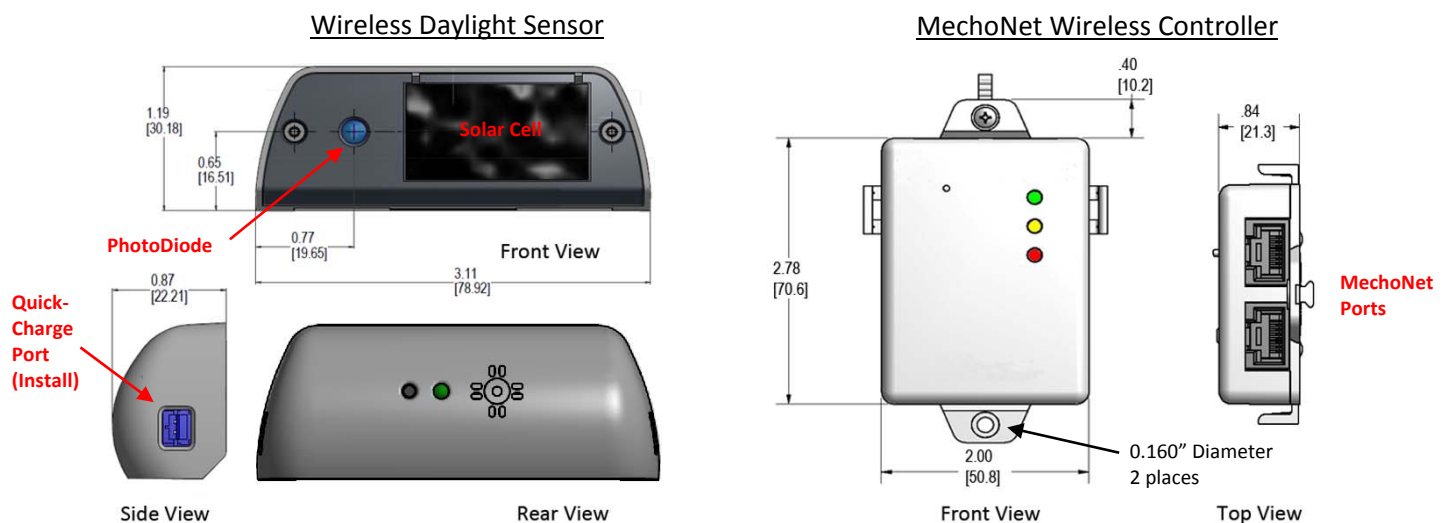


# Wireless Daylight Sensor

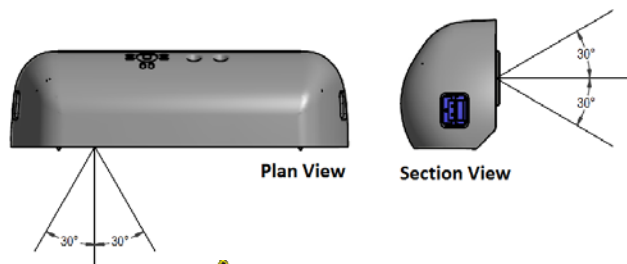
## Specifications

	<u>Wireless Curtainwall Daylight Sensor</u>	<u>MechoNet Wireless Controller</u>
Size	3.1" L x 1.2" H x 0.9" D	3.6" L x 2.4" H x 0.9" D
Color	White, Gray, Black	White
Power	Solar, 48 hrs internal storage capacity	12-28VDC, 100mA
Wiring	None	MechoNet: CAT-5/6, RJ45, 4000 ft. total, 250 devices Max.
Frequency	902MHz, EnOcean	902MHz, EnOcean
RF Range	100 ft max (unobstructed)	100 ft max (unobstructed)
Certifications	FCC Part 15 Class B Compliant	FCC Part 15 Class B Compliant
Temperature	0 – 60 deg C	0 – 60 deg C
Photosensor	Daylight Spectrum, Photopic	
Sensitivity	0 – 65 Klux	
Photosensor FOV	Horizontal: 60 degree cone angle Vertical: 60 degree cone angle	

## Dimensions



## Sensor Field of View (FOV)



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

## Part Numbers

- ☐ WDS9 EN01 PK xy Wireless Daylight Sensor – 902MHz  
xy: color of the base (x), cover (y)  
W=White, B=Black, G=Gray
- ☐ MWC9 EN01 PK xz MechoNet Wireless Controller – 902MHz  
xz: color of enclosure  
WH=White, BK=Black, GY=Gray
- ☐ WDK9 EN01 xy xz MechoNet Daylight Sensor + Controller Kit  
xy: color of sensor base (x), cover (y) (see above)  
xz: color of enclosure (see above)



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