Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

**EXP-MS-EMG-N4X-AT-HV-V2-10W-120V**

# 10W Explosion Proof Motion and Light Sensor w/ 3HR Emergency Backup - 120V - 59' Max Mounting Height - 52.4' x 49.2' Detection Zone

**Product ID: 273180**

**Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).**

**Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.**

**EXP-MS-EMG-N4X-AT-HV-V2-10W-120V Explosion Proof Motion and Day/Night Sensor w/ Emergency Backup**

**Listing: NRTL Listed for United States, Canada and IECEx/ATEX Rated**
**Dimensions: 7"-W x 5"-H x 9"-D**
**Detection: Motion, Motion+Day/Night**
**Detection Coverage: 52.4` x 49.2` - Maximum**
**Tilt Angles: 150° - Wall; 360° - Ceiling**
**System Voltage: 120V AC**
**Rated Load: 10W @ 120V**
**Transmitting Power: <0.5mW**
**Wiring:** Flying Leads
**Power Consumption: =0.5W (Standby)**
**Motion Detection: 0.5~3m/s**
**Output Hold Time: 5s / 30s / 90s / 3min / 20min / 30min**
**Daylight Sensor: 5Lux/ 15Lux /30Lux /50Lux /100Lux / Disable**
**Emergency Backup Duration: 3 Hours (180 Minutes)**
**Emergency Battery Location: Inline, Remote Mount**
**Daylight Sensor: 5Lux/ 15Lux /30Lux /50Lux /100Lux / Disable**
**Ambient Temperature Range: -20C ~ 60C**
**Radiated Frequency: 5.8GHz ± 75MHz, ISM Wave Band**
**Mounting Distance: 59` (Ceiling), 98.4` (Wall)**
**Color: Gray**

**Ratings/Approvals**

Class I, Divisions 1 & 2, Groups B, C, D
Class I, Zones 1 & 2, Groups IIB+H2, IIA
Class II, Divisions 1 & 2, Groups E, F, G
Class III, Divisions 1 & 2
NEMA 3R, 4, 7 (B, C, D), 9 (E, F, G)
NRTL Listed to UL 508A
NRTL Listed to UL 1203
NRTL Listed to CSA C22.2 No 14, 25, 30

**Special Orders - Special Requirements**

Contact us for special requirements

**Toll Free:** 1-800-369-6671
**Intl:** 1-903-270-1187
**Fax:** 1-903-498-3364
**E-mail:** sales@larsonelectronics.com

**The Larson Electronics EXP-MS-EMG-N4X-AT-HV-V2-10W-120V Explosion Proof Motion and Day/Night Sensor with Emergency Battery Backup is approved for Class I, Division 1 and Class II, Division 1 flammable work sites. This 10-watt device, which is capable of detecting both motion and ambient light, is an energy efficient and automated solution to lighting controls in industrial facilities. The explosion proof unit can be mounted on ceilings or walls and features compatibility with 120V AC.**

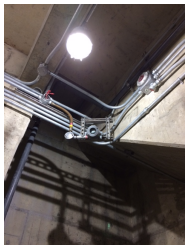
The EXP-MS-EMG-N4X-AT-HV-V2-10W-120V is ideal for operators seeking a high quality explosion proof motion and day/night sensor rated for use in Class I, Division 1 and Class II, Division 1 flammable work sites. This explosion proof unit operates on 120V AC and features the following modes: Disable and Sensor. For motion detection, the sensor can detect movement at a rate of 0.5~3m/s. When connected to a fixture, the 10-watt sensor ensures the lamp stays off when ambient light in the area is sufficient. At night, as the sensor detects insufficient ambient light in the environment, the device engages the fixture to turn on when motion is detected. During operation, the sensor adheres to the configured hold

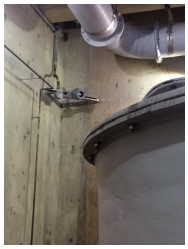
time. When motion is detected and the hold time is complete, the fixture turns off. Please note: when used as both day/night and motion sensor, this unit will only enable motion once ambient light has fallen below the required lux setting. This WILL NOT activate when lux falls below threshold. The day/night setting is designed to limit the motion sensor so the motion sensor is only activate at night.
**Emergency Battery Backup:** The EXP-MS-EMG-N4X-AT-HV-V2-10W-120V features a battery backup feature that adds emergency functionality to the sensor. This component will run the pass-thru sensor for 3 hours or 180 minutes in the event of power failure or outage. The system recharges the battery once electrical power is restored. Standard configuration includes a single emergency battery backup that is automatically recharged and kept in a ready state. This inline emergency battery can be remote mounted during installation at the site.



Motion Detected Through a Wall

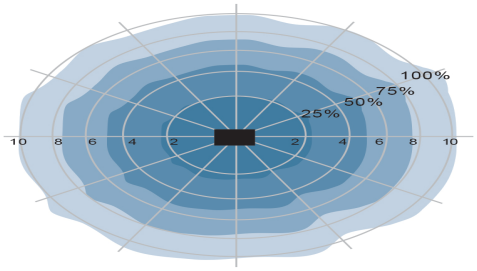
This unit leverages cutting-edge microwave sensors to detect motion. When in use, the device sends out discreet waves that are reflected back from nearby walls and objects (not heat or light). Microwave sensors are not affected by line of sight, resulting in wider and more accurate coverage of the target area. By comparison, traditional infrared sensors can only detect heat and light (factors used to identify movement) within the unit's field of view. Microwave sensors also provide stable performance in unpredictable climates and can penetrate glass, plastic and other non-metallic objects.

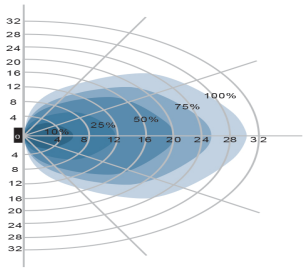





EXP-MS-N4X-AT in operation. Click Here to view our Flex Couplers available for purchase.
Click Images to Enlarge

**Reach Setting:** For best results, it is recommended to adjust the sensitivity of the unit by configuring the reach setting. Reach is the term used to describe the radius of the circular detection zone produced on the ground. This device provides a maximum detection zone of 52.4` x 49.2`. After mounting the sensor at the desired height, operators can adjust distance sensitivity.




Ceiling Mount Wall Mount

**Mounting:** The explosion proof motion and day/night detector can be mounted on ceilings or walls. When mounted on the ceiling, the sensor offers detection at distances up to 59 feet (from the ceiling) and 360 degrees of detection (see

chart). When mounted on a wall, the maximum distance of detection is 98.4 feet, with 150 degrees of detection (see chart).
**Suggested Applications:** Manufacturing, Industrial, Warehouse, Lighting, Lighting, Wet areas or Locations Where Combustible Dust is Present.
At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

# Frequently Asked Questions (FAQ)

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

**EXP-MS-EMG-N4X-AT-HV-V2-10W-120V**

**Product ID: 273180**

**Harmonized System (HS) Code:** 8543.70.4000

**Export Control Classification Number (ECCN):** EAR99

Links (Click on the below items to view):

- **ATEX Certificate (European Explosion Proof)**
- **Beam Information (Coverage, Datafile)**
- **Canadian CEC Certificate (Commonly referred to as CSA Certificate)**
- **CE Certificate**
- **Certificate 1, Misc**
- **Certificate 2, Misc**
- **Certificate 3, Misc**
- **Certificate 4, Misc**
- **IEC Ex Certificate (International Explosion Proof)**
- **MSDS (Material Safety Data Sheet**
- **RoHS Certificate (Restriction of Hazardous Substances)**
- **USA NEC Certificate (Commonly referred to as UL Certificate)**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**