

Appleton™ Group Lighting Controls by Emerson

Improving sustainability is an increasing focus area for many companies looking to reduce the carbon impact of their operations on the environment. Transitioning to LED lighting is the first step in driving sustainability improvements through large energy reductions. Implementing smart lighting solutions is the next step.

Appleton Group Lighting Controls by Emerson provide Plant Managers and Sustainability Officers with the ability to monitor and report on these efficiency gains, while driving further energy savings through easy-to-use lighting controls such as motion sensing, daylight harvesting, or scheduling. Emerson's smart lighting solution creates a new way forward for sustainability through their WirelessHART™ Leadership and Plantweb Insight™ platform. The Appleton Connected LED Luminaire is designed to illuminate hazardous and harsh industrial locations with integrated motion and illuminance sensors. When paired with Emerson's Plantweb Insight Connected Lighting Application, operators can enable map based commissioning, monitor health and energy usage, and review sustainability metrics around CO₂ emission savings.



Appleton LED Luminaires Designed to Optimize Lighting Operations

What is Group Lighting Controls?



- Allows the control of multiple luminaires over a distance of 60 meters (200 feet) with Appleton Connected LED Luminaire integrated dimming controller wired to the dimming leads of up to 10 applicable LED luminaires
- Appleton Connected LED Luminaire sensors will determine its lumen output intensity percentage. That same percentage lumen level will be sent over the 0-10 V dimming ports to each dimmable LED luminaire

What are the Benefits of Group Lighting Controls?



- Up to 10 Appleton dimmable LED luminaires can be connected to and controlled by an Appleton Connected LED Luminaire enabling the advanced capabilities of the Connected Luminaire to extend daylight harvesting (adjustable output), motion sensing (up to 12 meters [40 ft]) and scheduling features (up to 4 times period per day) with the group of lights
- WirelessHART based connected lighting solution strengthens the network
- Extend luminaire life by turning on the luminaires only when needed

What are the Benefits of the Plantweb Insight Connected Lighting Application?

- If used with the Plantweb Insight Connected Lighting Application, and a WirelessHart network/gateway, reporting on energy usage, carbon reduction, maintenance planning, and controls are available though the App
 - Map based commissioning of Motion Sensing, Daylight Harvesting and Scheduling
 - Automated Energy and Environmental Reports
 - Maintenance Alerts
 - Optional for Group Lighting Control





Smart Lighting Solutions for Hazardous and Industrial Locations

Facilities can reduce energy consumption and maintenance needs while enhancing safety for harsh industrial and hazardous locations with the Smart Lighting Solutions by Emerson. Plant operators can now control their facility's lighting. When Appleton dimmable LED Luminaires are connected to an Appleton Connected LED Luminaire, smart features – scheduling, daylight harvesting, motion sensing – are extended to the dimmable fixtures allowing them to operate as a group. Refer to product series catalog pages for more detailed product information, including global hazardous certifications and environmental ratings; available on www.masteringled.com/smartled.

Application	Lumen Output	Equivalency	Wattage	Efficacy (lm/W)	Voltage	сст
Mercmaster™ Connect LED Luminaires with WirelessHART™ Industrial Mercmaster Connect LED Luminaires with WirelessHART ②						
Area/Task	5,500–17,500 Dimmable Output	100W-600W HID	46W-145W	Up to 149	120–277 Vac; 125–300 Vdc;	5000K, 4000K, 3000K
Areamaster Connect LED Luminaires with WirelessHART Industrial Areamaster Connect LED Luminaires with WirelessHART						
Flood	9,500–38,000 Dimmable Output	175W-1500W HID	73W-317W	Up to 141	120–277 Vac; 125–300 Vdc	5000K, 4000K, 3000K, 1800K, Amber
Mercmaster LED Low Profile Luminaires Industrial Mercmaster LED Low Profile Luminaires						
Area/Task, Low Bay, Emergency ③	2,800-7,500	70W-250W HID	28W-51W	Up to 146	24-48 Vdc; 100-277 Vac; 125-300 Vdc; 347-480 Vac; 0-10 V, Dimmable	5000K, 4000K, 3000K, 1800K, Amber
ulkhead Indus	trial HB LED Multilen	s Bulkhead				
Bulkhead, Wall Mount, Surface Mount	3,500-7,500	70W-250W HID	31W-51W	Up to 133	24-48 Vdc; 100-277 Vac; 125-300 Vdc; 0-10 V, Dimmable	5000K, 4000K, 3000K, 1800K, Amber
Areamaster™ LED Generation 2 and High Lumen Luminaires Industrial Areamaster Generation 2 LED and High Lumen Luminaires						
Flood	9,500-38,000	175W-1500W HID	73W-317W	Up to 141	120–277 Vac; 125–300 Vdc; 347–480 Vac; 0-10 V, Dimmable	5000K, 4000K, 3000K, 1800K, Amber
nd High Lumen I	Luminaires Industr	ial Baymaster LED and	d High Lumen Lu	minaires		
High Bay	9,500–38,000	175W-1500W HID	73W-317W	Up to 141	120–277 Vac; 125–300 Vdc; 347–480 Vac; 0-10 V, Dimmable	5000K, 4000K, 3000K, 1800K, Amber
inaires						
High Bay, Flood	50,000-90,000	1500W HID and greater	360W-640W	Up to 146	120–277 Vac; 125–300 Vdc; 277–480 Vac; 0-10 V, Dimmable	5000K, 4000K, 3000K
	Area/Task ct LED Luminaire Flood ow Profile Lumin Area/Task, Low Bay, Emergency ③ ulkhead Indus Bulkhead, Wall Mount, Surface Mount Generation 2 and Flood High Bay inaires High Bay,	Area/Task Flood Py,500–38,000 Dimmable Output Sow Profile Luminaires Industrial Meaning Area/Task, Low Bay, Emergency (3) Sulkhead Industrial HB LED Multilen Bulkhead, Wall Mount, Surface Mount Flood Py,500–38,000 Generation 2 and High Lumen Lumin Flood Py,500–38,000 Aligh Bay Py,500–38,000 Aligh Bay Py,500–38,000 Aligh Bay Py,500–38,000	Area/Task 5,500–17,500 Dimmable Output 100W–600W HID ct LED Luminaires with WirelessHART Industrial Areama Flood 9,500–38,000 Dimmable Output 175W–1500W HID ow Profile Luminaires Industrial Mercmaster LED Low Profile Luminaires Industrial HB LED Multilens Bulkhead Bulkhead Industrial HB LED Multilens Bulkhead Bulkhead, Wall Mount, Surface Mount 3,500–7,500 70W–250W HID Generation 2 and High Lumen Luminaires Industrial Area Flood 9,500–38,000 175W–1500W HID Ind High Bay 9,500–38,000 175W–1500W HID Indiaires High Bay, 50,000–90,000 1500W HID	Area/Task 5,500–17,500 Dimmable Output 100W–600W HID 46W–145W ct LED Luminaires with WirelessHART Industrial Areamaster Connect LE Flood 9,500–38,000 Dimmable Output 175W–1500W HID 73W–317W ow Profile Luminaires Industrial Mercmaster LED Low Profile Luminaires Area/Task, Low Bay, Emergency 3 2,800–7,500 70W–250W HID 28W–51W ulkhead Industrial HB LED Multilens Bulkhead Bulkhead, Wall Mount, Surface Mount 3,500–7,500 70W–250W HID 31W–51W Generation 2 and High Lumen Luminaires Industrial Areamaster General Flood 9,500–38,000 175W–1500W HID 73W–317W Ind High Bay 9,500–38,000 175W–1500W HID 73W–317W Indiaires High Bay, 50,000–90,000 1500W HID 73W–317W	Area/Task 5,500–17,500 Dimmable Output 100W–600W HID 46W–145W Up to 149 ct LED Luminaires with WirelessHART Industrial Areamaster Connect LED Luminaires with V Up to 149 Flood 9,500–38,000 Dimmable Output 175W–1500W HID 73W–317W Up to 141 bw Profile Luminaires Industrial Mercmaster LED Low Profile Luminaires	Area/Task

① Refer to product series catalog pages for more detailed product information, including global hazardous certifications and environmental ratings; available on www.masteringled.com.





② Use of the WirelessHART Gateway and Plantweb Insight are optional.

③ Refer to product series catalog pages for Emergency Model specifications.