

specification sheet:
Metrolight LP150
Electronic Ballast



100/150 Watt - HPS
90/140 - CosmoPolis

From the company that brought you the energy efficient SmarHID™ solution comes the LP150 electronic ballast designed specifically for street lighting applications.

Metrolight's robust LP150 ballast combines energy efficiency, CO2 and maintenance cost reduction and flexible lighting controls with effective and consistent performance even in challenging outdoor environments, providing excellent lumen stability and effective lamp life. The LP150 electronic ballast provides the opportunity to participate in and enjoy the benefits of carbon reduction and energy saving programs and incentives offered by municipalities worldwide.

Features & Benefits

Microprocessor-controlled
Extends lamp life
Greater efficiency and efficacy
Low component count, higher reliability
Micro-Start™ digitally controlled ignition
Lumen and color consistency
Virtually eliminates "wall blackening" caused by erosion of electrodes
Extends effective lamp life
Full range analog and digital dimming
Event triggered scheduling - traffic movement, daylight sensors and interactive operation mode lighting systems
SmartDim™ - Automatic scheduling
Automatic control of dimming through preconfigured policies
Greater protections
Greater surge protection ensures low fault rate and trouble free installations
TOV (Temporary Over Voltage) protection
Full protection against capacitive mode of operation (hard switching)
Full protection against arcing or shorting

Control & Communication
Can be integrated with existing control and communication systems
Based on proprietary and feature-rich MADLI protocol
Extends system's energy saving capabilities
Provides advanced end-of-life alerts resulting in reduced maintenance costs
Plug and play platform
Smart Grid connection option
Enables tie in with demand response systems
Full range analog and digital dimming
Remote reconfiguration capabilities
Per requirement
Per lamp parameters (power rating, dimming settings, etc.)
Sodium lamp hot re-strike
Instant relighting after power cuts or turn-off
Remote Installation
Ballast location and fixture can be separated (up to 5m/16ft as standard; above 5m/16ft and up to 25m/82ft upon special request)

Operating Specifications

The Metrolight LP150 Electronic Ballast is designed to suit most lighting solutions. This section lists the ballast's operating specifications, its input and output characteristics and its built-in protections.

Dimensions (LxWxH)	7.55" x 3.31" x 1.65" / 192mm x 84.2mm x 42mm
Operating temperature range	-30°C to +65°C / -22°F to 149°F
Maximum case temperature (Tc)	85°C

Input Specifications

Input values for power and current are dependent on the lamp wattage. Other input values apply across all SmartHID™ Ballasts.

Lamp Power, Voltage and Current Specifications

Lamp Type	Typical Input Power @ 230V	Input Voltage	Power Factor (at nominal conditions and full power)	Input Current
150W HPS	160W HPS	120 – 277VAC (+10% to -15%)	>0.98	0.59A @ 277V; 0.71A @ 230V; 1.40A @ 120V
100W HPS	109W HPS	120 – 277VAC (+10% to -15%)	>0.97	0.43A @ 277V; 0.49A @ 230V; 0.95A @ 120V

Lamp Type	Typical Input Power @ 230V	Input Voltage	Power Factor (at nominal conditions and full power)	Input Current
140W HPS	149W HPS	120 – 277VAC (+10% to -15%)	>0.98	0.56A @ 277V; 0.66A @ 230V; 1.29A @ 120V
90W HPS	98W HPS	120 – 277VAC (+10% to -15%)	>0.96	0.39A @ 277V; 0.45A @ 230V; 0.85A @ 120V

General Input Specifications

Continuous full range dimming	50% - 100% of full power (Optional: Reverse dimming 100% - 50%)
Dimming options	Analog dimming by dimmer, ambient sensor, light sensor or any other compatible sensor. Digital dimming - Connection to control software or automatic dimming profile
Lumen maintenance	Lumen maintenance

Protections

Self-protection mechanisms:

In the event of a short circuit, or open circuit If the lamp fails to light At the end of the lamp's life Advanced surge protection between phase and neutral and between line and ground Advanced output protection against arcing or shorting to ground

Heat management:

The LP150 Electronic Ballast operates at full output power at a Tc temperature range of -30°C to 85°C. Should the Tc temperature reach beyond 85°C during use, the LP150 Ballast will gradually reduce its output power to 50%, allowing the ballast to cool. When the Tc temperature falls below 85°C, the ballast will return to full output power.

Should the Tc temperature reach 91°C or beyond, the LP150 Ballast will switch itself off.

EMC Note:

We recommend that the following EMI suppression components be used in order to comply with EMC standard EN55015. Power line side: EMI filter P/N FN2030-4-06 by Schaffner or equivalent; Lamp side: EMI suppression ferrite cores P/N 2631540002 by Fair-rite or equivalent. For more information, contact Metrolight.

Note: All specifications are subject to change without prior notification; All values indicated are typical

About Metrolight

Metrolight provides proven energy-efficient eHID and LED solutions for high-power lighting. Metrolight's ballasts and managed lighting solutions are used in retail, industrial, commercial and municipal installations to reduce energy consumption and carbon emission by 70%. Pioneering lighting energy solutions since 1996, Metrolight operates worldwide with over 750,000 systems deployed and over 8 billion hours in operation. For more information, please visit our website at: www.metrolight.com

