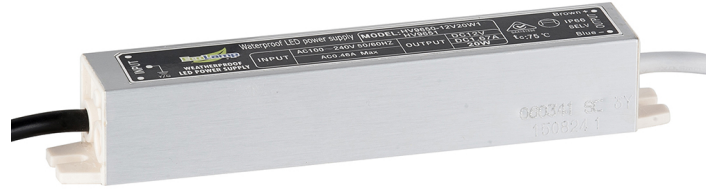


## PRODUCT SPECIFICATIONS

- Material:** Aluminium
- Colour:** Silver
- Input Voltage:** 240v AC
- Output Voltage:** 12v DC Constant Voltage
- Output Power:** 20w\*
- No. Output Cables:** 1
- Wiring:** Parallel
- IP Rating:** IP66
- Dimmable:** No
- Warranty:** 2 Years Replacement\*\*



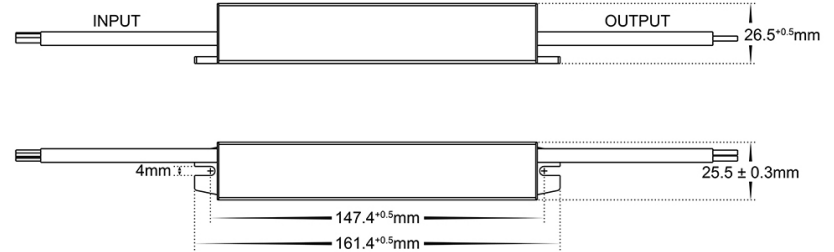
Supplied with Flex & Plug

## COMPATIBLE WITH

All 12v DC Low Voltage Light Fittings and LED Strip



## DIMENSIONS



## IP RATING



## APPROVAL



## Product Ordering

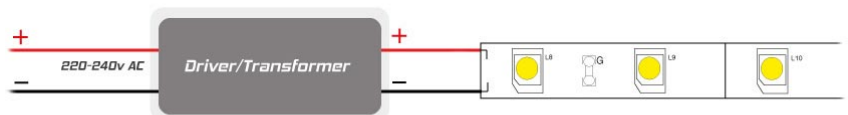
### IMAGE

### PART NUMBER



**HV9651**

## SAMPLE INSTALLATION DIAGRAM



\* Recommended maximum Load of 16w

\*\* See Warranty Terms and Conditions for more information

Output	DC Voltage	12V
	Rated Current	1.66A
	Current Range	0-1.66A
	Rated Power	20W
	Ripple and Noise(max)	120mVp-p
	Voltage Tolerance	±4%
	Line Regulation	±1%
	Load Regulation	±2%
	No. Output Cables	1
	Set up time	2000ms, 50ms(at full load)110Vac/230Vac
	Holding time(Typ.)	15ms(at full load) 110Vac/230Vac
Input	Voltage range Note 2	90~264Vac
	Frequency range	47~63Hz
	Power factor(Typ.)	PF≥0.45/230V (at full load)
	Efficiency(Typ.)	84%
	AC current	0.32A/230Vac
	Inrush current(Typ.)	Cold start: 50A/230Vac
	Leakage current	<0.75mA/240Vac
Protection	Over load	104%-140% of the rated output power Protection mode: constant current limiting, recovers automatically after the load reduced.
	Short circuit	Protection type: Hiccup mode, recovers automatically after fault conditions removed
	Over voltage	13-18V Protection type: Hiccup mode, recovers automatically after fault conditions removed
	Over temperature	Ta: 60°C~70°C Protection type: Hiccup mode, recovers automatically after fault conditions removed
Environment	Working temperature	Ta: -25°C~ +50°C
	Working humidity	10%~90%RH, non-condensing
	Storage temp. and humidity	-25°C ~+75°C, 5%~95%RH
	Temp. coefficient	±0.05%/°C (0~40°C)
	Vibration	10-300Hz, 1G 10min./cycle, period for 60min. each along X, Y, Z axes
Safety and EMC	Safety standards	Compliance to EN61347-1, EN61347-2-13, AS/NZS61347-1, Ip66 waterproof rating.
	Withstand voltage	I/P-O/P: 3.75KVAC I/P-FG: 1.875KVAC O/P-FG: 0.5KVAC
	Insulation resistance	I/P-O/P, I/P-FG, O/P-FG: 100Mohms/500Vdc 25°C /70%RH
	EMC Emission	Compliance to AS/NZS CISPR15
	EMC Immunity	Compliance to AS/NZS CISPR15

# 30w IP66 Weatherproof LED Driver

## PRODUCT SPECIFICATIONS

- Material:** Aluminium
- Colour:** Silver
- Input Voltage:** 240v AC
- Output Voltage:** 12v DC or 24v DC
- Output Power:** 30w\*
- No. Output Cables:** 1
- Wiring:** Parallel
- IP Rating:** IP66
- Dimmable:** No
- Warranty:** 2 Years Replacement\*\*



Supplied with Flex & Plug

## COMPATIBLE WITH



All Low Voltage Light Fittings and LED Strip



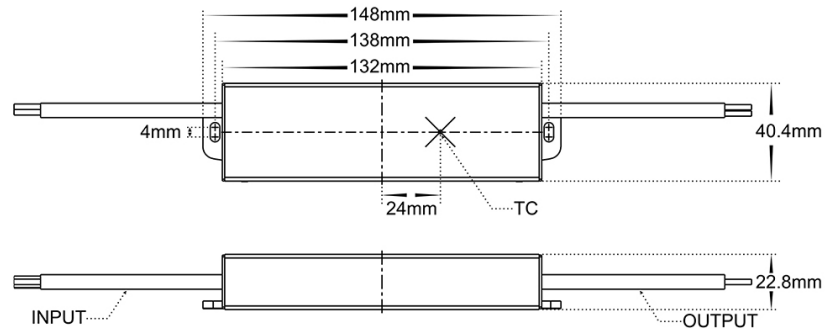
## IP RATING



## APPROVAL



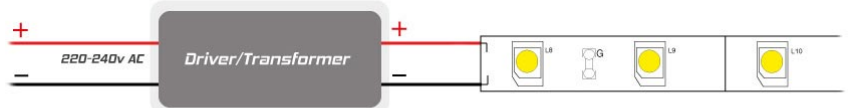
## DIMENSIONS



## Product Ordering

IMAGE	OUTPUT VOLTAGE	PART NUMBER
	<b>12v DC</b>	<b>HV9652</b>
	<b>24v DC</b>	<b>HV9652-24V</b>

## SAMPLE INSTALLATION DIAGRAM



\* Recommended maximum Load of 24w

\*\* See Warranty Terms and Conditions for more information

For more information contact Havit Lighting

ADDRESS:  
143 Beauchamp Road  
Matraville NSW 2036  
Australia

Tel: 02 9381 8300  
Fax: 02 9666 8881  
Email: sales@havitt.com.au  
web: www.havit.com.au

Output	DC Voltage	12V	24V
	Rated Current	2.5A	1.25A
	Current Range	0-2.5A	0-1.25A
	Rated Power	30W	30W
	Ripple and Noise(max)	120mVp-p	240mVp-p
	Voltage Tolerance	±4%	±2%
	Line Regulation	±1%	±1%
	Load Regulation	±2%	±2%
	No. Output Cables	1	1
	Set up time	2000ms, 50ms(at full load) 110Vac/230Vac	
	Holding time(Typ.)	15ms(at full load) 110Vac/230Vac	
Input	Voltage range Note 2	90~264Vac	
	Frequency range	47~63Hz	
	Power factor(Typ.)	PF≥0.45/230V (at full load)	
	Efficiency(Typ.)	84%	85%
	AC current	0.32A/230Vac	
	Inrush current(Typ.)	Cold start: 50A/230Vac	
	Leakage current	<0.75mA/240Vac	
Protection	Over load	104%-140% of the rated output power Protection mode: constant current limiting, recovers automatically after the load reduced.	
	Short circuit	Protection type: Hiccup mode, recovers automatically after fault conditions removed	
	Over voltage	13-18V	24.5-35V
		Protection type: Hiccup mode, recovers automatically after fault conditions removed	
	Over temperature	Ta: 60°C~70°C Protection type: Hiccup mode, recovers automatically after fault conditions removed	
Environment	Working temperature	Ta: -25°C~ +50°C	
	Working humidity	10%~90%RH, non-condensing	
	Storage temp. and humidity	-25°C ~+75°C, 5%~95%RH	
	Temp. coefficient	±0.05%/°C (0~40°C)	
	Vibration	10-300Hz, 1G 10min./cycle, period for 60min. each along X, Y, Z axes	
Safety and EMC	Safety standards	Compliance to EN61347-1, EN61347-2-13, AS/NZS61347-1, Ip66 waterproof rating.	
	Withstand voltage	I/P-O/P: 3.75KVAC I/P-FG: 1.875KVAC O/P-FG: 0.5KVAC	
	Insulation resistance	I/P-O/P, I/P-FG, O/P-FG: 100Mohms/500Vdc 25°C /70%RH	
	EMC Emission	Compliance to AS/NZS CISPR15	
	EMC Immunity	Compliance to AS/NZS CISPR15	

# 60w IP66 Weatherproof LED Driver



## PRODUCT SPECIFICATIONS

- Material:** Aluminium
- Colour:** Silver
- Input Voltage:** 240v AC
- Output Voltage:** 12v DC or 24v DC
- Output Power:** 60w\*
- No. Output Cables:** 1
- Wiring:** Parallel
- IP Rating:** IP66
- Dimmable:** No
- Warranty:** 2 Years Replacement\*\*



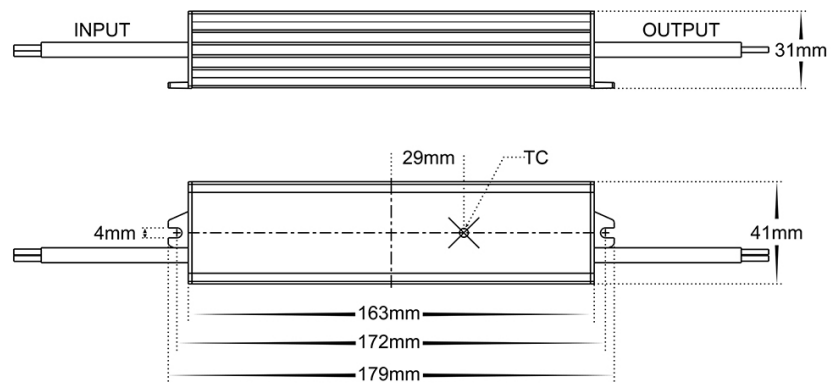
Supplied with Flex & Plug

## COMPATIBLE WITH

All Low Voltage Light Fittings and LED Strip



## DIMENSIONS



## IP RATING



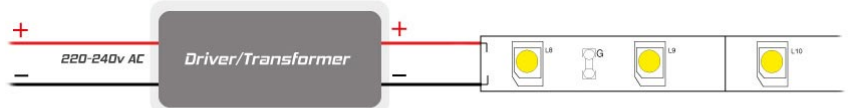
## APPROVAL



## Product Ordering

IMAGE	OUTPUT VOLTAGE	PART NUMBER
	12v DC	HV9653
	24v DC	HV9653-24V

## SAMPLE INSTALLATION DIAGRAM



\* Recommended maximum Load of 80w

\*\* See Warranty Terms and Conditions for more information

For more information contact Havit Lighting

ADDRESS:  
143 Beauchamp Road  
Matraville NSW 2036  
Australia

Tel: 02 9381 8300  
Fax: 02 9666 8881  
Email: sales@havit.com.au  
web: www.havit.com.au

Output	DC Voltage	12V	24V
	Rated Current	5A	2.5A
	Current Range	0-5A	0-2.5A
	Rated Power	60W	60W
	Ripple and Noise(max)	120mVp-p	240mVp-p
	Voltage Tolerance	±4%	±2%
	Line Regulation	±1%	±1%
	Load Regulation	±2%	±2%
	No. Output Cables	1	1
	Set up time	2000ms, 50ms(at full load) 110Vac/230Vac	
	Holding time(Typ.)	15ms(at full load) 110Vac/230Vac	
Input	Voltage range Note 2	90~264Vac	
	Frequency range	47~63Hz	
	Power factor(Typ.)	PF≥0.45/230V (at full load)	
	Efficiency(Typ.)	87%	88%
	AC current	0.7A/230Vac	
	Inrush current(Typ.)	Cold start: 50A/230Vac	
	Leakage current	<0.75mA/240Vac	
Protection	Over load	104%-125% of the rated output power	
		Protection mode: constant current limiting, recovers automatically after the load reduced.	
	Short circuit	Protection type: Hiccup mode, recovers automatically after fault conditions removed	
	Over voltage	13-18V	24.5-35V
		Protection type: Hiccup mode, recovers automatically after fault conditions removed	
Over temperature	Ta: 60°C~70°C		
	Protection type: Hiccup mode, recovers automatically after fault conditions removed		
Environment	Working temperature	Ta: -25°C~ +50°C	
	Working humidity	10%~90%RH, non-condensing	
	Storage temp. and humidity	-25°C ~+75°C, 5%~95%RH	
	Temp. coefficient	±0.05%/°C (0~40°C)	
	Vibration	10-300Hz, 1G 10min./cycle, period for 60min. each along X, Y, Z axes	
Safety and EMC	Safety standards	Compliance to EN61347-1, EN61347-2-13, AS/NZS61347-1, Ip66 waterproof rating.	
	Withstand voltage	I/P-O/P: 3.75KVAC I/P-FG: 1.875KVAC O/P-FG: 0.5KVAC	
	Insulation resistance	I/P-O/P, I/P-FG, O/P-FG: 100Mohms/500Vdc 25°C /70%RH	
	EMC Emission	Compliance to AS/NZS CISPR15	
	EMC Immunity	Compliance to AS/NZS CISPR15	

# 100w IP66 Weatherproof LED Driver



## PRODUCT SPECIFICATIONS

- Material:** Aluminium
- Colour:** Silver
- Input Voltage:** 240v AC
- Output Voltage:** 12v DC or 24v DC
- Output Power:** 100w\*
- No. Output Cables:** 1
- Wiring:** Parallel
- IP Rating:** IP66
- Dimmable:** No
- Warranty:** 2 Years Replacement\*\*



Supplied with Flex & Plug

## COMPATIBLE WITH



All Low Voltage Light Fittings and LED Strip



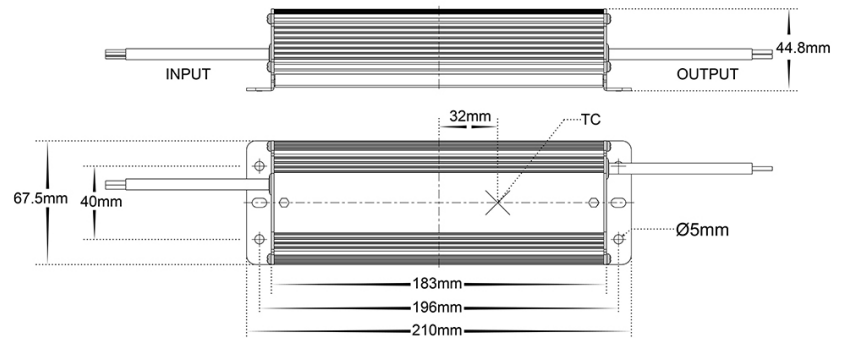
## IP RATING



## APPROVAL



## DIMENSIONS



## Product Ordering

IMAGE	OUTPUT VOLTAGE	PART NUMBER
	12v DC	HV9654
	24v DC	HV9654-24V

## SAMPLE INSTALLATION DIAGRAM



\* Recommended maximum Load of 80w

\*\* See Warranty Terms and Conditions for more information

For more information contact Havit Lighting

ADDRESS:  
143 Beauchamp Road  
Matraville NSW 2036  
Australia

Tel: 02 9381 8300  
Fax: 02 9666 8881  
Email: sales@havit.com.au  
web: www.havit.com.au

Output	DC Voltage	12V	24V
	Rated Current	8.33A	4.17A
	Current Range	0-8.33A	0-4.17A
	Rated Power	100W	100W
	Ripple and Noise(max)	120mVp-p	240mVp-p
	Voltage Tolerance	±4%	±2%
	Line Regulation	±1%	±1%
	Load Regulation	±2%	±2%
	No. Output Cables	1	1
	Set up time	2000ms, 50ms(at full load)110Vac/230Vac	
	Holding time(Typ.)	15ms(at full load) 110Vac/230Vac	
Input	Voltage range Note 2	90~264Vac	
	Frequency range	47~63Hz	
	Power factor(Typ.)	PF≥0.45/230V (at full load)	
	Efficiency(Typ.)	87%	88%
	AC current	1.05A/230Vac	
	Inrush current(Typ.)	Cold start: 55A/230Vac	
	Leakage current	<0.75mA/240Vac	
Protection	Over load	102%-120% of the rated output power Protection mode: constant current limiting, recovers automatically after the load reduced.	
	Short circuit	Protection type: Hiccup mode, recovers automatically after fault conditions removed	
	Over voltage	13-18V	24.5-35V
		Protection type: Hiccup mode, recovers automatically after fault conditions removed	
	Over temperature	Ta: 60°C~70°C Protection type: Hiccup mode, recovers automatically after fault conditions removed	
Environment	Working temperature	Ta: -25°C~ +50°C	
	Working humidity	10%~90%RH, non-condensing	
	Storage temp. and humidity	-25°C ~+75°C, 5%~95%RH	
	Temp. coefficient	±0.05%/°C (0~40°C)	
	Vibration	10-300Hz, 1G 10min./cycle, period for 60min. each along X, Y, Z axes	
Safety and EMC	Safety standards	Compliance to EN61347-1, EN61347-2-13, AS/NZS61347-1, Ip66 waterproof rating.	
	Withstand voltage	I/P-O/P: 3.75KVAC I/P-FG: 1.875KVAC O/P-FG: 0.5kVAC	
	Insulation resistance	I/P-O/P, I/P-FG, O/P-FG: 100Mohms/500Vdc 25°C /70%RH	
	EMC Emission	Compliance to AS/NZS CISPR15	
	EMC Immunity	Compliance to AS/NZS CISPR15	