







- Urban roads -
- Express roads -
  - Town roads -
- Residential area roads -
  - Pedestrian crossings -
    - Parking areas -





### **Product Benefits**

- 70% energy savings, short ROI period
- Up to 100, 000hrs @ L70, low maintenance cost
- World-class, certified quality components (LEDs, Drivers, etc.)
- The smooth back of the fixture is designed to prevent dust accumulation
- Tool-less opening of the driver box for ease of maintenance
- 5 years warranty

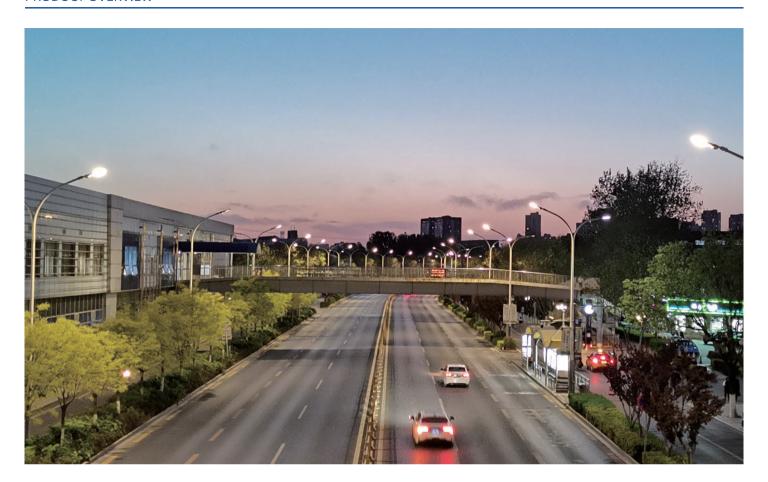
#### **Product Features**

Luminaire efficacy: Up to 199 lm /wLifetime more than 100, 000 hoursImpact resistance: IK09 /IK10

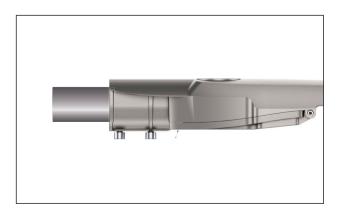
- Type of protection: IP66

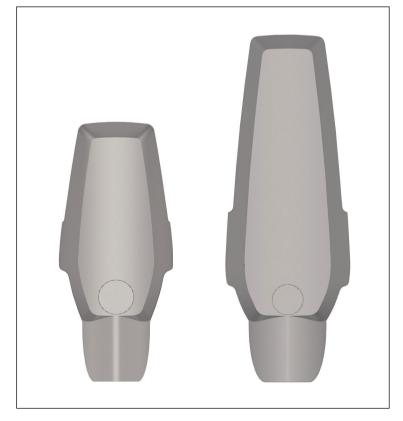














84  -	Mardal Na	Model No.		3030 Version		5050 Version		Ultra Version	
Model	Model No	Power (W)	Efficiency (lm /w)	Lumen (lm)	Efficiency (lm /w)	Lumen (lm)	Efficiency (lm /w)	Lumen (lm)	
	ZGSM-ST22-20S	20	155	3100	165	3300	177	3540	
	ZGSM-ST22-20S*	20	175	3500	180	3600	189	3780	
	ZGSM-ST22-30S	30	155	4650	170	5100	185	5550	
	ZGSM-ST22-30S*	30	175	5250	175	5250	194	5820	
	ZGSM-ST22-40S	40	155	6200	165	6600	190	7600	
Version S	ZGSM-ST22-40S*	40	170	6800	175	7000	195	7800	
	ZGSM-ST22-50S	50	155	7750	165	8250	189	9450	
	ZGSM-ST22-50S*	50	165	8250	175	8750	194	9700	
	ZGSM-ST22-60S	60	155	9300	165	9900	190	11400	
	ZGSM-ST22-80S	80	155	12400	165	13200	186	14880	
	ZGSM-ST22-90M	90	160	14400	175	15750	192	17280	
	ZGSM-ST22-90M*	90	175	15750	180	16200	199	17910	
	ZGSM-ST22-100M	100	160	16000	175	17500	195	19500	
Version M	ZGSM-ST22-100M*	100	175	17500	180	18000	199	19900	
	ZGSM-ST22-120M	120	160	19200	175	21000	195	23400	
	ZGSM-ST22-150M	150	160	24000	175	26250	192	28800	
	ZGSM-ST22-160M	160	160	25600	170	27200	192	30720	

<sup>-</sup>The above values are calculated for products with a CCT greater than 4000K and a CRI of 70. For products with a CCT of less than 4000K, or a CRI greater than 75, the values are approximately 5% lower than those stated above.
-The above values displayed are subject to a ±5% tolerance.
-Model No marked with an asterisk (\*) denote high-efficiency versions.

### Electrical Data:

Nominal Voltage	AC 100-240V /277V   50 /60Hz	
LED	Lumileds /Other brands on request	
Driver	Inventronics /Other brands on request	
Power Factor (PF)	>0.95	
THD	<15	
SPD	10KV (Default) / 20KV (available on request)	
Optics	Type II	
CRI	Ra>70 (Default) / Ra>80	
ССТ	1800К, 2200К, 2700К, 3000К, 4000К, 5000К, 5700К	

## General Data

Body Material	High pressure die-cast aluminum
Housing Color	Gray-RAL9007 (Default) /Other Colors on request
Cover Material	UV-resistant Polycarbonate
Working Environment	-40°C ~ +50°C, 10% ~ 90%RH
Lifespan L70 at 25 °C	>100, 000 h
Mounting Type	Side entry pole mounted
Pole Diameter	50-60mm (suggestion)
Dimmable	1-10V Dimming (Default) /Timer Dimming /DALI Dimming
Protection Class	Class I (Default) / Class II
Certifications & Standards	CE, RoHS, <b>ENEC</b> , CB, LM79, LM80, TM-21, IP66, IK09, IEC62471, IEC60068-2-6, IEC61643-11, <b>Zhaga-D4i</b>
Available on request	NEMA socket (3/5/7pins), ZHAGA socket, Short cap, Photocell, NTC, OLC, Solar Compatible, DALI Dimming, Smart Controller



Model	Picture	Dimension
Version S		487mm 487mm 85mm φ63mm
Version M		740mm 265mm 88mm

# Fixture Information

	Version	Dimension	Weight	
	S	487 x213 x85mm	2.9kgs	
	М	740 x265 x88mm	4.6kgs	

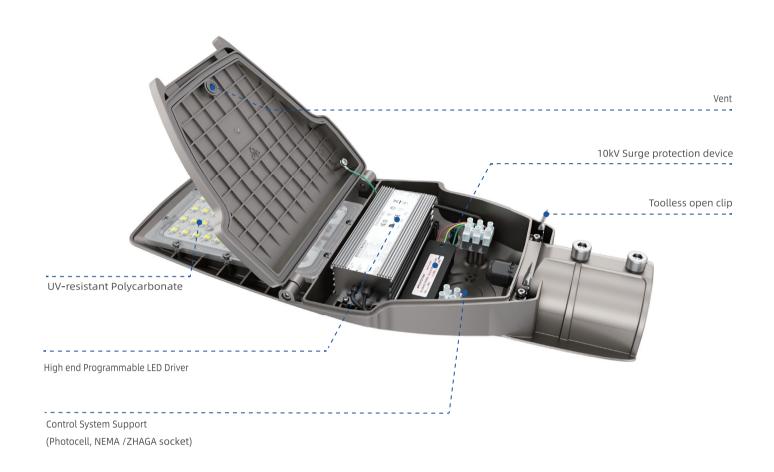
# Package Information

Version	Dimension	Weight
S	510 x230 x140mm	3.4kgs
М	760 x280 x140mm	5.2kgs





### Structure Drawing:



### Optional accessories



Photocell



Shorting Cap



NEMA Socket (3 /5 /7pin)



Smart Controller



ZHAGA Socket



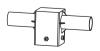
"60-40mm"



"T" Type



"L" Type



"2" in "1"



"4" in "1"

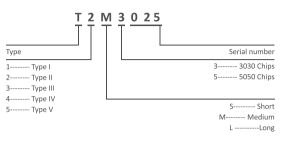


"60-60mm" "60-80mm"

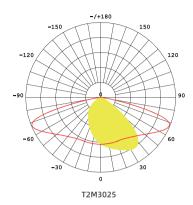


#### **Light Distributions**

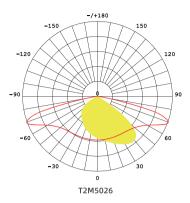
#### Order reference



#### 3030 Version



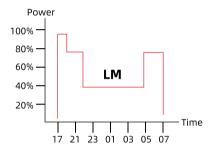
#### 5050 Version



### **Control Systems**

#### **Custom Dimming Profile**

Intelligent luminaire drivers can be programmed to follow complex dimming profiles, allowing for customized combinations of time intervals and light levels without the need for extra wiring. The period during which the lights are switched on until they are switched off is used to implement the preset dimming profile. This custom dimming system achieves maximum energy savings while maintaining the required levels of lighting uniformity throughout the night.



# Daylight Sensor /Photocell

Photocell or daylight sensors activate the luminaire when natural light drops below a certain level. They can be programmed to switch on during storms, on cloudy days (in critical areas), or only at dusk to ensure safety and comfort in public spaces.



#### **Smart Control System**

#### Luminaire Controller Zhaga (optional):

This is an easy-to-install wireless device designed for remote control of LED luminaires. The device is equipped with Zhaga-compliant connectors and can control luminaires via DALI 2.0 or D4I interfaces. Now supporting LoRaWAN®, ZIGBEE and 4G networks, the controller's modern and compact design is ideal for a variety of street lighting situations.

#### Luminaire Controller NEMA (optional):

The Luminaire Controller NEMA is a remote LED luminaire control device compatible with ANSI C136.41 NEMA sockets. It can operate fixtures via DALI or 0-10V analog control interfaces and now also supports LoRaWAN\*, ZIGBEE and 4G networks. This controller provides a reliable power connection via three rugged twist-lock contacts.

