

Data sheet

Citygrid Zhaga Controller S

P/N D21018



The Citygrid Zhaga controller S is the all-in-one device which, at an instant, makes a luminaire intelligent and motion controlled.

ELECTRICAL CHARACTERISTICS – INPUT			
Name	Value	Unit	Condition
Universal input voltage	24	V _{dc}	± 10% (typically powered by LED driver).
Power consumption	< 0,5	W	Always active, no sleep mode.

DIMMING			
Name	Value	Unit	Condition
Dimming range	0...100	%	Minimum level dependent on the LED Driver.
Dimming type	DALI		

INTERFACES	
Name	Value
DALI-2	Certified. Parts 101 and 103.
D4i	Certified as a Type D device. The controller is able to read the D4i memory banks from control gear.
Zhaga connector	Zhaga Book 18

WIRELESS COMMUNICATION			
Specification item	Value	Unit	Condition
Gateway ratio	1:250	Control unit	Citygrid Gateway MKII P/N D22006/D22007
Max units per site*	500	Control unit	
Frequency Range	868,3 / 918,0	MHz	The frequency is set when running the Producer App to match European / Australian regulation.
Standard	IEEE 802.15.4		
Protocol	6LoWPAN		
Endpoints	UDP:7812,7813,7814,7815, 8760,61709 ICMP		
Encryption	AES-128		
Over-the-air update	Yes		
Recommended distance between units	<50	m	Theoretical communication distance
Maximum Range**	200	m	
GPS	GLONASS and QZSS		
NFC	ST25DV04KC-IE6C3		

*Adjacent sites can communicate motion events.

** Maximum range under ideal conditions such as RF matching, line of sight, maximum power. Actual results may vary depending on the customer's design.

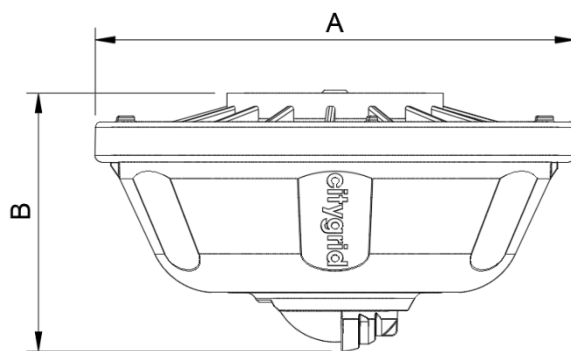
ELECTRICAL CONNECTIONS			
Name / (PIN-number)	Value	Unit	Condition
1: Power in	24	V _{dc}	± 10%
2: Shared GND and DALI –	GND		
3: DALI+	16	V _{dc}	± 6,50 V _{dc}
4: No functio	N/A		

ON BOARD SENSING			
Sensor type	Value	Unit	Condition
Temperature (measurement range)	-30 to + 90	°C	Tc –at PCB

PROTECTION			
Specification item	Value	Unit	Condition
Required external fuse	<1	A	
IP rating	IP66		
IK rating	IK09		Excluding the lens.

TEMPERATURE & HUMIDITY			
Type	Value	Unit	Condition
Operational temperature	-30 to +60	°C	Ambient
Storage temperature	-40 to +80	°C	Ambient
Relative humidity	10 to 90	%	Noncondensing. For use up to 2000m above sea level.

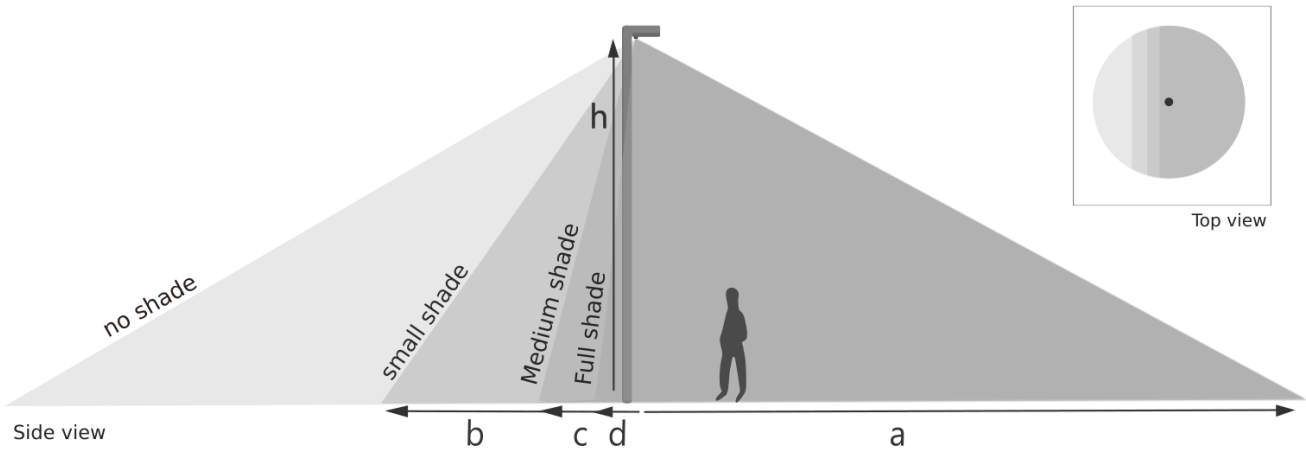
DIMENSIONS & WEIGHT			
Item	Value	Unit	Comment
A	86	mm	Diameter
B	46	mm	Height
Weight	0,085	kg	



MOTION DETECTION			
Details	Value	Unit	Condition
Detection technology	PIR		
Recommended installation height	4 to 8	m	

DETECTION AREA				
Height h	Radius a	Length b (partial shade)	Length c (medium shade)	Length d (full shade)
4	6	2	1	< 0.5
5	7	3	1.5	< 0.5
6	8	4	2	0.5
7	9	5	2.5	< 1
8	10*	6	3	< 1

*For pedestrians. For larger objects a = <12 m)



PRODUCT VARIANTS AND ORDER NUMBER		
Specification item	Value	
Product Name	Citygrid Zhaga Controller S	D21018

LOGISTIC DATA		
Specification item	Value	Unit
Parts		
Pieces per box	20	pcs
Box dimensions	423 x 382 x 95	mm
Box weight	2,5	kg

WARRANTY AND EXPECTED LIFETIME	
Specification item	Value
Warranty	2 years
Expected lifetime	Up to 100.000 hours of operation. Expected failure rate <10%*

* Under optimal conditions.



CAUTION

- Avoid touching live parts.
- Do not use the product with damaged housing or connectors.
- The product should only be installed by a trained or qualified person.

