### Schréder

Experts in lightability™

## **SHUFFLE**



SHUFFLE is a connected, modular approach to city hardware - with its plugand-play rotatable modules that contain pre-certified hardware, it can be configured to suit your specific needs.

#### **KEY ADVANTAGES**

- > Seamless integration in the SHUFFLE column
- Numerous lighting configurations
- > Remote control lighting through 7-pin NEMA or Zhaga socket
- > Easy installation with patented mounting system
- > Integrated access points
- > Extremely simple WiFi deployment

The SHUFFLE 360 LGT WLAN GEN2 is a versatile module that offers an array of highly performing public WiFi options, carefully designed to offer the best possible lighting options and at the same time improve communication and connectivity between citizens.

The versatility of this module continues with the light which provides a connected intelligent LED system with options like LED colour, power, type of optics, control options, electrical class, protector type and so much more. From an integrated control unit to IoT solutions delivered through a standard NEMA 7-pin or Zhaga socket, this module can adapt to any local requirements.

Modules are carefully manufactured in die-cast, high pressure aluminium and clear, semi or totally sanded protectors is added to host the technology within. All fasteners are in stainless steel. The housing is covered in the highest graded polyester powder paint supporting a variety of colours.







### SHUFFLE 360 LGT WLAN GEN2 | CHARACTERISTICS

#### **KEY FEATURES**

- Lumen package range: 1,500 to 8,800lm
- Back-light control (optional)
- French law compliant with G-Limiter option (GL)
- **DarkSky Certification**
- **Neutral or warm white LEDs**
- Optional internal diffuser or external diffuse protector for enhanced visual comfort
- **NEMA 7-pin socket for** smart city IoT controller
- Self-forming and selfhealing meshed network. Individual access points can connect with each other wirelessly
- Adapts automatically to environmental changes
- Many concurrent users per access point
- Stable connections at higher data rates
- Dividable bandwidth: e.g. to assign a dedicated part to city operators and a restricted bandwidth for the general public
- Unmatched scalability, cloud or locally managed
- Zhaga-D4i certified



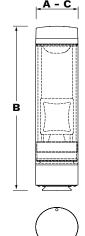
#### **COMPARISON TABLE**

SH36LW2-FO SH36LW2-FV	SH36LW2-JT
***	***
***	* * ☆
***	***
Yes	Yes
Yes	Yes
512 per AP	250 per AP
26dBm	20dBm
Yes	No
Yes	Yes
	SH36LW2-FV ★★★ ★★★ Yes Yes 512 per AP 26dBm Yes

#### \*contact Customer Support

#### **DIMENSIONS AND MOUNTING**

AxBxC (mm   inch)	194x815x194   7.6x32x7.6
Weight (kg   lbs)	8   17.6
Aerodynamic resistance (CxS)	0.16
Mounting possiblilities	Clamps









Internal Diffuser

Protector

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## **SHUFFLE**

### SHUFFLE 360 LGT WLAN GEN2 (SH36LW2-FO/FV) | CHARACTERISTICS

GENERAL	
Recommended installation height	3m to 6.8m   9.8' to 22.3'
Driver included	Yes
CE Mark	Yes
UKCA Certified	Yes
ENEC Certified	Yes
ENEC+ Certified	Yes
UL Mark	Yes
ROHS Compliant	Yes
Zhaga-D4i Certified	Yes
French law of December 27th 2018 - Compliant with application type(s)	a, b, c, d, e, f, g
Testing standard	LM 79-08 (all measurements in ISO17025 accredited laboratory
HOUSING AND FINISH	
Housing	Aluminum
Optic	PMMA
Protector	Polycarbonate PMMA
Internal diffuser	Polycarbonate

Optic	PMMA
Protector	Polycarbonate PMMA
Internal diffuser	Polycarbonate
Housing finish	Polyester powder coating
Standard colour	AKZO grey 900 sanded*
Tightness level	IP 66
Impact resistance	IK 10 (polycarbonate) IK 06 (PMMA)

<sup>\*</sup>any other RAL or AKZO colour upon request

#### **OPERATING CONDITIONS**

Operating	-40°C up to 50°C / -40°F up to 122°F
temperature range	with wind effect*
(Ta)	with wind effect.

<sup>\*</sup>Depending on the module configuration. For more details, please contact us.

#### **SHUFFLE**

SHUFFLE pole model	2 doors same side   3 doors
SHUFFLE components	Mains box   Lighting box Beyond light power supply box
	Support plate network
	Network cable
Position on pole	Always top position

#### LIFETIME OF THE LEDS @ TQ 25°C

ELECTRICAL

Electrical class	Class   EU, Class    EU Class 1 US
Nominal voltage	220-240V - 50/60Hz 120-277V - 50/60Hz
Power factor (at full load)	0.95+
Surge protection options (kV)	10
Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-3-2 / EN 61000-3-3 / EN 61547/ EN 61000-4-2 / EN 61000-4-3 / EN 61000-4-4 / EN 61000-4-5 / EN 61000-4-6 / EN 61000-4-8 / EN 61000-4-11
Control protocol(s)	1-10V, DALI
Control options	Custom Dimming Profile, Remote management
Socket	NEMA 7-pin Zhaga
Associated control system(s)	OWLET Nightshift Schréder EXEDRA
Sensor	PIR (optional)

OPTICAL INFORMATION	
LED colour temperature	2700K (Warm White 727) 3000K (warm White 730) 3000K (Warm White 830) 4000K (Neutral White 740)
Color rendering index (CRI)	>70 (Warm White 727) >70 (Warm White 730) >80 (Warm White 830) >70 (Neutral White 740)
Upward Light Output Ratio (ULOR)	<3%

 $<sup>\</sup>cdot$  ULOR may be different according to the configuration. Please consult us. · Meets DarkSky requirements when fitted with LEDs of 3000K or less.

#### WLAN (Access point and Mesh node)

Antenna connection	Embedded antenna
Power supply	802.3af/at(POE)
WiFi frequency	2.4GHz, 5GHz
Peak PHY rates	2.4GHz: 574Mbps 5GHz: 1200Mbps
Client capacity	Up to 512 clients per AP
SSID	Up to 31 per AP
WiFi country license	WW* (EU), US, CA
WiFi mounting	Screws
WiFi norms	a, b, g, n, ac, 6
WiFi operating mode	Access Point, Gateway, Mesh node

<sup>\*</sup>Although worldwide, it does not apply to all countries.

## SHUFFLE 360 LGT WLAN GEN2 (SH36LW2-JT) | CHARACTERISTICS

GENERAL	
Recommended installation height	3m to 6.8m   9.8' to 22.3'
Driver included	Yes
CE Mark	Yes
UKCA Certified	Yes
ENEC Certified	Yes
ENEC+ Certified	Yes
UL Mark	Yes
ROHS compliant	Yes
Zhaga-D4i Certified	Yes
French law of December 27th 2018 - Compliant with application type(s)	a, b, c, d, e, f, g
Testing standard	LM 79-08 (all measurements in ISO17025 accredited laboratory

#### **HOUSING AND FINISH**

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Housing	Aluminum						
Optic	PMMA						
Protector	Polycarbonate PMMA						
Internal diffuser	Polycarbonate						
Housing finish	Polyester powder coating						
Standard colour	AKZO grey 900 sanded*						
Tightness level	IP 66						
Impact resistance	IK 10 (polycarbonate) IK 06 (PMMA)						

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#### SHUFFLE

SHUFFLE Pole model	2 doors same side   3 doors				
SHUFFLE Components	Mains box   Lighting box Beyond light power supply box				
	Support plate network				
	Network cable				
Position on pole	Always top position				

#### LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L95
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#### **ELECTRICAL**

Electrical class	Class I EU, Class II EU Class 1 US					
Nominal voltage	220-240V - 50/60Hz 120-277V - 50/60Hz					
Power factor (at full load)	0.95+					
Surge protection options (kV)	10					
Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-3-2 / EN 61000-3-3 / EN 61547/ EN 61000-4-2 / EN 61000-4-3 / EN 61000-4-4 / EN 61000-4-5 / EN 61000- 4-6 / EN 61000-4-8 / EN 61000-4-11					
Control protocol(s)	1-10V, DALI					
Control options	Custom Dimming Profile, Remote management					
Socket	NEMA 7-pin Zhaga					
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Upward Light Output Ratio (ULOR)	<3%						

<sup>·</sup> ULOR may be different according to the configuration. Please consult us.

#### **WLAN** (Access point and Mesh node)

WEAR (Access point and Mesh Hode)								
Antenna connection	External Dual-Band Omni Antennas							
Power supply	802.3af/at(POE)							
WiFi frequency	2.4GHz, 5GHz							
Peak PHY rates	2.4GHz: 300Mbps 5GHz: 867Mbps							
Client capacity	Up to 250 clients per AP							
SSID	Up to 8 per AP							
WiFi country license	EU							
WiFi mounting	Screws							
WiFi norms	802.11 a/b/g/n/r/k/v/ac							
WiFi operating mode	Access Point, Gateway, Mesh node							

<sup>·</sup> Meets DarkSky requirements when fitted with LEDs of 3000K or less.

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## SHUFFLE 360 LGT WLAN GEN2 | PERFORMANCE

		Lumii output f Warm 72	lux (lm) White	Lumii output f Warm 73	lux (lm) White	Lumii output f Warm 83	lux (lm) White	Lumi output f Neutral 74	lux (lm) . White	Pov consur (W	nption	Luminaire efficacy (lm/W)	
Modules	Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to	Photometry
T GEN2	16	1500	4100	1600	4500	1500	4200	1800	4800	18	37	148	LENSO FLEX* 2
.E 360 LGT	20	2000	5200	2100	5600	2000	5200	2300	6100	22	45	154	LENSO FLEX* 4
SHUFFLE	24	2300	7400	2400	8200	2300	7600	2600	8800	27	70	151	LENSO FLEX*2

Tolerance on LED flux is  $\pm$  7% and on total luminaire power  $\pm$  5 %



