

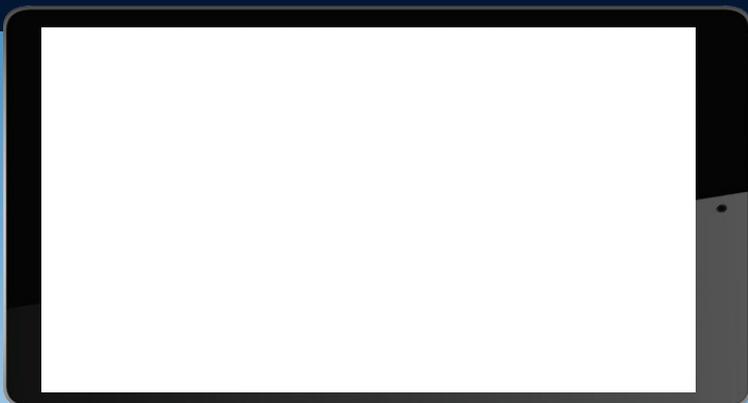
Schröder
Experts in lightability™

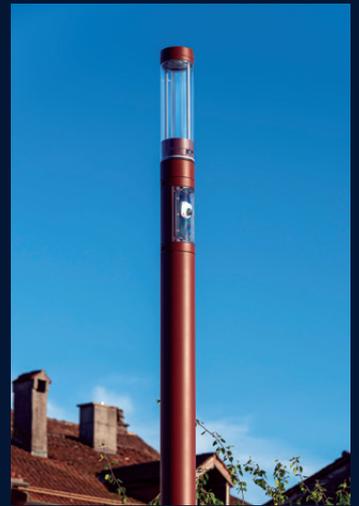
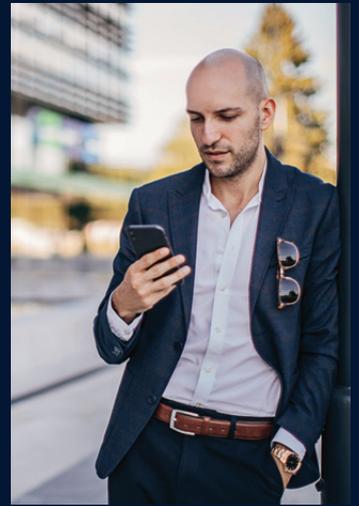
SHUFFLE

The smart column for cities people love to live in



It's time to
SHUFFLE
your world!





SMART & CONNECTED

SHUFFLE



Decluttering
cities on their
journey to
becoming smart

The SHUFFLE smart column is a connected, modular approach to city hardware. With plug-and-play rotatable modules that contain pre-certified hardware, it can be configured to suit your specific needs.

Redesign. Reorganise. Improve. Combine. Do these all at once with SHUFFLE, an integrated concept with unlimited opportunities to **bring the experience to a new level** in cities and venues. Information, identity, safety, communication, entertainment, mobility and much more. All your various features can be gathered elegantly into **one integrated platform**. Not set in stone, but with versatility and ready for future evolutions. You can create your personalised SHUFFLE by associating **up to 5 modules per column**, or pick one of our preconfigured variants.

KEY ADVANTAGES

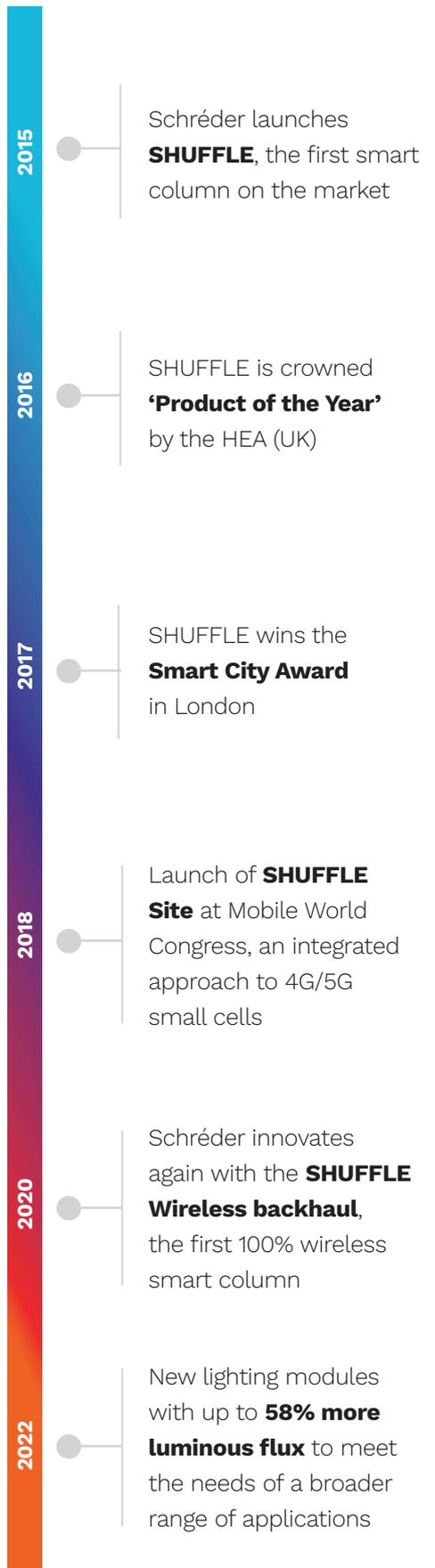
- Seamless integration of urban hardware in a refined column
- Personalised combinations: up to 5 modules per column
- Preconfigured versions: Campus, SOS, Security, Light and Mobility
- Total versatility with 360° rotatable modules
- Patented system for easy installation
- Upgradable: modules can be added or replaced after installation
- Fully connected platform





Leading with **non-stop innovation**

SHUFFLE was launched in 2015, and many enthusiastic customers who set out to shed extra light on their vibrant urban living spaces have installed it. And they went **beyond simple outdoor lighting**. They took the opportunity offered by this platform to bring new services into their environments, such as WiFi, surveillance cameras, loudspeakers, emergency buttons and EV chargers. Just a year after its launch, SHUFFLE was awarded **'Product of the Year 2016'** by the Highway Electrical Association (HEA) in the UK. A little while later, in 2017, SHUFFLE received the **'Smart City Award'** in London for its technology with great potential for smart cities. In 2020, Schröder made SHUFFLE independent from physical wiring for lightning-speed connectivity, creating the first wireless smart column. This spirit of constant innovation combined with exquisite design, attention to detail and a deep understanding of customer needs has positioned SHUFFLE as a benchmark in the market. Since their launch, SHUFFLE columns have delighted cities and private companies in **more than 35 countries** worldwide.



SHUFFLE SOS

THE CITIZENS' GUARDIAN ANGEL

SHUFFLE SOS offers the perfect solution for helping people and emergency services in critical situations. With one simple push of a button, citizens can quickly get in touch with the emergency services if they witness an incident or are the victim of an accident.

Using a voice-over IP intercom, people can explain the problem and **receive proper assistance**. The embedded cameras enable call centres to take the right actions thanks to a real-time video feed. The strobe light and horn, which can be triggered remotely, make sure that the emergency signal is seen and heard by bystanders in the area. They also **guide the emergency crew** to the exact location of the incident.

With SHUFFLE SOS, people never feel alone in a city. They receive the support they expect in the shortest possible time. Emergency services are able to react accordingly and cover a larger area, optimising their resources.

	SHUFFLE SOS BASIC	SHUFFLE SOS CORE	SHUFFLE SOS ACTIVE
Pole height	4370mm 14.34'	4370mm 14.34'	4370mm 14.34'
Control node	Yes	Yes	Yes
Module (top)	360° Lighting with strobe (SH36L2-HL)	360° Lighting with strobe (SH36L2-HL)	360° Lighting with strobe (SH36L2-HL)
Module 2	Horn (SH18S2-HN)	Camera without extra PC protector (SH18C2-JH)	Red light ring (SHLR2-RE)
Module 3	-	Horn (SH18S2-HN)	Quadview (SHCQV)
Module 4	-	-	Horn (SH18S2-HN)
Integrated in pole	Intercom (SHPOIC2-GH)	Intercom with camera (SHPOIC2-G)	Intercom with camera (SHPOIC2-Gi)



SHUFFLE CAMPUS

CREATING PLACES PEOPLE LOVE TO BE IN

SHUFFLE Campus is the right tool for ambitious companies, institutions, public services and cities wanting to offer a high-quality experience to their workers, customers, residents, citizens or visitors.

It is designed to provide multiple services, aesthetically and efficiently, to **business facilities, condominiums, academic, medical or sport complexes, parks, shopping malls or transport infrastructures** such as airports and train or bus stations. SHUFFLE Campus creates **safe, pleasant places, connecting people** to the internet, informing and entertaining them, while keeping an elegant and discreet presence that blends into any environment. SHUFFLE Campus is **a great asset for placemaking** as it strengthens the connection between people and the urban environment with a minimal footprint.

	SHUFFLE CAMPUS BASIC	SHUFFLE CAMPUS CORE	SHUFFLE CAMPUS ACTIVE
Pole height	4370mm 14.34'	4370mm 14.34'	4370mm 14.34'
Control node	Yes	Yes	Yes
Module (top)	360° Lighting with WLAN (SH36LW2-CS/CX)	360° Lighting with WLAN (SH36LW2-JT)	360° Lighting with WLAN (SH36LW2-JT)
Module 2	-	Blue light ring (SHLR2-BL)	Blue light ring (SHLR2-BL)
Module 3	-	Analogue speaker (SH18S2-CP)	Quadview (SHCQV)
Module 4	-	-	Analogue speaker (SH18S2-CP)
Integrated in pole	PIR sensor (C0)	PIR sensor (C0)	PIR sensor (C0) Power sockets (SHPOLE2-G8)



Click for more information



BASIC

CORE

ACTIVE

SMART & CONNECTED



SHUFFLE SECURITY

BUILDING CONFIDENCE IN OUTDOOR AREAS

Feeling secure is a basic human right. Your residents and visitors want to feel safe at all times. SHUFFLE Security delivers a strategic breakthrough to address this challenge with advanced lighting and security features.

It is designed to **create safe and pleasant outdoor areas:** tourist sites, parks and squares, outdoor spaces around public and private buildings (embassies, ministry buildings, banks, hospitals, schools, etc.), metro, bus or train stations, car parks and sports or leisure venues. SHUFFLE Security provides a monitoring system that enables bidirectional communication: from authorities to citizens or security companies to people in the environment, and vice versa, from end users to public/property managers.

SHUFFLE Security improves confidence in using outdoor environments. It encourages people to socialise, to contribute to the local economy and to develop a true sense of community.

	SHUFFLE SECURITY BASIC	SHUFFLE SECURITY CORE	SHUFFLE SECURITY ACTIVE
Pole height	4370mm 14.34'	4370mm 14.34'	4370mm 14.34'
Control node	Yes	Yes	Yes
Module (top)	360° Lighting (SH36L2)	360° Lighting (SH36L2)	360° Lighting (SH36L2)
Module 2	Camera without extra PC protector (SH18C2-JH)	Quadview (SHCQV)	Universal camera bracket (SHCBR)
Module 3	-	Analogue speaker (SH18S2-CP)	Camera without extra PC protector (SH18C2-JH)
Module 4	-	-	Analogue speaker (SH18S2-CP)
Integrated in pole	-	-	Intercom (SHPOIC2-GH)



Click for more information



BASIC

CORE

ACTIVE



SHUFFLE MOBILITY

MOVING TOWARDS NET ZERO

SHUFFLE Mobility is designed to charge electric vehicles and protect them from vandals. It can be installed in streets where it is difficult to establish infrastructure for electric vehicle charging.

SHUFFLE Mobility not only provides a charging solution for electric vehicles, it ensures **an outstanding experience for EV drivers** by helping them to find vacant chargers, by ensuring a high level of security for them and their car and by offering the best lighting solution at night.



	SHUFFLE MOBILITY BASIC	SHUFFLE MOBILITY CORE	SHUFFLE MOBILITY ACTIVE
Pole height	4370mm 14.34'	4370mm 14.34'	4370mm 14.34'
Control node	No	Yes	Yes
Module (top)	Blue/green light ring (SHLR2-BL/GR)	360° Lighting (SH36L2)	360° Lighting (SH36L2)
Module 2	-	Green/blue light ring (SHLR2-GR/FK)	Green/blue light ring (SHLR2-GR/FK)
Module 3	-	-	180° Lighting Spot (SH18L)
Module 4	-	-	Camera without extra PC protector (SH18C2-JH)
Integrated in pole	EV charger 11kW (SHPOEV)	EV charger 11kW (SHPOEV)	EV charger 11kW (SHPOEV)



BASIC

CORE

ACTIVE

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SHUFFLE LIGHT

FOR ENDLESS CHALLENGES

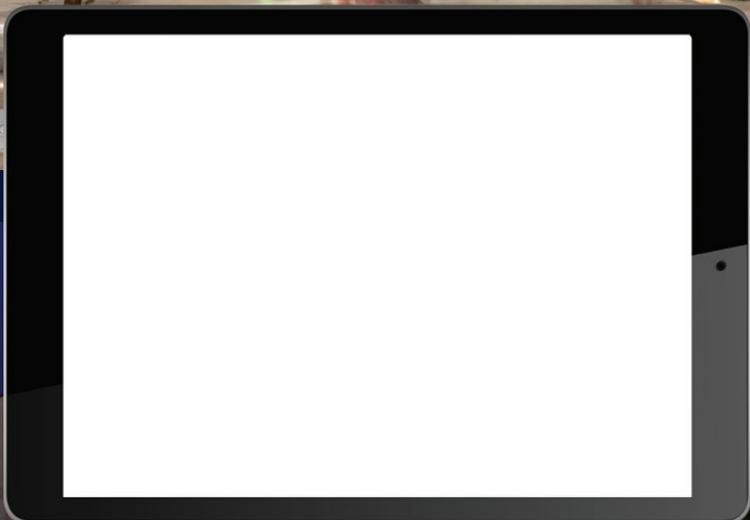
SHUFFLE Light is designed to meet the various lighting needs of an area with elegance and high energy efficiency. Its aesthetic design integrates various lighting modules (360°, spot and light ring) with smart control features for dimming and light-on-demand scenarios.

The SHUFFLE Light smart column can be installed in any location where its versatility, connectivity and simplicity create additional value beyond basic lighting.

Designed to light roads, streets, squares and other places where creating a pleasant atmosphere is a key element, SHUFFLE Light benefits from **a wide range of photometries** and provides aesthetic consistency for various urban environments. It offers the perfect tool for placemaking as it frees up space that can then be used to enhance the urban experience and promote people's health, happiness and well-being.

	SHUFFLE LIGHT BASIC	SHUFFLE LIGHT CORE	SHUFFLE LIGHT ACTIVE
Pole height	4370mm 14.34'	4370mm 14.34'	4370mm 14.34'
Control node	Yes	Yes	Yes
Module (top)	360° Lighting (SH36L2)	360° Lighting (SH36L2)	360° Lighting (SH36L2)
Module 2	-	180° Lighting Spot (SH18L)	Blue light ring (SHLR2-BL)
Module 3	-	-	180° Lighting Spot (SH18L)
Integrated in pole	-	-	PIR sensor (C0)





WLAN 

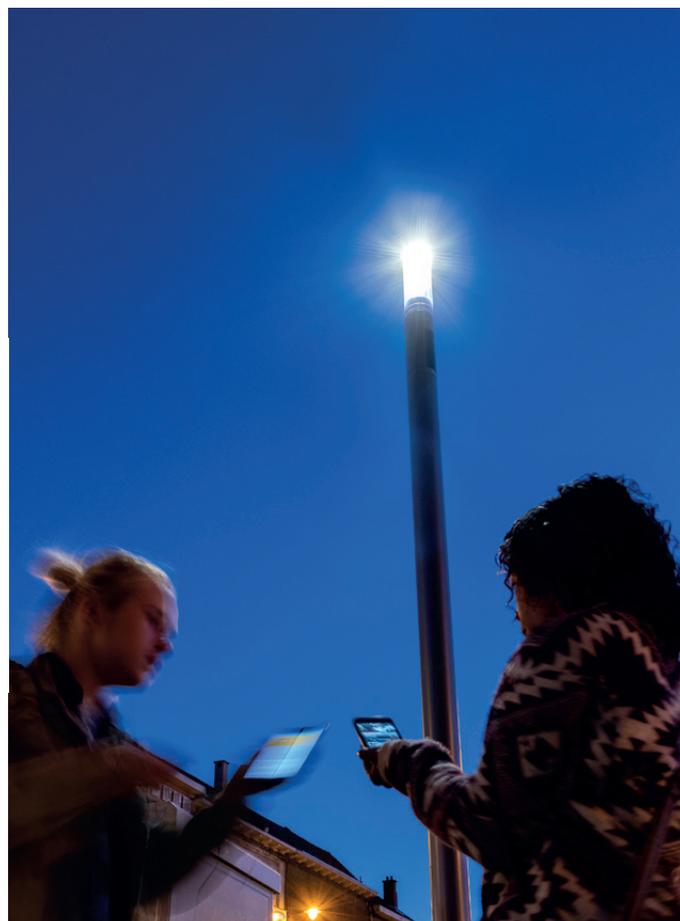
	WLAN (SH18W2-CS)	WLAN (SH36LW2-CS/ SH36LW2-CX)	WLAN (SH36LW2-JT)	WLAN (SH36LW2-FO/ SH36LW2-FV)
WiFi coverage	★☆☆	★☆☆	★★★	★★★★
WiFi throughput	★☆☆	★☆☆	★★★	★★★★
Ethernet throughput	★☆☆	★☆☆	★★★	★★★★
Mesh	No	No	Yes	Yes
Powered by PoE	No	No	Yes	Yes
Client capacity	NA	NA	250 per AP	512 per AP
Maximum transmission power	20dBm	20dBm	20dBm	26dBm
Wi-Fi 6	No	No	No	Yes
Management platform	No	No	Yes	Yes

Professional and secure wireless network

- Available in a 360° lighting module or in a dedicated module
- Multiple concurrent users per access point
- Stable connections at higher data rates
- Divisible 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

4G/5G **Providing 4G/5G capacity and coverage**

- High-speed mobile connection
- Blends into the urban environment
- Easy site acquisition for mobile operators
- Range of up to 100m
- Upgradable antenna can be added later, when additional capacity is needed
- The operator installs and owns the telecom equipment
- Easy access for maintenance
- Waterproof IP material
- Upgradable base module can be equipped for 5G networks

4G/5G antenna
(SH18A-GD)Side cabinet
(SHSC-HA)

WIRELESS BACKHAUL



Base Unit
(SH18WB2-JN)



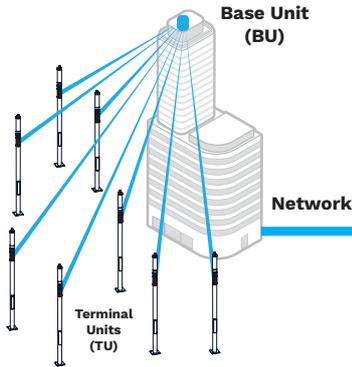
Terminal Unit
(SH18WB2-JM)

Wireless fibre communication network for smart city applications

- Wireless extended fibre connections to and from a pole
- The speed of fibre (up to 2.3Gbps), the flexibility of wireless
- Easy street level deployment
- Reliable, virtually interference-free operation
- Connect up to 8 SHUFFLEs from one Base Unit
- 400m auto-aligned range
- AES encryption
- Integrated managed PoE switch
- Operates in 60GHz V band

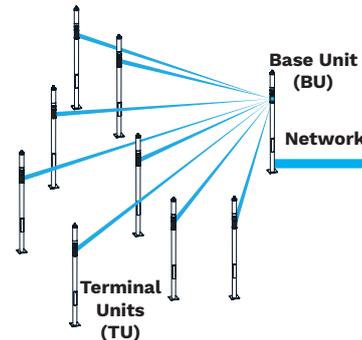


1 Building to SHUFFLE (star mode)



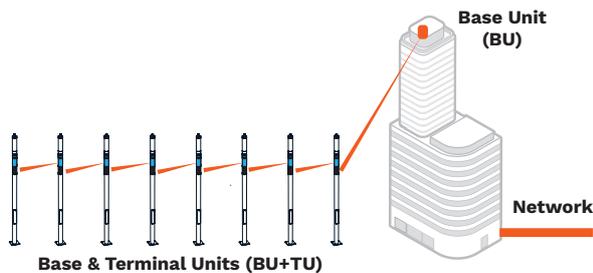
The Base Unit is mounted outdoors, on the side of a building or on a rooftop. It connects to 8 SHUFFLEs (Terminal Units) installed within a range of 400 metres max.

2 SHUFFLE to SHUFFLEs (star mode)



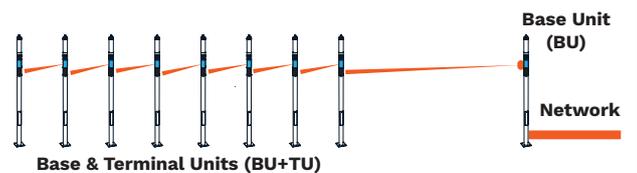
The Base Unit is integrated into a SHUFFLE. This connects to 8 SHUFFLEs (Terminal Units) installed within a range of 400 metres max.

3 Building to SHUFFLE (linear mode)



The Base Unit is mounted outdoors, on the side of a building or on a rooftop. It connects to one SHUFFLE (Base and Terminal Units) that itself connects to another SHUFFLE having the same hardware (BU+TU) and so on, in a daisy chain layout. The spacing between two SHUFFLEs can be up to 400 metres (max).

4 SHUFFLE to SHUFFLEs (linear mode)



The Base Unit is integrated into a SHUFFLE. It connects to one SHUFFLE (Base and Terminal Units) that itself connects to another SHUFFLE having the same hardware (BU+TU) and so on, in a daisy chain layout. The spacing between two SHUFFLEs can be up to 400 metres (max).

SPEAKER **Professional sound system for public service announcements, warnings and music**

- Frequency range: 90 - 19,000Hz
- Full range speaker with dual cone
- Perfect sound - up to 25W power output
- Weatherproof / adapted to indoor and outdoor applications
- Digitally connected network speaker



	Analogue speaker (SH18S2-CP)	Digital speaker (SH18S2-S8)
Frequency range	100 - 18000Hz	90 - 19000 Hz
Sound pressure level (1W/1m)	89dB	90dB
Max. power rating	20W	25W
Ethernet connection	No	Yes
Internal amplifier	No	Yes

POWER SUPPLY **Auxiliary power source**

- Secured access with locked door (T25 screws at the top of pole, key at the bottom)
- Integrated fuse
- Integrated cable retainer
- Passage to the outside for cables



	Power sockets (SHPOLE2-G8)	Event lighting socket (SHPOLE2-FU)
Location	At the bottom of the pole	At the top of the pole
Number of sockets	2	1
Type	Schuko Type F 16A 230V	Schuko Type F 16A 230V
Purpose	Power sockets for any need	Power socket for decorative lighting
Max. power	3500W	1200W

EV CHARGING 

EV charger
(SHPOEV2)

Professional charging station

- AC charging 11kW
- European socket (type 2)
- Safety locking during charging
- Access unit (for cabinet mounting)



LIGHTING

360° LensoFlex®2/
LensoFlex®4 (SH36L2)

Street lighting / Ambiance lighting / Pedestrian crossing lighting

- Lumen package range: from 1,500 to 8,100lm
- Back light control (optional)
- Warm or neutral white LEDs
- Optional internal diffuser or external diffuse protector for enhanced visual comfort



180° Spot (SH18L)

Up/down (on-site adjustment): architectural lighting

- Lumen package range: from 1,300 to 2,400lm
- On-site inclination angle settings: -10/+40°
- Warm or neutral white LEDs



180° LensoFlex®2 (SH18L)

Street lighting

- Lumen package range: from 2,200 to 5,500lm
- Back-light control (optional)
- Warm or neutral white LEDs



180° reflector (SH18L)

Down: Street lighting / Ambiance lighting / Area lighting Up: Architectural lighting

- Lumen package range: from 2,300 to 6,000lm
- Neutral or warm white LEDs



Light ring (SHLR2)

Signage / beautification (identity) / creation of ambiance

- Static red, blue, green, warm or neutral white variants
- 1 or 2 alternating static colours
- RGB for colour changing effects



Luminaire bracket (SHLB)

Street lighting / Pedestrian crossing lighting

- For luminaire with mounting for Ø60mm/2.3"
- Inclination angle: +5°



With PIANO Midi



With FLEXIA FG Midi



With YMERA



With CITEA NG Mini

CCTV - 180° **For professional camera networks**

- Resolution: full HD (1920 x 1080)
- Image optimisation (back-light, contrasts, night vision, high luminosity)
- Privacy layers
- ONVIF communication standard
- Event triggering: motion detection, video analytics, tampering, etc.
- Digital zoom
- Data optimisation: selected and/or delayed transmission, on-site recording (SD memory slot)
- Compatible with video management systems



Camera with or without
extra PC protector
(SH18C2-HK)



Camera with or without
extra PC protector
(SH18C2-GC)



Camera with or without
extra PC protector
(SH18C2-JH)

Smart features	No	Yes	Yes
Security features	★☆☆	★★☆	★★★
Angular field of view	Horizontal: 108° Vertical: 60°	Horizontal: 110° Vertical: 62°	Horizontal: 108° Vertical: 59.3°
IR	15m	No	30m
Power consumption	3W	6.4W	7.5W

CCTV - 360° 

QuadView
(SHCQV)

**Integrated 360-degree video
CCTV solution**

- Offers a 360° field of view
- Contains 4 separate sensors with wide 113° horizontal field of view per sensor
- Vertical angle of view: 62°
- Streams videos from four sensor units simultaneously
- Supports 1920x1200/1080 (1080p) resolution with up to 50/60fps (50/60Hz)
- Supports Wide Dynamic Range (WDR) – Forensic Capture
- Ideal for very bright and/or dark areas
- Support for Zipstream technology lowers bandwidth and storage use
- Withstands dust, rain, snow, vibrations, shocks and impacts
- IP connectivity through standard Ethernet ports
- Power over Ethernet or 8–28V DC
- Features two SD card slots for optional local storage



Universal camera
bracket (SHCBR)

Integrated hanging bracket for PTZ cameras

- Compatible with most PTZ cameras on the market
- Excellent stability for minimal camera movement
- Concealed cable management

INTERCOM SOS

One-touch system to contact operators and/or to trigger panic response scenarios

- Vandal-resistant SIP and IP intercom
- Optional HD video at up to 30FPS (1440x1080px) and H.264 for integration with most video solutions
- Crystal clear audio
- Active background noise cancellation
- Automatic volume adjustment
- Stainless steel front plate with one button
- Can interact with SHUFFLE Strobe, light ring, horn and cameras



	Intercom (SHPOIC2-GH)	Intercom with camera (SHPOIC2-GI)
Internal speaker amplifier	10W class D	10W class D
Microphone	Digital MEMS, omnidirectional	Digital MEMS, omnidirectional
Power supply	PoE or external power supply	PoE or external power supply
Camera	-	Fixed lens, 1440x1080 pixels
Power consumption	Idle 1.8W Max 12W	Idle 3.5W Max 12W



STROBE SOS



360° Lighting with strobe (SH36L2-HL/SH36L2-HM)

Vital visual aid for emergencies

- Lumen package range: from 1,500 to 8,100lm
- Flashing blue strobe light
- Can be triggered remotely or locally via the intercom button

HORN

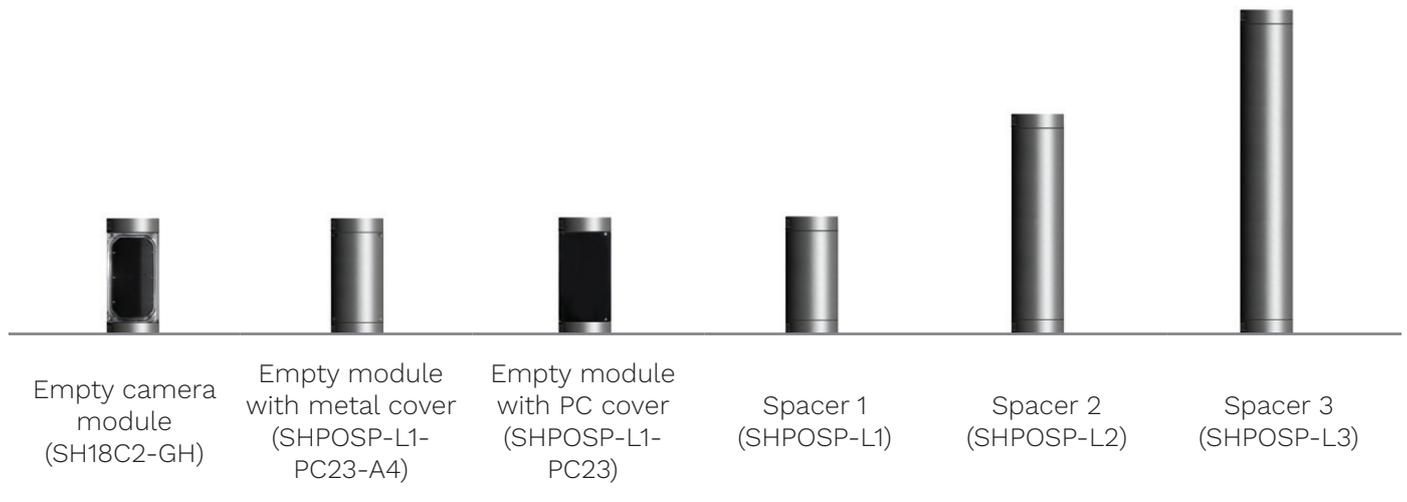


Horn (SH18S2-HN/SH18S2-HO)

Warning or alarm with a powerful electronic tone

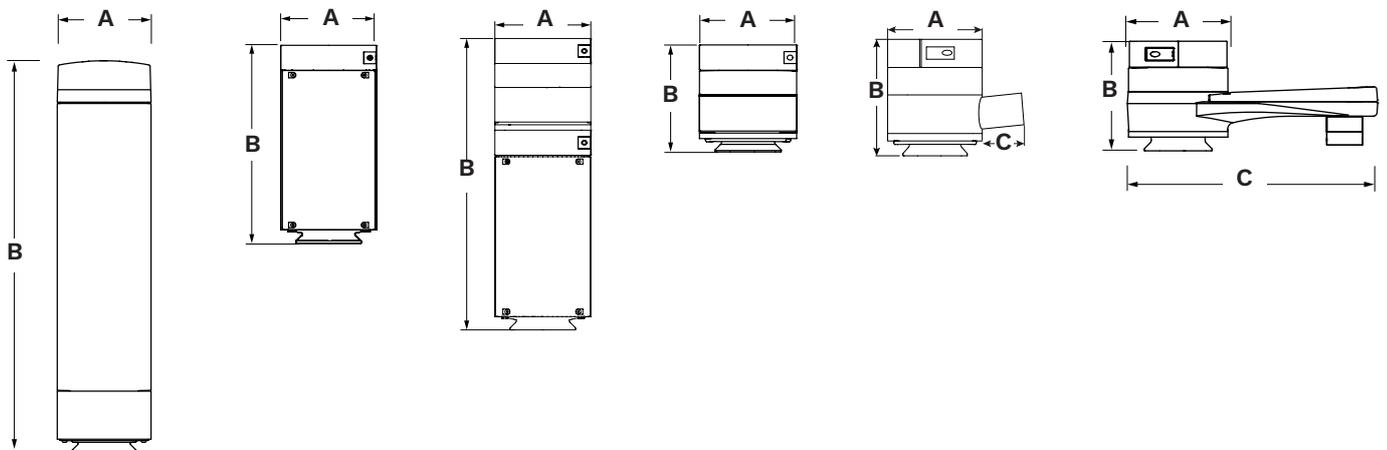
- Warning or alert to the nearby population
- Supports voice-over IP
- Multi-tone up to 105dB
- Can be triggered remotely
- Can be integrated into a global warning system
- Can be linked to SHUFFLE Intercom

SPACER



DIMENSIONS

	360° module	180° module	QuadView module	Light ring	Luminaire bracket (Ø60mm)	Camera bracket
A	194mm 7.6"	194mm 7.6"	194mm 7.6"	194mm 7.6"	194mm 7.6"	194mm 7.6"
B	815mm 32"	403mm 15.9"	593mm 23.4"	215mm 8.5"	215mm 8.5"	215mm 8.5"
C	-	-	-	-	109mm 4.3"	490mm 19.3"



6.84M / 22.5'

Max. 5 modules

4M / 13'

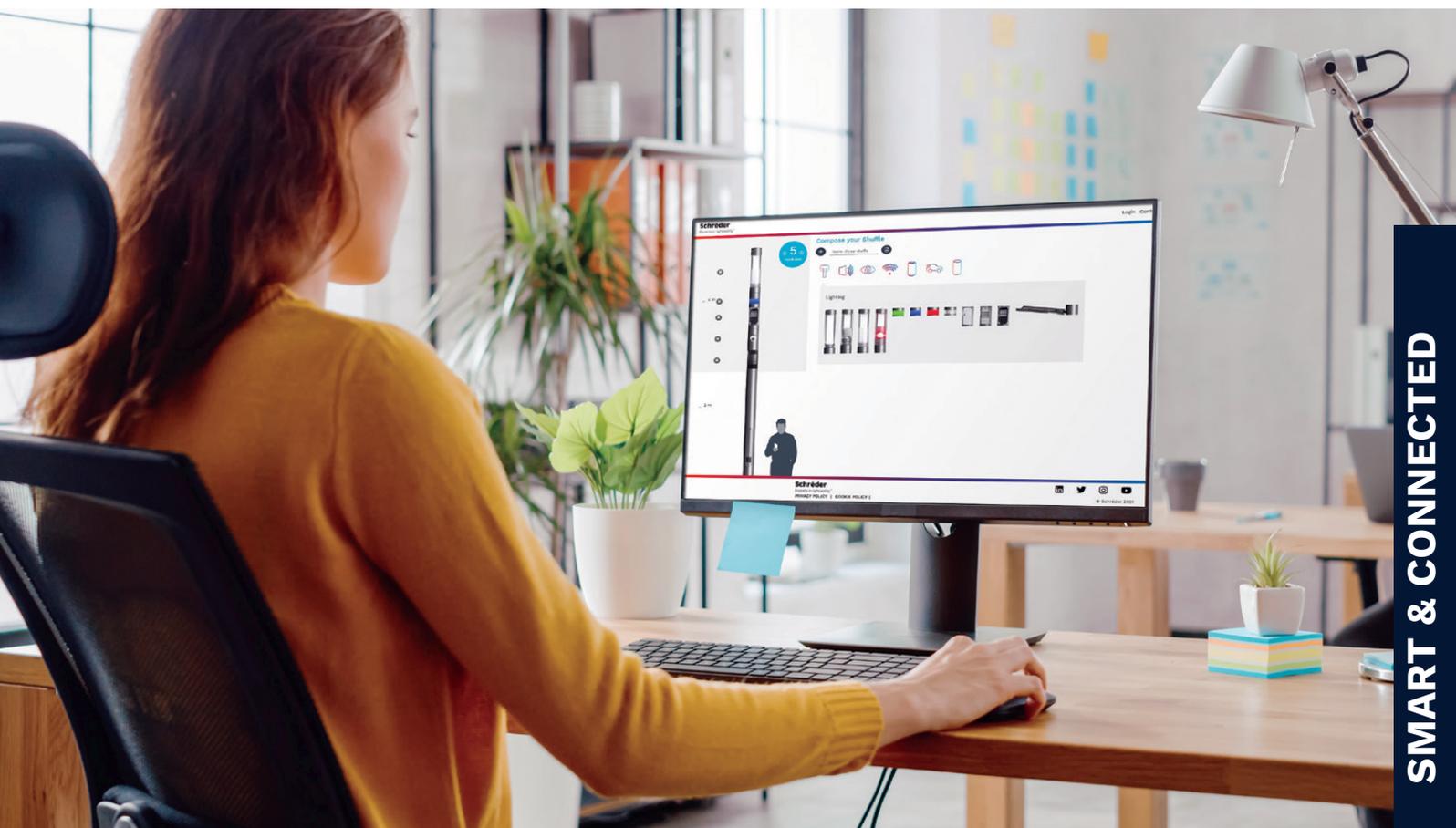
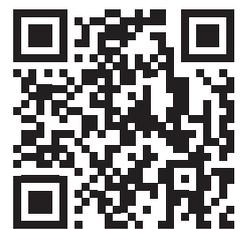
2.28M / 6.5'

Min.
pole
height



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