### 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
- > Professional camera network
- > Easy installation with patented mounting system
- > Compatible with the video management system

The SHUFFLE CAM GEN2 (external) module offers a solution for integrating a camera in a discreet public CCTV solution. It is designed to offer cities a way to enhance and develop security in public areas.

Our selection of cameras support a broad range of applications from security to business intelligence and additional plug-ins offering new efficiencies and opportunities.

The range of full HD 1080 cameras with infrared capabilities are specifically chosen to provide excellent visibility under diverse conditions. IR LED can produce clear monochrome images in 0 lux conditions. The Intelligent Auto (iA) feature enables the camera to automatically adjust settings in real-time adapting to its' surroundings, reducing distortion or motion blur.

Modules are in high-grade, high-pressure, die-cast aluminium. An external embellishment was added around the camera providing a polished appearance and a higher impact resisitance to the module. All fasteners are in stainless steel. The housing is covered in the highest graded polyester powder paint supporting a variety of colours.



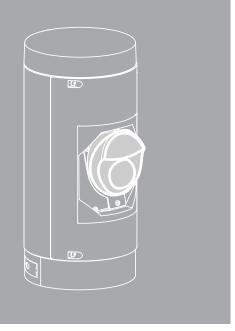
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## **SHUFFLE**

### SHUFFLE CAM GEN2 EXTERNAL | CHARACTERISTICS

### KEY FEATURES

- > Resolution: full HD (1920 x 1080)
- Image optimisation (backlight, contrasts, night vision, high luminosity)
- > Privacy layers
- > ONVIF communication standard
- > Event triggering: motion detection, video analytics, tampering...
- > Digital zoom
- Data optimisation:
   selected and/or delayed
   transmission, on-site
   recording (SD memory slot)
- > On-site tilting settings: 0 85°

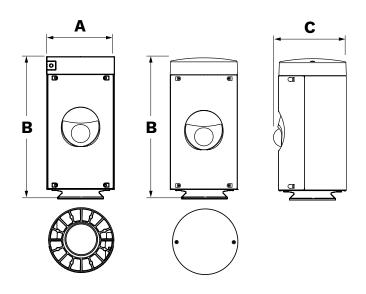


#### **COMPARISON TABLE**

|                       | SH18C2-HK                           | SH18C2-GB                           | SH18C2-JH                           |
|-----------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Smart<br>features     | No                                  | Yes                                 | Yes                                 |
| Angular field of view | Horizontal : 132°<br>Vertical : 74° | Horizontal : 110°<br>Vertical : 62° | Horizontal : 105°<br>Vertical : 56° |
| IR                    | 21m                                 | No                                  | 10m                                 |
| Power consumption     | 3.8W                                | 6.4W                                | 7.5W                                |
| UL Mark               | No                                  | Yes                                 | Yes                                 |

#### DIMENSIONS AND MOUNTING

| AxBxC (mm   inch)            | 194x403x220   7.6x15.9x8.6 |
|------------------------------|----------------------------|
| Weight (kg   lbs)            | 6.4   14.1                 |
| Aerodynamic resistance (CxS) | 0.08                       |
| Mounting possiblilities      | Clamps                     |



# **SHUFFLE**

## SHUFFLE CAM GEN2 EXTERNAL SH18C2-HK | CHARACTERISTICS

| GENERAL                         |                                     |
|---------------------------------|-------------------------------------|
| Recommended installation height | 2,3m to 6,8m   7,5' to 22,3'        |
| CE mark                         | Yes                                 |
| UKCA mark                       | Yes                                 |
| ROHS compliant                  | Yes                                 |
| HOUSING AND FINIS               | SH                                  |
| Housing                         | Aluminum                            |
| Camera support                  | Polycarbonate                       |
| Embellishment                   | Aluminum                            |
| Housing finish                  | Polyester powder coating            |
| Standard colour                 | AKZO grey 900 sanded                |
| Tightness level                 | IP 66                               |
| Impact resistance               | IK 10                               |
| Та                              | -40°C to +50°C<br>-40°F to +122°F   |
| ELECTRICAL                      |                                     |
| Electrical class                | Class   EU, Class    EU, Class   US |
| Power consumption               | 3.8W                                |
| SHUFFLE                         |                                     |
| SHUFFLE Pole<br>Versions        | 2 doors same side   3 doors         |
|                                 | Mains box   Beyond light supply box |
| SHUFFLE<br>Components           | Support plate network               |
|                                 | Network cable                       |
| Location on pole                | Any position                        |

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|                              | [16:9 mode(60 fps mode/ 30 fps mode/<br>50 fps mode/ 25 fps mode)]1920x1080/<br>1280x720/ 640x360/ 320x180  |
|------------------------------|---|
| Resolution                   | [4:3 mode(30 fps mode/ 25 fps mode)]<br>1280x960/ VGA/ QVGA   |
| H.265/ H.264<br>JPEG (MJPEG) | [4:3 mode(15 fps mode/ 12.5 fps mode)]<br>2048x1536* / 1280x960/ VGA/ QVGA  |
|                              | *Used by super resolution techniques  |
|                              | 2 mega pixel [16:9]   |
| Focal length                 | 2.4mm {3/32inches}  |
| Angular field of view        | [16:9 mode] Horizontal: 132°   Vertical: 74°<br>[4:3 mode] Horizontal: 99°   Vertical: 74°  |
| Maximum aperture ratio       | 1:2.1   |
| Minimum<br>Illumination      | Color: 0.02 lx (301RE, F2.1, 1/30 s)<br>Color: 0.03 lx (501RE, F2.1, 1/30 s)<br>BW: 0.02 lx (501RE, F2.1, 1/30 s)<br>BW: 0 lx (501RE, F2.1, 1/30 s with IR LED) |
| Focus range                  | 0.5m {19-11/16 inches} - ∞  |
| Adjusting angle              | Horizontal (PAN) angle: ±45°<br>Vertical (TILT) angle: 0 to +90°<br>Azimuth (YAW) angle: ±90°   |
| Memory card                  | microSDXC / microSDHC / microSD   |
| Power source                 | PoE (IEEE802.3af Compliant)   |
| No. of simultaneous<br>users | Up to 14 users (depends on network conditions)  |
|                              | IPv6 : TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTF<br>SMTP, DNS, NTP, SNMP, DHCPv6, MLD, ICMF<br>ARP, IEEE 802.1X, DiffServ   |
| Network protocol             | IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP, IEEE 802.1X, DiffServ                     |
|                              | SSL/TLS, SNMPv1/v2/v3, LLDP, SFTP, MQTT   |
| Network connector            | RJ45  |
| lmage sensor                 | Approx.1/2.8 type CMOS image sensor   |

# **SHUFFLE**

## SHUFFLE CAM GEN2 EXTERNAL SH18C2-GB | CHARACTERISTICS

| GENERAL                         |                                     |
|---------------------------------|-------------------------------------|
| Recommended installation height | 2,3m to 6,8m   7,5' to 22,3'        |
| CE mark                         | Yes                                 |
| UKCA mark                       | Yes                                 |
| UL mark                         | Yes                                 |
| ROHS compliant                  | Yes                                 |
| HOUSING AND FINIS               | SH                                  |
| Housing                         | Aluminum                            |
| Camera support                  | Polycarbonate                       |
| Embellishment                   | Aluminum                            |
| Housing finish                  | Polyester powder coating            |
| Standard colour                 | AKZO grey 900 sanded                |
| Tightness level                 | IP 66                               |
| Impact resistance               | IK 10                               |
| Ta                              | -40 °C to 55°C<br>-40 °F to 131°F   |
| ELECTRICAL                      |                                     |
| Electrical class                | Class   EU, Class    EU, Class   US |
| Power consumption               | 6.4 W                               |
| SHUFFLE                         |                                     |
| SHUFFLE Pole<br>Versions        | 2 doors same side   3 doors         |
|                                 | Mains box   Beyond light supply box |
| SHUFFLE<br>Components           | Support plate network               |
| Components                      | Network cable                       |
| Location on pole                | Any position                        |



| CAMERA                     |   |
|----------------------------|---|
| Resolution<br>H.265/ H.264 | 2 mega pixel [16:9] (25/30 fps)<br>1,920x1,080  |
| JPEG (MJPEG)               | 1 mega pixel [16:9] (45 fps)<br>1,280x720   |
| Focal length               | 2.8 mm {1/8 inches  |
| Angular field of view      | [16 : 9 mode] Horizontal : 110°   Vertical : 62°  |
| Maximum aperture ratio     | 2.8mm F1.6  |
| Minimum<br>Illumination    | Color: 0.06 lux at 30 IRE F1.6<br>B/W: 0.01 lux at 30 IRE F1.6<br>Color: 0.12 lux at 50 IRE F1.6<br>B/W: 0.02 lux at 50 IRE F1.6  |
| Adjusting angle            | Horizontal (PAN) angle: ±30°<br>Vertical (TILT) angle: 15 to +90°<br>Azimuth (YAW) angle: ±175°   |
| Memory card                | microSDXC / microSDHC / microSD   |
| Power source               | PoE (IEEE 802.3af)  |
| Multi-view<br>streaming    | Up to 8 individually cropped out view areas   |
| Network protocol           | IPv4, IPv6 USGv6, HTTP, HTTPS, HTTP/2, TLS, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf) |
| Network connector          | RJ45  |
| Image sensor               | 1/2.9" Progressive scan RGB CMOS  |
| Image optimisation         | WDR mode  |
|                            | Included AXIS Video Motion Detection, active tampering alarm, blocked view detection, shock detection   |
| Smart features             | Supported AXIS Motion Guard, AXIS Loitering Guard, AXIS Fence Guard Support for AXIS Camera Application Platform enabling installation of   |

third-party applications.

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## SHUFFLE CAM GEN2 EXTERNAL SH18C2-JH | CHARACTERISTICS

| GENERAL                         |                                     |
|---------------------------------|-------------------------------------|
| Recommended installation height | 2,3m to 6,8m   7,5' to 22,3'        |
| CE mark                         | Yes                                 |
| UKCA mark                       | Yes                                 |
| UL mark                         | Yes                                 |
| ROHS compliant                  | Yes                                 |
| HOUSING AND FINIS               | SH                                  |
| Housing                         | Aluminum                            |
| Camera support                  | Polycarbonate                       |
| Embellishment                   | Aluminum                            |
| Housing finish                  | Polyester powder coating            |
| Standard colour                 | AKZO grey 900 sanded                |
| Tightness level                 | IP 66                               |
| Impact resistance               | IK 10                               |
| Та                              | -30 °C to 75°C<br>-22°F to 167°F    |
| ELECTRICAL                      |                                     |
| Electrical class                | Class   EU, Class    EU, Class   US |
| Power consumption               | 7.5 W                               |
| SHUFFLE                         |                                     |
| SHUFFLE Pole<br>Versions        | 2 doors same side   3 doors         |
|                                 | Mains box   Beyond light supply box |
| SHUFFLE<br>Components           | Support plate network               |
|                                 | Network cable                       |
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| CAMERA                                     |  |
|--|--|
| Resolution<br>H.265/ H.264<br>JPEG (MJPEG) | 2 mega pixel [16:9] (30 fps)<br>1,920x1,080  |
| Lens type                                  | Fixed lens, 2/2.8/4/6/8 mm   |
| Angular field of view                      | 2.8 mm, horizontal FOV 105°,<br>vertical FOV 56°   |
| Maximum aperture ratio                     | 2mm: F2.25<br>2.8 /4/6 /8mm: F1.6  |
| Minimum<br>illumination                    | Color: 0.01 Lux @ (F1.6, AGC ON)   |
| Adjusting angle                            | Horizontal (PAN) angle: -30° to +30°<br>Vertical (TILT) angle: 0° to 75°<br>Azimuth (YAW) angle: 0° to 360°  |
| Memory card                                | Built-in micro SD/SDHC/SDXC slot, up to 256 GB   |
| Power source                               | PoE (IEEE 802.3af)   |
| Simultaneous live view                     | Up to 8 channels   |
| User/Host                                  | Up to 16 users, 3 levels: Administrator,<br>Operator and User  |
| Network protocol                           | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP,<br>DNS, DDNS, Email ,RTP, RTSP, RTCP, NTP,<br>UPnP, SMTP, SNMP, ICMP 802.1X, QoS, IPv6,<br>Bonjour, ISUP5.0                          |
| Network connector                          | RJ45   |
| Image sensor                               | 1/2.8" CMOS Progressive Scan   |
| Image optimisation                         | WDR mode   |
| Smart features                             | Motion detection, video tampering alarm,  Line crossing detection, Configurable intrusion detection, Unattended baggage detection, Object removal detection Face detection |



Any position

Location on pole