# SML²
# Data Sheet

SML² 220 · black



SML² 900 · polished



SML² 220 · silver



SML² 220 · black



SML² 220 · silver

With its radically reduced design and exclusive features, the SML line has established itself as one of the serien trademark ranges. SML LED, the most recent addition to this successful product family, now joins the modular lighting system in its second generation as SML². With its height of just 25 mm SML² can be modularly combined with the SML halogen and fluorescent versions.The SML² line now comes in six lengths and offers wide application range and extended modularity.

Examples of application: In private and commercial spaces. Wherever flexible lighting combined with a uniform design language, low running and maintenance costs is required. Thanks to the low heat production, also ideal for lighting in places where it might be touched, for example in bathrooms, kitchens or service areas.

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# SML²

## Technical data sheet

SML² offers all the benefits of the SML line and much more besides: Sustainable, future-proof technology, high energy efficiency and significantly reduced heat development. In collaboration with electrical engineers we have developed exclusively for the LED version of the SML family the power supply, the LED circuit board, and a highly efficient cooling system, which ensures the long life of the illuminant. At the end of its long service life, the LED circuit board can be replaced by qualified staff.

Design Jean-Marc da Costa

## Awards

Design Centre of North Rhine-Westphalia,
Red Dot Award 2013
Design Award of the Federal Republic of Germany,
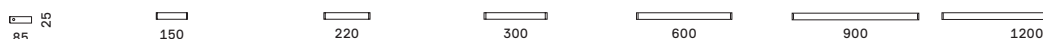Nomination 2013

## Material & surfaces

| Material | Housing aluminum, lamp cover polycarbonate satinée or printed with raster |
| Surface | coated silver (RAL9006), coated white (RAL9010), coated black (RAL9005), polished |
| Illuminant cover | satinée/satinée or satinée/Raster |

## Dimensions

85 / 25 | 150 | 220 | 300 | 600 | 900 | 1200

## Technical data

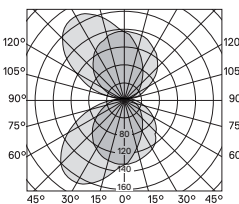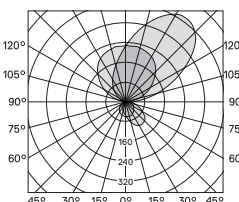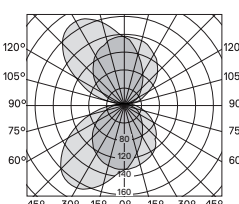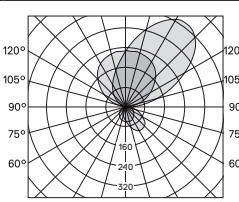| Illuminant | | High Efficiency Quality Mid Power LED (> 130 lm/W) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 32 pieces | 48 pieces | 64 pieces | 64 pieces | 92 pieces | 128 pieces |
| Power | | 10 W | 15 W | 20 W | 20 W | 30 W | 40 W |
| Luminous flux LED (nominal value)[1]/ Color temperature | 2700 K | 1050 lm | 1500 lm | 2050 lm | 2050 lm | 3000 lm | 4000 lm |
| | 3000 K | 1100 lm | 1570 lm | 2150 lm | 2150 lm | 3120 lm | 4180 lm |
| | 4000 K* | 1150 lm | 1650 lm | 2225 lm | 2225 lm | 3250 lm | 4350 lm |
| Color rendering index | | > 90 CRI (other color rendering indices available on request) | | | | | |
| Operating voltage | | primary 220–240V AC, secondary 24V DC | | | | | |
| | | | | | 2 channels à 350mA | 3 channels à 350mA | 4 channels à 350mA |
| Control[4] | | on/off | TRIAC | TRIAC | DALI | DALI | DALI |
| Average lifetime LED | | 50.000 h[2] | | | | | |
| Energy efficiency class | | A+ / A | | | | | |
| Guarantee | | 2 years | | | | | |
| Mounting | | Delivery includes aluminum spacer profile (for mounting with center power outlet). | | | | | |
| Cleaning | | Illuminant covers can be mounted or removed for cleaning purposes without tools. | | | | | |
| Extras | | Suitable for use in emergency lighting systems | | | | | |
| Weight | | ca. 0.35 kg | ca. 0.5 kg | ca. 0.6 kg | ca. 1.0 kg | ca. 1.5 kg | ca. 1.8 kg |

\* Please ask for special delivery times and specifications.

IP20 CE
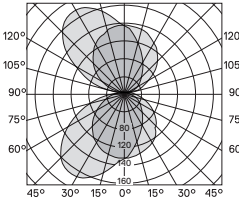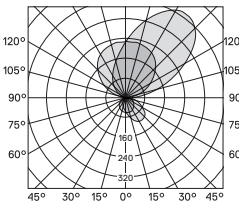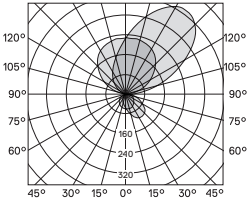
The crossed-out wheelie bin indicates that this electrical appliance must not be disposed of via household waste. In order to protect human health and the environment against potentially hazardous substances, at the end of its lifecycle this product can be taken to a collection point close to you and disposed of free of charge there. This separate disposal enables electrical appliances to be reused or recycled.

# SML²

## Photometric data sheet (1/2)

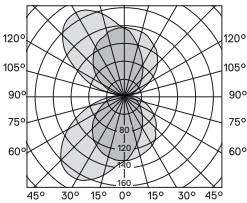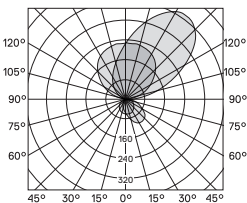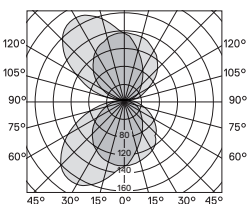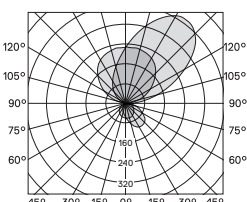Depending on the intended use, SML² can be fitted with different illuminant covers to provide different light. Depending on the illuminant cover, light is scattered symmetrically upward and downward or shielded to one side. Moreover, the light of SML2 is free of ultraviolet and infrared rays and comparable in brilliance with the performance of halogen bulbs.

| | | Power (measured value)[1] | CRI | Color Temperature | Luminous flux (measured value)[1] |
|---|---|---|---|---|---|
| **SML² 150** satinée/satinée | | | | 2700 K | 775 lm |
| | | 10 W | 90 | 3000 K | 800 lm |
| Light: scattered symmetrically up and down | | | | 4000 K* | 850 lm |
| satinée/raster | | | | 2700 K | 550 lm |
| | | 10 W | 90 | 3000 K | 565 lm |
| Light: scattered upward dimmed down or dimmed up and scattered down | | | | 4000 K* | 595 lm |
| **SML² 220** satinée/satinée | | | | 2700 K | 1150 lm |
| | | 15 W | 90 | 3000 K | 1200 lm |
| Light: scattered symmetrically up and down | | | | 4000 K* | 1275 lm |
| satinée/raster | | | | 2700 K | 805 lm |
| | | 15 W | 90 | 3000 K | 840 lm |
| Light: scattered upward dimmed down or dimmed up and scattered down | | | | 4000 K* | 895 lm |
| **SML² 300** satinée/satinée | | | | 2700 K | 1550 lm |
| | | 20 W | 90 | 3000 K | 1600 lm |
| Light: scattered symmetrically up and down | | | | 4000 K* | 1700 lm |
| satinée/raster | | | | 2700 K | 1085 lm |
| | | 20 W | 90 | 3000 K | 1120 lm |
| Light: scattered upward dimmed down or dimmed up and scattered down | | | | 4000 K* | 1200 lm |

# SML²

Photometric data sheet (2/2)

| | | Power (measured value)[1] | CRI | Color Temperature | Luminous flux (measured value)[1] |
|---|---|---|---|---|---|
| **SML² 600** satinée/satinée | | | | 2700 K | 1550 lm |
| | | 20 W | 90 | 3000 K | 1600 lm |
| Light: scattered symmetrically up and down | | | | 4000 K* | 1700 lm |
| satinée/raster | | | | 2700 K | 1085 lm |
| | | 20 W | 90 | 3000 K | 1120 lm |
| Light: scattered upward dimmed down or dimmed up and scattered down | | | | 4000 K* | 1200 lm |
| **SML² 900** satinée/satinée | | | | 2700 K | 2350 lm |
| | | 30 W | 90 | 3000 K | 2400 lm |
| Light: scattered symmetrically up and down | | | | 4000 K* | 2550 lm |
| satinée/raster | | | | 2700 K | 1650 lm |
| | | 30 W | 90 | 3000 K | 1680 lm |
| Light: scattered upward dimmed down or dimmed up and scattered down | | | | 4000 K* | 1785 lm |
| **SML² 1200** satinée/satinée | | | | 2700 K | 3100 lm |
| | | 40 W | 90 | 3000 K | 3200 lm |
| Light: scattered symmetrically up and down | | | | 4000 K* | 3400 lm |
| satinée/raster | | | | 2700 K | 2170 lm |
| | | 40 W | 90 | 3000 K | 2240 lm |
| Light: scattered upward dimmed down or dimmed up and scattered down | | | | 4000 K* | 2380 lm |

Please note:
You can download the photometric data (EULUMDAT) from http://serien.com/downloads/.

All values are rated values. Power and luminous flux are subject to an initial tolerance of +/- 10%.
Tolerance of color temperature: +/-150 K. When not otherwise indicated the values apply for an ambient temperature of 25 °C.

* Please ask for special delivery times and specifications.

# SML²

## Article numbers

| | | Output (nominal value) [1] | Control Technology [4] | CRI [3] | Color Temperature [3] | Illuminant covers | silver | white | black | polished |
|---|---|---|---|---|---|---|---|---|---|---|
| | SML² 150 | 10 W | on/off (not dimmable) | 90 | 2700 K | satinée/satinée | SM1325 | SM1327 | SM1329 | SM1331 |
| | | | | | | satinée/raster | SM1326 | SM1328 | SM1330 | SM1332 |
| | | | | | 3000 K | satinée/satinée | SM1227 | SM1229 | SM1231 | SM1233 |
| | | | | | | satinée/raster | SM1228 | SM1230 | SM1232 | SM1234 |
| | | | | | 4000 K* | satinée/satinée | SM1425 | SM1427 | SM1429 | SM1431 |
| | | | | | | satinée/raster | SM1426 | SM1428 | SM1430 | SM1432 |
| | SML² 220 | 15 W | TRIAC | 90 | 2700 K | satinée/satinée | SM1333 | SM1335 | SM1337 | SM1339 |
| | | | | | | satinée/raster | SM1334 | SM1336 | SM1338 | SM1340 |
| | | | | | 3000 K | satinée/satinée | SM1235 | SM1237 | SM1239 | SM1241 |
| | | | | | | satinée/raster | SM1236 | SM1238 | SM1240 | SM1242 |
| | | | | | 4000 K* | satinée/satinée | SM1433 | SM1435 | SM1437 | SM1439 |
| | | | | | | satinée/raster | SM1434 | SM1436 | SM1438 | SM1440 |
| | SML² 300 | 20 W | TRIAC | 90 | 2700 K | satinée/satinée | SM1341 | SM1343 | SM1345 | SM1347 |
| | | | | | | satinée/raster | SM1342 | SM1344 | SM1346 | SM1348 |
| | | | | | 3000 K | satinée/satinée | SM1243 | SM1245 | SM1247 | SM1249 |
| | | | | | | satinée/raster | SM1244 | SM1246 | SM1248 | SM1250 |
| | | | | | 4000 K* | satinée/satinée | SM1441 | SM1443 | SM1445 | SM1447 |
| | | | | | | satinée/raster | SM1442 | SM1444 | SM1446 | SM1448 |
| | SML² 600 | 20W | DALI | 90 | 2700 K | satinée/satinée | SM1349 | SM1351 | SM1353 | SM1355 |
| | | | | | | satinée/raster | SM1350 | SM1352 | SM1354 | SM1356 |
| | | | | | 3000 K | satinée/satinée | SM1251 | SM1253 | SM1255 | SM1257 |
| | | | | | | satinée/raster | SM1252 | SM1254 | SM1256 | SM1258 |
| | | | | | 4000 K* | satinée/satinée | SM1449 | SM1451 | SM1453 | SM1455 |
| | | | | | | satinée/raster | SM1450 | SM1452 | SM1454 | SM1456 |
| | SML² 900 | 30 W | DALI | 90 | 2700 K | satinée/satinée | SM1357 | SM1359 | SM1361 | SM1363 |
| | | | | | | satinée/raster | SM1358 | SM1360 | SM1362 | SM1364 |
| | | | | | 3000 K | satinée/satinée | SM1259 | SM1261 | SM1263 | SM1265 |
| | | | | | | satinée/raster | SM1260 | SM1262 | SM1264 | SM1266 |
| | | | | | 4000 K* | satinée/satinée | SM1457 | SM1459 | SM1461 | SM1463 |
| | | | | | | satinée/raster | SM1458 | SM1460 | SM1462 | SM1464 |
| | SML² 1200 | 40 W | DALI | 90 | 2700 K | satinée/satinée | SM1365 | SM1367 | SM1369 | SM1371 |
| | | | | | | satinée/raster | SM1366 | SM1368 | SM1370 | SM1372 |
| | | | | | 3000 K | satinée/satinée | SM1267 | SM1269 | SM1271 | SM1273 |
| | | | | | | satinée/raster | SM1268 | SM1270 | SM1272 | SM1274 |
| | | | | | 4000 K* | satinée/satinée | SM1469 | SM1467 | SM1465 | SM1471 |
| | | | | | | satinée/raster | SM1466 | SM1468 | SM1470 | SM1472 |

\* Please ask for special delivery times and specifications.

# SML²

### Accessories

| | | Length in mm | silver | white | black | polished |
|---|---|---|---|---|---|---|
| ▭ | **Cover Plate** | 150 | SM4053 | SM4056 | SM4059 | SM4062 |
| | | 220 | SM4054 | SM4057 | SM4060 | SM4052 |
| | | 300 | SM4055 | SM4058 | SM4061 | SM4048 |
| 🗑 🗑 | **Mirror Adapter** | – | ZB1001 | – | – | – |

### Recommended dimmers

The following list is the result of internal tests conducted in a controlled environment. However, in some cases there is a possibility that owing to technical specifications (e. g., drivers, cables, switches, etc.) a specific combination of dimmer and LEDs does not work.
As such our recommendations do not represent a guarantee.

| **SML² 220** | 15 W | TRIAC | digitalSTROM GE-KM200 | Merten MEG5139 |
|---|---|---|---|---|
| | | | Feller 40200.LED.EB | Merten MEG5300-0001 |
| | | | Feller 40600.RL. (all variants) | Merten MEG5134 |
| | | | Feller 40200.LED. (all variants) | Gira 245000 |
| | | | Schalk ETD U2 | Gira 540000 |
| | | | Schalk F03 U2E | Gira 244000 |

| **SML² 300** | 20 W | TRIAC | Schalk ETD U2 | |
|---|---|---|---|---|
| | | | Schalk F03 U2E | |