Light shapes the city of tomorrow.

PUBLIC LIGHTING · DECORATIVE · CONNECTED

SMART CITY

WIRELESS MESH NETWORK

CATALOGUE D-SLS-03

2026

D-SLS-03 20-150 W · Cigar-type light column

D-SLS
Digital-Smart Lighting Solutions

OVERVIEW · D-SLS-03 CIGAR-TYPE LIGHT COLUMN

Light module 20 – 150 W Ø 200 × H 2 000 mm on existing shaft or complete 4 000 mm column

D-SLS-03-200-120A — complete 4 m column and retrofit module on existing shaft

16 500 lm
max. luminaire flux · 150 W · 4000 K · CRI 70

110 lm/W
luminaire efficacy · CRI 70 (96 at CRI ≥ 97)

IP66 · IK08
sealing · impact resistance

DALI-2 · D4i
programmable driver · NFC · Tunable White

100 000 h
L90B10 · IES TM-21

7 years
warranty · 10 years optional

A decorative column, equipped like a road luminaire

The **D-SLS-03** "cigar" light column consists of a **2 000 mm** light section in marine-grade aluminium sheet, 3 mm thick, Ø 200 mm, perforated by **laser-cut Moroccan geometric patterns**, over a 2 mm **UV-stabilised opal PMMA** diffuser: a continuous 360° source, glare-free. The **20 to 150 W** LED strip, Tunable White 2 700 – 6 500 K, CRI 70 / 80 / 90 / 97, is controlled by a programmable **DALI-2 D4i + DT8** driver (NFC), protected by an **SPD 10 kV / 10 kA**, with **Zhaga Book 18** socket for LidarMesh remote management. The module fits on an existing shaft of the same diameter (retrofit) or on the 2 000 mm D-SLS lower shaft with access door, 400 × 400 × 8 mm base plate and integrated control gear (complete column). Range 20 – 150 W; 120 W reference configuration.

Public squares & esplanades

360° marker and ambient lighting — spacing 8 – 12 m for marking, 15 – 20 m for ambient.

Seafronts, gardens & walkways

Diffuse, glare-free light, night-time dimming and LiDAR detection.

Heritage & events

Moroccan patterns, Tunable White and CRI ≥ 97 — architectural enhancement, ceremonies.

D-SLS-03 · NEW ON-BOARD TECHNOLOGIES

D-SLS indirect reflector, 360° opal diffusion, LiDAR node, D4i · DALI-2 · Thread

Indirect reflector (inter-reflection) — D-SLS signature

Optical signature of the D-SLS range: satin aluminium reflector ρ ≥ 98 %, the LED is never seen directly — reflected light, anti-glare, ULOR 0 %. On the D-SLS-03, the same 'invisible LED' principle is achieved with a 360° opal PMMA diffuser behind the perforated sheet — CRI ≥ 97, SDCM < 3.

D-SLS-03 column in a garden — night view

New technologies used

LiDAR node
presence detection, counting, Zhaga D4i socket

Static detection
built-in mmWave radar — presence without motion

Thread mesh network
IPv6, self-healing, TALQ 2.7.1

Tunable White
2700 → 6500 K controlled via D4i + DT8

Certified interfaces

THREAD · TALQ 2.7.1 · ZHAGA BOOK 18 · NFC · DALI-2 · D4i + DT8

D4i

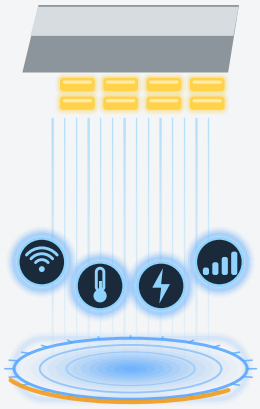
Intelligence serving urban lighting

Interoperability
D4i-compliant for open ecosystems

Power and data on the same cable
standardised interface

Smart sensors
detection, counting, energy monitoring

Predictive maintenance
real-time diagnostics and remote management



DALI+

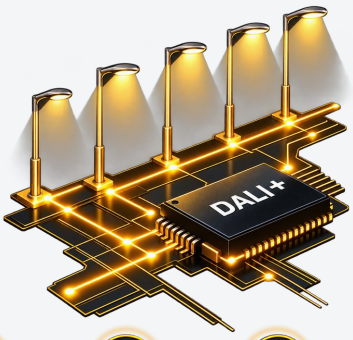
Advanced, scalable management

Precise control
dimming and lighting scenarios

Multi-device
group and address management

Interoperability
certified multi-brand DALI+ ecosystem

Flexibility
suited to current and future projects



Scenarios · Schedules · Regulation · Supervision

D-SLS-03 — the six connected functions

TUNABLE WHITE · LIDAR AI · MESH NETWORK · SECURE VPN · OTA SELF-HEALING · AI ANTI-THEFT

PRODUCT ARCHITECTURE · SIX KEY POINTS

A column designed for maintenance: everything is replaced on site, no special tools

D-SLS-03 in situ

Garden and terrace — complete 4 m column: lower shaft with access door and base plate, 2 000 mm light module in perforated sheet over opal PMMA tube, 20 × 20 mm aluminium central profile with top flange. Pattern projected on the ground, soft 360° light.

D-SLS-03 — complete 4 m column in a garden, night view

1 Laser-cut cladding

3 mm marine-grade aluminium sheet · Moroccan geometric pattern (standard or custom, DXF file)

2 Opal PMMA tube

UV-stabilised, 2 mm thick, on 20 × 20 mm central aluminium profile — replaceable from the top

3 120 W LED strip

CRI ≥ 97 · Tunable White 2 700 – 6 500 K · removable wiring plate · NTC-ETM DIGITAL

4 Plug-in driver

In the shaft (IP66) · DALI-2 D4i + DT8 · NFC · integrated 10 kV / 10 kA SPD

5 Zhaga Book 18 socket

LiDAR node clips on at any time, without opening the column

6 Shaft & access door

3 mm alu shaft H 2 000 · 400 × 90 door at 500 mm from ground · 400 × 400 × 8 base plate, 312 centres · 4 M14 × 400 rods

Reference configuration — D-SLS-03-200-120A (120 W)

120 W · TW 2700 – 6500 K · CRI ≥ 97 · 2 000 mm module on existing shaft · complete column 4 000 mm — range 20 – 150 W

Same electronics and remote management as the entire D-SLS-03 series (20 – 200 W).

PERFORMANCE & SAVINGS · DASHBOARD

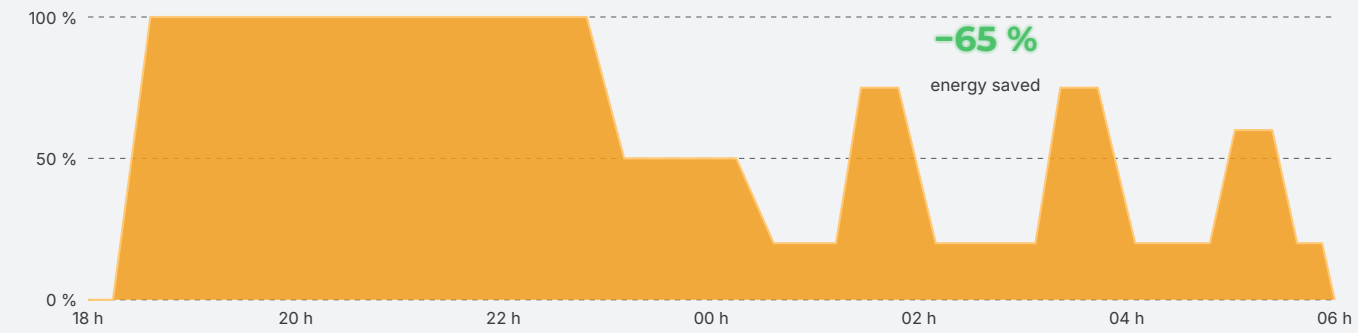
≥ 98 %	> 94 %	−65 %
optical efficiency	driver efficiency	energy (LiDAR)

TUNABLE WHITE — CCT RANGE

2200 K WARM — COOL 6500 K

D4i + DT8 control — CRI 70 · 80 · 90, MacAdam 3 SDCM (option S3) · option TW
Standard fixed CCT: 5000 · 4000 · 3000 · 2700 · 1800 K

LiDAR ADAPTIVE DIMMING — TYPICAL NIGHT PROFILE ON AN ESPLANADE



--- constant 100 % lighting
evening 100 % · quiet night 50 % · standby 20 % with boost on presence detection (LiDAR)

ANNUAL CONSUMPTION PER COLUMN — 4 200 h/yr · 0.25 €/kWh

Discharge cigar 2 × 150 W (existing)	1 428 kWh/yr · €357	
D-SLS-03 120 W	525 kWh/yr · €131	−63 %
D-SLS-03 120 W + LidarMesh	184 kWh/yr · €46	−87 %

Assumptions: existing 2 × 150 W discharge head (340 W system) replaced by the D-SLS-03 120 W module; on-demand dimming via LiDAR detection.

226 €	226 kg	zero	100 %
saved per column per year	CO2 avoided per column per year	relamping — L90B10 ≥ 100 000 h	remotely controllable (TALQ 2.7.1)

Reading the dashboard

* Excluding installation, based on the energy price above and avoided maintenance — exact costing on study. Savings combine three levers: the efficacy of the LED band (110 lm/W luminaire), the opal diffuser lighting at 360° with no loss to the sky, and on-demand dimming by the LiDAR node, which only lights at full power when a user passes.

KEY FEATURES · 8 REASONS TO CHOOSE THE D-SLS-03

Laser-cut Moroccan patterns

3 mm marine-grade aluminium sheet, laser-perforated — standard geometric pattern or design chosen by the client (DXF file), powder-coated in the requested RAL colour.

360° opal diffusion

UV-stabilised opal PMMA diffuser, 2 mm thick, over the full height: uniform luminance, no visible LEDs, no glare — the column is a luminous object by night and by day.

CRI ≥ 97 · Tunable White

High colour rendering LED strip (Ra ≥ 97) and tunable white 2 700 – 6 500 K controlled via D4i + DT8 — evening ambiences, ceremonies, heritage.

Module on existing shaft or complete column

Retrofit: removal of the existing head, reuse of the shaft, fitting of the module with stainless steel brackets. Complete column: 2 000 mm lower shaft, 3 mm aluminium, 400 × 90 access door, 400 × 400 × 8 base plate, 4 M14 × 400 anchor bolts.

NFC-programmable driver

Zhaga-certified DALI-2 and D4i + DT8, wirelessly adjustable output current (AOC), dim-to-off < 0.5 W, 3 timer modes, OLC flux compensation, 24 V DC auxiliary.

Full protection

SPD **10 kV / 10 kA** type II with end-of-life signal, **IP66** optical unit and driver compartment, **IK08**, class I (class II on request).

LidarMesh CMS (option LD)

LiDAR presence-detection node, GPS, astronomical clock, TALQ 2.7.1 gateway: evening / quiet night / standby scenarios controlled from the D-SLS cloud platform.

7-year warranty · ENEC certified

Extension to **10 years** (W10 option). Type D-SLS-03-200-120A under ENEC certificate **HN 69290740** (TÜV Rheinland); TÜV SÜD attestation N8A 08132 0101 (series 03), RoHS.

COMPONENTS · COMMON TECHNICAL PLATFORM

Parts common to the entire D-SLS range — replaceable without tools

D-SLS-03 column in a garden — night view

D-SLS-03 module

Opal PMMA tube, laser-cut cladding, 20 × 20 mm central aluminium profile (L 2 010 mm) with top flange, LED strip on removable wiring plate. Driver, SPD and terminal block housed in the lower shaft, accessible via the 400 × 90 access door.

Anchoring — 4 M14 × 400 mm rods on C25 concrete base, Ø 50 mm cable duct.

Driver	Programmable DALI-2 / D4i + DT8 electronics, ENEC certified — LED current set via NFC when de-energised, tool-free plug-in
Protection	Integrated SPD 10 kV / 10 kA type II with end-of-life indicator · automatic disconnection on opening
LED module	Removable and field-replaceable — Zhaga Book 18 standard, programmable NTC-ETM DIGITAL thermal controller
Connection	Removable wiring plate, screw terminal block — stainless cable gland IP68 · gear and terminal block in the lower shaft

Sealing & remote management — parts common to the whole range

Stainless steel pressure-equalisation valve — hydrophobic membrane, IP66 maintained over the entire lifetime

D-SLS LiDAR node on Zhaga Book 18 · 20 socket — D4i, clip-on at any time without opening the column

1 /3 CPS

MATERIALS & CONSTRUCTION

CPS technical file — 1 / 3: luminaire body materials & construction

Housing	End plates, cap and driver compartment in **die-cast** aluminium (high-pressure) EN AC-46100 (AlSi11Cu2(Fe)) — laser-cut marine-grade sheet cladding
LED module	Removable / replaceable LED strip on wiring plate — **Zhaga Book 18** standard
Cladding	3 mm marine-grade aluminium sheet (5754 / 5083), laser-cut, polyester powder coating
Diffuser	UV-stabilised opal PMMA 2 mm thick — replaceable from the top
Lower shaft	Aluminium 3 mm thick Ø 200, vandal-proof access door 400 × 90, base plate 400 × 400 × 8 mm
Closure	Vandal-resistant door + sealing gasket · A2 stainless fixings
Sealing	EPDM gasket · stainless M20 × 1.5 cable gland IP68 · stainless pressure-equalisation valve
Anchoring	4 M14 × 400 mm rods on concrete base — kit supplied
Anti-corrosion treatment	Housing surface preparation before painting: alkaline degreasing, pickling and **chemical conversion passivation**, then oven-cured polyester powder coating ≥ 70 µm — salt spray 500 h (ISO 9227), C3 corrosivity standard, **C5-M seaside** optional (MAR)
Finish	Outdoor-grade polyester powder coating, colour chosen by the client — C5 seaside anti-corrosion treatment optional (MAR)
Driver	Programmable DALI-2 / D4i + DT8 electronics — ENEC-certified platform, housed in the shaft

MATERIALS

Marine-grade aluminium, laser-cut

The 3 mm perforated sheet and shaft of the same thickness form a rigid, light column; the driver sits in the ventilated shaft and the LED strip on a central wiring plate: junction temperature stays controlled up to ta = +50 °C, lifetime and flux guaranteed.

COMPONENTS

LED	High-CRI LED strip (Ra ≥ 97), ceramic LEDs under-driven at 700 mA — LM-80 files available
Driver	Programmable DALI-2 / D4i + DT8 electronics, ENEC certified, NFC, integrated SPD
Interface	D4i · DALI-2 · Zhaga Book 18 — optional LiDAR-ATMANI-AI node

World-class sources and electronics, integrated and qualified by D-SLS.

5754 / 5083 marine-grade aluminium	**3 mm thick** perforated sheet and shaft	**IP68** stainless cable gland
UV PMMA opal diffuser 2 mm thick	**C5** seaside as option (MAR)	**M14 × 400** anchoring on C25 footing

Complete D-SLS-03 column — 4 000 mm

2/3 CPS

TECHNICAL SPECIFICATIONS · D-SLS-03

CPS technical file — 2 / 3: technical characteristics to compare point by point with the CPS

Range	D-SLS-03 — 20 · 30 · 40 · 50 · 60 · 80 · 100 · 120 · 150 W · reference configuration **D-SLS-03-200-120A** (120 W) · on existing shaft or complete column
Applications	Public squares · Esplanades · Seafronts · Gardens and paths · Architectural and heritage enhancement
Housing	End plates, cap and driver compartment in **die-cast** aluminium EN AC-46100 (high-pressure)
Light section	3 mm marine-grade aluminium sheet, Ø 200 mm, H 2 000 mm, laser-cut with Moroccan geometric openwork pattern
Diffuser	UV-stabilised opal PMMA tube, 2 mm thick, Ø 194 int., on 20 × 20 mm central aluminium profile (L 2 010) with top flange — continuous 360° light
Light source	120 W LED strip, ceramic LEDs under-driven at 700 mA, Tunable White 2 700 – 6 500 K or fixed CCT 1800 – 6000 K
Luminaire flux	up to **16 500 lm** at 4000 K / CRI 70 (150 W, Tq 25 °C) · 13 200 lm at 120 W · 11 520 lm at 120 W CRI ≥ 97
Luminaire efficacy	**110 lm/W** at 4000 K / CRI 70 (Tq 25 °C) · 96 lm/W at CRI ≥ 97
CRI	70 (standard) · 80 · 90 · 97 (HC option) · SDCM < 3
Photobiological safety	EN 62471 — risk group 0 (RG0)
Insulation class	EU: class I (class II on request — CL2 option)
Ingress protection	**IP66** light section and driver compartment · **IK08**
Pressure equalisation	**Stainless steel** pressure-equalisation valve with hydrophobic membrane — no condensation, no thermal pumping
Lower shaft	Aluminium 3 mm thick, Ø 200 / 194 mm, H 2 000 mm — 400 × 90 mm access door 500 mm above ground, vandal-proof lock and sealing gasket
Socket	Base plate 400 × 400 × 8 mm, 4 anchor slots at 312 mm centres, central opening — 4 M14 × 400 mm rods on C25 concrete foundation, Ø 50 duct
Fixing on existing shaft	Stainless steel brackets, plates and adapter parts — same outer diameter as the existing shaft
Internal equipment	Safety and protection gear, terminal block, driver, supply cable — access via the access door
Anti-corrosion treatment	Housing surface preparation before painting: alkaline degreasing, pickling and **chemical conversion passivation**, then oven-cured polyester powder coating ≥ 70 µm — salt spray 500 h (ISO 9227), C3 corrosivity standard, **C5-M seaside** optional (MAR)
Finish	Polyester powder coating, colour chosen by the client
Wind-exposed surface	Side 0.025 m² · plan 0.18 m² · SCx 0.02 m² (module)
Weight	≈ 14 kg (module) · ≈ 32 kg (complete column)
Temperatures	Operation: −20 °C / +50 °C · Storage: −40 °C / +80 °C
Lifetime	≥ 100 000 h L90B10 (IES TM-21)
Power supply	220 – 240 V AC · 50 / 60 Hz — 90 – 305 V AC optional
Driver	**DALI-2 · D4i + DT8** programmable via NFC · efficiency > 94 % · power factor > 0.95
Surge protection	Integrated type II SPD **10 kV common mode / 6 kV differential mode** (10 kA), end-of-life indicator — external 20 kV SPD optional
Thermal controller	**NTC-ETM DIGITAL** thermal controller — NTC probe on LED matrix and driver, digital threshold programmable via NFC, automatic current reduction when threshold is exceeded
Dimming & remote management	DALI-2 · D4i + DT8 · autonomous profiles · Zhaga Book 18 socket — LidarMesh CMS TALQ 2.7.1 (LD option)
Warranty	**7 years** — 10 years optional (W10)

ENEC · TÜV SÜD · RoHS · IP66 · IK08 · Class I · DALI-2 · D4i + DT8 · Zhaga Book 18

D-SLS-03 range — 20 to 150 W

Sizes 40 (20 – 30 W) · 50 (40 – 60 W) · 100 (80 – 120 W) · 200 (120 – 150 W) — same laser-cut cladding, same opal PMMA diffuser, same D4i + DT8 electronics across the range. ENEC-certified types D-SLS-03-b-cd from 20 to 200 W. Two mountings: retrofit module on an existing shaft of the same diameter (new stainless brackets, wiring and protections) or complete column with D-SLS 2 000 mm lower shaft, access door, base plate and integrated control gear.

3/3 CPS

CERTIFICATIONS & STANDARDS

CPS technical file — 3 / 3: certificates, tests and standards framework

ENEC certificate no. HN 69290740

Test body	TÜV Rheinland InterCert Kft. (MEEI, Budapest) — report CN22W59T 002 dated 11/06/2025
Standards	EN IEC 60598-1:2021 + EN 60598-2-3
Holder	D-SLS SRL — Via Bocchetto 6, 20123 Milano (MI), Italia
Covered type	D-SLS-03-200-120A (120 W) — series 03, 443 certified types
Certified parameters	AC 220 – 240 V · 50/60 Hz · class I · IP66 · ta 45 °C

TÜV SÜD attestation no. N8A 08132 0101

Test body	TÜV SÜD Product Service GmbH — Rev. 00 dated 24/10/2023, test report 89301231023-01
Directive	Low Voltage 2014/35/EU
Tested standards	EN IEC 60598-1:2021/A11:2022 · EN 60598-2-3:2003/A1:2011 · EN 62493:2015
Family covered	D-SLS-03-b-cd (series 03) — LED street lights
Certified parameters	200 – 240 V · 50/60 Hz · ta 50 °C · class II · IP66 · IK09

Standards framework

Luminaire safety
EN IEC 60598-1 · EN 60598-2-3 · EN 62493

Electromagnetic compatibility
EN 55015 · EN 61547 · EN 61000-3-2 · EN 61000-3-3 · EN 61000-4-5

Application
NF EN 13201 (street lighting) · NM EN 12193 · NF C 17-200

Lifetime
IES LM-80 · IES TM-21 · IES LM-79 · UNI EN 13032-1

Photobiology
EN 62471

Protection
EN 60529 (IP) · EN 62262 (IK)

Control & interoperability
IEC 62386 (DALI-2 · D4i) · Zhaga Book 18 · TALQ 2.7.1

European directives
2014/35/EU (low voltage) · 2014/30/EU (EMC) · 2011/65/EU (RoHS)

ENEC · TÜV SÜD · RoHS · IP66 · IK09 · Class I · DALI-2 · D4i + DT8 · Zhaga Book 18

Compliance file

The parameters above are those on the current ENEC certificate and TÜV SÜD attestation; the published reference D-SLS-03-200-120A corresponds to the ENEC certificate type. EU declaration of conformity, ENEC certificate, TÜV SÜD attestation, IP / IK reports and photometric files attached to the tender file.

Documents supplied with every offer

ENEC certificate	Certificate no. HN 69290740 and test report CN22W59T 002 — TÜV Rheinland InterCert
TÜV SÜD attestation	Attestation no. N8A 08132 0101 and test report 89301231023-01 — series 03
EU Declaration	EU Declaration of Conformity — directives 2014/35/EU · 2014/30/EU · 2011/65/EU
IP / IK reports	IP66 per IEC 60529 · IK08 per IEC 62262 on assembled column
LED lifetime	LM-80 report and IES TM-21 projection of the LED strip
Photometry	LDT / IES files per pattern and per CCT · DIALux / Relux calculation to EN 13201

TYPE TESTS & ROBUSTNESS

TYPE TESTS

Temperature rise	ta 50 °C — EN 60598-1 § 12: driver tc and LED module tp, values corrected to the reference ambient.
Sealing	IP 66 — IEC 60529 (dust · powerful water jets) on light section and driver compartment.
Mechanical impact	IK 08 — IEC 62262 (5 joules) on cladding and shaft; IK 09 attested by TÜV SÜD on series 03.
Vibration	IEC 60068-2-6 — pole, console and ground bracket mounting.
Surges	10 kV / 10 kA — EN 61000-4-5; replaceable type II SPD with end-of-life indicator — external 20 kV SPD optional.
Photometry	EN 13032 / LM-79 — LDT and IES files per pattern and per CCT; LM-79 reports on assembled column: in progress.
Long-term flux	LM-80 + TM-21 — L90B10 ≥ 100 000 h.
Corrosion	Salt spray ISO 9227 — 500 h on coating and fasteners.

ROBUST PRODUCT — DESIGN CHOICES

Cladding & shaft	3 mm marine-grade aluminium sheet 5754 / 5083, laser-cut — Ø 200 mm, rigid and lightweight column.
Coating	Outdoor-grade polyester powder coating: thickness ≥ 70 µm (ISO 2360), adhesion class 0 (ISO 2409), salt spray 500 h (ISO 9227), UV resistant.
Diffuser	UV-stabilised opal PMMA tube, 2 mm thick, on 20 × 20 mm central aluminium profile — replaceable from the top, no LED visible.
Inspection door	Vandal-resistant 400 × 90 mm door with sealing gasket — access to driver, SPD and terminal block without removing the module.
Fixings	A2 stainless steel fasteners and brackets — reuse of existing shafts of the same diameter, 400 × 400 × 8 mm base plate.
Wiring	Removable wiring plate, plug-in connectors — tool-free driver and SPD replacement.
Pressure-equalisation valve	Stainless steel valve with hydrophobic membrane — equalises internal pressure at every day / night cycle without affecting sealing; replaceable without opening the module.

Repairability

The column is designed to be **repairable on site**: LED strip, driver and SPD are replaced individually, without removing the module or using special tools. This architecture meets the circular-economy requirements of European ecodesign and extends the installation's useful life well beyond the warranty.

ta 50 °C	IK08	500 h	10 kV / 10 kA
certified ambient temperature	impact resistance — 5 J	salt spray ISO 9227	surge immunity

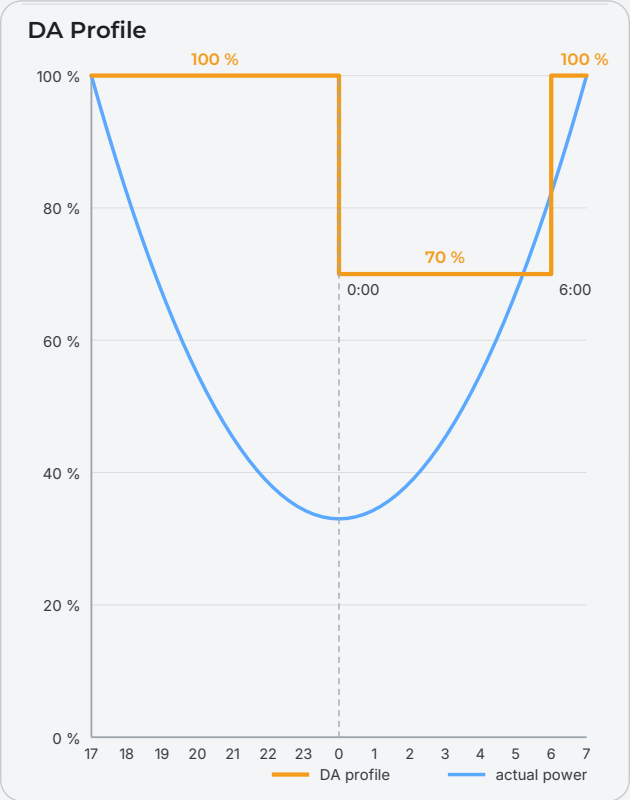
ELECTRICAL SPECIFICATIONS · PROGRAMMABLE DRIVER

Power supply	220 – 240 V AC · 50 / 60 Hz (90 – 305 V AC on request, tolerance ±10 %)
Power	20 – 150 W ± 5 % at Vin = 230 V AC — LED current 700 mA (350 – 1 000 mA wirelessly adjustable via NFC, AOC)
Power factor	> 0.95 (full load — PLM) | > 0.98 (full load — F, DA, DAC)
Efficiency	> 94 %
Interfaces	**DALI-2 · D4i + DT8** Zhaga-certified · NFC · PWM · 0 – 10 V
Auxiliary supply	24 V DC / 125 mA / 3 W always on (12 V DC optional A12) · integrated 16 V DC bus (DALI-2)
Surge protection	Integrated SPD **10 kV / 10 kA** type II — 10 kV common mode / 6 kV differential mode — LED signal and thermal fuse: load disconnected at end of life · external 20 kV SPD (option SP20)
Lifetime	≥ 100 000 h L90B10 · ≥ 100 000 h L90 (IES TM-21)
Warranty	7 years (10 years with W10 option)

Built-in smart functions

- **Dim-to-off** — smart board standby < 0.5 W
- **3 timer modes** (Timer setup) — scheduled consumption reduction
- **OLC** Output Lumen Compensation — constant flux over lifetime
- **OTP — NTC-ETM DIGITAL** built into driver and LED matrix, programmable digital threshold
- Digital thermal sensing (NTC): driver and LED module protection, programmable
- End-of-life indicator · output light compensation
- Modes **F** (fixed) · **DA** (autonomous dimming) · **DAC** (autonomous + control)
- Astronomical clock and calendar profiles (option LD)

DA profile — autonomous dimming



Example of an NFC-programmed profile: 100 % at dusk, reduced to 70 % from 0:00 to 6:00, back to 100 % before dawn — no control wiring, matched to the actual power curve (blue).

REMOTE MANAGEMENT · LidarMesh CMS & D-SLS LiDAR NODE (OPTION LD)

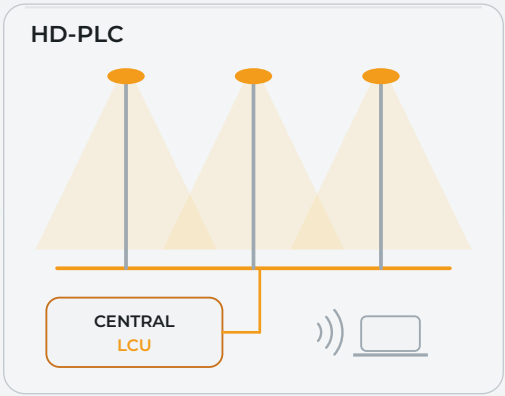
D-SLS smart node — Zhaga Book 18 / D4i

- **LiDAR presence detection** — pedestrians, cyclists, vehicles: switching and dimming on demand
- **GPS location** · astronomical clock · calendar
- **D4i** interface: the node powers, meters and controls the driver (energy, diagnostics)
- **Thread** mesh network (IPv6) · **TALQ 2.7.1** gateway · LoRaWAN 3 – 15 km · HD-PLC 0 – 10 km
- Peripherals: CCTV camera, audio / video, environmental sensors, Internet access
- **DMX / Art-Net** dynamic lighting for events and ceremonies

Protocols:

D4i · DALI-2 · TALQ 2.7.1 · Thread · LoRaWAN · HD-PLC · PWM · 0 – 10 V · DMX · Art-Net

HD-PLC architecture — powerline



Communication over the existing supply cable to the control unit — no additional network to deploy on the poles.

LidarMesh CMS — D-SLS remote-management platform (D-SLS Cloud Infrastructure)

- GIS mapping of light points and cabinets
- Alarms and diagnostics: driver, SPD, temperature, voltage
- Predictive maintenance and work-order management
- Dimming scenarios by zone, calendar and detection
- D4i energy metering, reports and export
- Open TALQ 2.7.1 API — interoperable with third-party CMS

Role-based secure access, European hosting on the D-SLS Cloud Infrastructure — control from smartphone, tablet or supervision workstation.

Road scenario — four levels, zero intervention

100 %	50 %	20 %	0 %
Evening	**Quiet night**	**Standby**	**Dawn**
from sunset to 11 pm — full level per EN 13201	calendar-scheduled dimming	empty road — instant ramp-up on LiDAR detection	astronomical switch-off, driver < 0.5 W

Implementation

The LiDAR node mounts on the column's Zhaga Book 18 socket — in the factory or retrofitted on an existing installation, without opening the module. The D4i driver powers it and reports energy consumed, operating hours and diagnostics. Each column becomes an individual measurement and control point of the LidarMesh CMS platform.

IPv6	3 – 15 km	0 – 10 km	TALQ 2.7.1
Thread mesh network	LoRaWAN range	HD-PLC powerline	CMS interoperability

NETWORK, UPDATES & SUPERVISION · LD OPTION

Functions of the LidarMesh CMS platform and the D-SLS LiDAR node — optional, not included in the standard supply.

MESH NETWORK & CONNECTIVITY

Architecture	Each luminaire is an identical **TALQ 2.7.1** gateway — exposed TALQ API, DALI D4i functions, IPv6 addressing.
Mesh network	Self-organising, self-healing mesh — sized for over 10 000 nodes: if a node fails, traffic is rerouted automatically.
Internet access	At the owner's choice: WiFi, 4G/LTE, Ethernet or fibre — a single link serves a whole segment, instant failover if it drops.
Network sobriety	A single download per segment: updates propagate node to node across the mesh.
Stand-alone mode	Full offline operation: lighting, DALI dimming, LiDAR detection, astronomical calendar (RTC + GPS) and local log — synchronisation resumes when the network returns.
Network security	End-to-end encrypted link (WireGuard, ChaCha20-Poly1305) to the platform.

REMOTE UPDATES (OTA) — SELF-HEALING

Principle	Firmware update of the entire installed base remotely, without field intervention — dual A/B partition: a healthy version is always available.
Probation	Each new version must prove correct operation (network, DALI, supervision) within 10 minutes — otherwise automatic rollback to the previous version.
Rollback guards	Hardware watchdog, reboot loop, network or routing loss, silent DALI, memory anomaly — every guard triggers rollback.
Canary deployment	In controlled waves 1 % → 10 % → 50 % → 100 % of the installed base — automatic halt and operator alert at the slightest rollback.
OTA security	Images signed and verified by a hardware secure element before flashing — secure boot, encrypted memory, SHA-256 integrity check, anti-rollback.

SUPERVISION & AI COPILOT

Dashboard	GPS map of every luminaire · real-time status, consumption, alarms and history · one-click DALI configuration.
AI copilot	Plain-language fault diagnosis, deployment recommendations and automatic campaign report.
Predictive maintenance	Pre-failure alert for LED module / driver / SPD — optional sensors: light level, temperature, air quality, noise.
Energy budget	Cap set by the operator, never exceeded: self-regulation if spending drifts, per-luminaire monitoring, savings and CO2 report.

D-SLS-03 — the six connected functions

TUNABLE WHITE · LIDAR AI · MESH NETWORK · SECURE VPN · OTA SELF-HEALING · AI ANTI-THEFT

LidarMesh CMS · D-SLS PROPRIETARY REMOTE-MANAGEMENT PLATFORM

D-SLS proprietary cloud platform — no dependence on any third-party supplier.

Each luminaire is a TALQ 2.7.1 gateway. The installed base is managed from a browser, no software to install: multi-user access with differentiated permissions, open API, cloud or on-premises deployment on request.

SMART MESH NETWORK

Technology	Self-organising, self-healing mesh — over 10 000 nodes per network
Protocols	IPv6 SLAAC · Thread · TALQ 2.7.1 · DALI-2 D4i + DT8
Safety	End-to-end encrypted tunnel · secure boot · signed firmware
Connectivity	WiFi · 4G/LTE · Ethernet · fibre — a single link per segment

ENERGY & SOLAR BUDGET

Energy budget	Cap in euros or kWh set by the operator — never exceeded: real-time self-regulation, luminaire by luminaire
Solar integration	Monitoring of PV production, storage and grid injection — adaptive control based on weather and reserve
Savings report	Dashboard of kWh saved / CO2 avoided / euros invoiced — automatic monthly report
Dynamic pricing	Lighting programme matched to grid tariff (off-peak / peak hours)

TALQ 2.7.1 INTEROPERABILITY

TALQ standard	TALQ 2.7.1 API exposed on every node — compatible with any third-party TALQ-certified CMS
DALI D4i functions	The 8 mandatory D4i functions (Part 102/103/251/252/253/304/306/351) + diagnostics
Calendars	True astronomical calendars (GPS sunrise / sunset + RTC) · scenarios · manual override
Autonomy	The operator remains owner of its data · CSV / JSON export · portability to any other TALQ CMS

ACCESS & SERVICE

Client access	Multi-browser web interface · iOS and Android mobile app
Multi-site	Multi-municipality and multi-district management · delegation of rights · full operation traceability
Hosting	D-SLS Cloud Infrastructure (European Union) · 99.9 % availability · 24/7 technical support

10 000+	99,9 %	24/7	0
nodes per mesh network	platform availability	technical support	software to install

Stand-alone mode — no Internet

The fleet remains controllable even without a connection: lighting, DALI dimming, LiDAR detection, astronomical calendar and local log work offline. Synchronisation with the platform resumes automatically when the network returns — no permanent connection is required for daily operation.

OPTIONS · COMBINABLE ORDER CODES

LD — LidarMesh remote management

D4i LiDAR node (Zhaga Book 18): presence detection, GPS, astronomical clock, TALQ 2.7.1 gateway, access to the LidarMesh CMS platform.

SP20 — External 20 kV SPD

External 20 kV surge protection device in addition to the integrated 10 kV / 10 kA SPD — exposed sites, isolated poles, overhead networks.

W10 — 10-year warranty

Extension of the standard warranty from 7 to 10 years, subject to project registration and compliant operating conditions.

MAR — C5 coastal anti-corrosion

Reinforced surface treatment of module + shaft for marine or industrial atmospheres (ISO 12944 C5), stainless steel fasteners.

A12 — 12 V DC auxiliary

12 V DC auxiliary output instead of the standard 24 V DC — powers sensors and third-party nodes.

TW — Tunable White

Dynamic white 2200 – 6500 K controlled via D4i + DT8 — evening ambiences, events, heritage lighting.

S3 — 3 SDCM

Tighter colour binning: 3-step MacAdam ellipse instead of 5 — perfect uniformity between columns.

CL2 — Class II

Double insulation without earth conductor for installations that require it (on request).

MOT — Cut-out pattern

Standard D-SLS geometric pattern or pattern chosen by the contracting authority (coat of arms, calligraphy) — DXF file approved before production.

RAL — Colour

Any RAL colour on module and shaft — sample approved before production.

Control

All options are cumulative and declared at the end of the reference — e.g. **D-SLS-03-200-120A-LD-W10**. The LD option is installed and configured at the factory; the SP20 external SPD is supplied with its mounting bracket in the shaft.

DIMENSIONS & MOUNTING · MODULE 2 000 mm · COLUMN 4 000 mm

COMPLETE COLUMN D-SLS-03 — DIMENSIONED DRAW

module 1 950 + cap · shaft 2 000central alu profile 20 × 20 · L 2 010

M14 × 400 anchoring · C25 concrete base plate 400 × 400 × 8 · centres 311.9

Dimensioned drawings (DWG / PDF) and cutting file supplied with the order. Photos non-contractual — pattern and colour at the contracting authority's choice.

LIGHT MODULE 2 000 mm

Light section	H 2 000 mm · Ø 200 mm · laser-cut marine-grade alu sheet 3 mm thick
Diffuser	UV-stabilised opal PMMA 2 mm thick, full height
Source	20 – 150 W LED strip, TW 2700 – 6500 K or fixed CCT
Shaft fixing	A2 stainless brackets, plates and adapter parts — same Ø as the existing shaft
Access	Module removable from the top; wiring through the shaft
Weight	≈ 14 kg (module)

LOWER SHAFT D-SLS-03-F20

Lower shaft	H 2 000 mm · Ø 200 / 194 mm · aluminium 3 mm thick
Inspection door	400 × 90 mm at 500 mm above ground, vandal-proof closure, gasket
Base plate	400 × 400 × 8 mm · 4 holes at 312 mm centres · central opening
Anchoring	4 M14 × 400 mm rods on C25 concrete base, Ø 50 duct (kit supplied)
Internal equipment	Safety and protection gear, terminal block, driver, cable
Weight	≈ 18 kg (shaft) · ≈ 32 kg complete column

MOUNTING & LAYOUT

Retrofit	Removal of existing head, shaft inspection and refurbishment, module fitting — fixed CCT or TW
Spacing	8 – 12 m for marker lighting · 15 – 20 m for ambient lighting

APPLICATIONS & CASE STUDY

Squares & esplanades

360° marker lighting: spacing 8 – 12 m, class P3 EN 13201 (Em ≥ 7.5 lx) alongside the street lights; ambient 15 – 20 m.

Seafronts, gardens & walkways

Diffuse, glare-free light, LiDAR detection and on-demand dimming — 20 % on standby, 100 % on passage.

Heritage & events

Moroccan patterns, CRI ≥ 97 and Tunable White 2700 – 6500 K: architectural enhancement, ceremonies, DMX scenography.

CASE STUDY — RETROFIT OF 85 CIGAR COLUMNS

(indicative example)

−63 %
energy vs existing discharge heads

10.2 kW
installed — 85 D-SLS-03 120 W modules

≈ 76 700 kWh
saved per year for 4 200 h

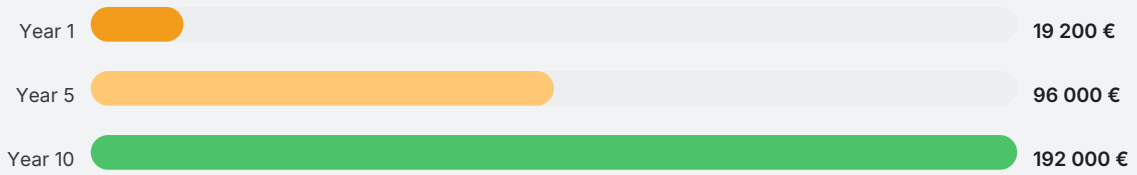
Existing installation

- 85 cigar columns with 2 × 150 W discharge heads
- 28.9 kW with ballasts (losses ≈ 13 %)
- Shafts retained, heads and wiring to be replaced
- Relamping every 3 – 4 years
- No dimming: 100 % all night

D-SLS-03 120 W solution

- 85 × D-SLS-03-200-120A module on existing shaft
- 10.2 kW — 6 000 K fixed or TW, CRI ≥ 97
- New stainless brackets, wiring and protections
- ≥ 100 000 h L90B10 — constant flux (OLC)
- LidarMesh scenario: evening / quiet night / standby

CUMULATIVE SAVINGS — 85 × D-SLS-03 + LidarMesh vs discharge heads (in €)



Energy only at 0.25 €/kWh — excluding avoided relamping and maintenance call-outs. Indicative results — detailed DIALux / Relux photometric study available on request.

Calculation assumptions

Assumptions: 4 200 h/year · 0.25 €/kWh · 2 × 150 W discharge heads (340 W system) replaced by the D-SLS-03 120 W module on the existing shaft, LidarMesh scenario evening / quiet night / standby. DIALux / Relux study on request.

THE D-SLS-03 & THE ENVIRONMENT

Responsible street lighting — respectful of biodiversity, the night sky and neighbours

Light the public space — and nothing else.

Every technical choice — optics, spectrum, control — aims to reduce light trespass and impact on wildlife: ecodesign (EU) 2019/2020, photobiological group RG0, zero UVA radiation.

INTRUSIVE LIGHT & NEIGHBOURS

Low-luminance opal diffusion	Extended, diffuse source: low luminance, no hot spots — visual comfort for pedestrians and residents.
Opaque cap	Closed top cover: limited emission above the horizontal, night sky preserved.
Environmental zones	Sizing to CIE 150 and EN 13201: glare and obtrusive light verified in DIALux study.
Scheduled switch-off	Astronomical switch-off and calendar dimming: no installation stays at 100 % after midnight.

NOCTURNAL WILDLIFE

Adapted spectrum	Tunable White: 2700 K at night in sensitive areas — warm wavelengths attract far fewer insects than cool white sources.
Zero UV	LEDs emit no UVA / UVB radiation — insects are not attracted to the source.
LiDAR dimming	Lighting on demand: with no one passing, intensity drops to 20 %, limiting the attraction effect and preserving nocturnal flight cycles.
Logarithmic dimming	Smooth 0.1 – 100 % transitions compliant with EN 62386 — no flashes or abrupt gradients.

ECODESIGN & LIFE CYCLE

EU ecodesign	Compliant with Regulation (EU) 2019/2020: PstLM ≤ 1 · SVM ≤ 0.4 · light sources and drivers replaceable without tools.
Longevity	L90B10 ≥ 100 000 h: no source replacement over the installation's lifetime — zero lamp waste, zero mercury.
CO2 avoided	Replacement of discharge heads on 85 columns with 85 D-SLS-03 120 W modules with LidarMesh: approx. 19 t of CO2 avoided per year.

RG0	0 UVA	2700 K
photobiological group — EN 62471	no ultraviolet radiation	Tunable White — 'wildlife' night mode

References & project study

References: CIE 150 · EN 13201 · Regulation (EU) 2019/2020 · International Dark-Sky Association · BirdLife International and LPO. Obtrusive light study supplied with every project.

PHOTOMETRY · CALCULATION CHAIN

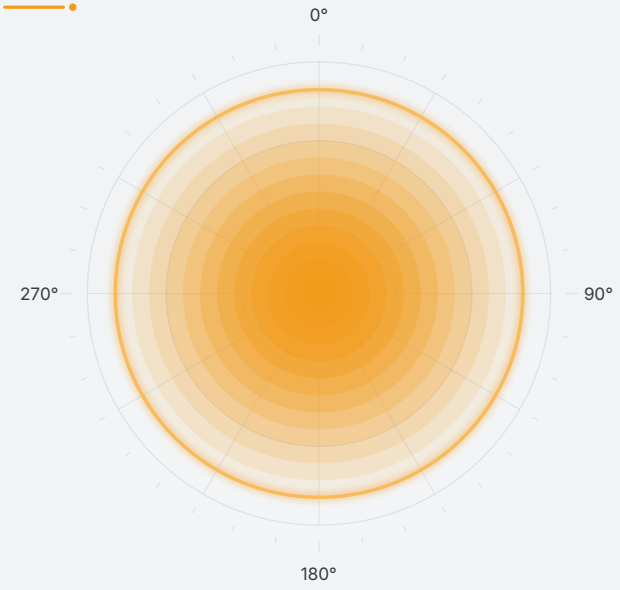
From the source to the luminaire output flux

Values published in the tables on the following pages are calculated from the complete chain: **high-CRI LED strip** at operating current (700 mA) × **transmission of the opal PMMA diffuser + perforated cladding assembly** ≥ **55 %** × **driver** ≥ **94 %**, i.e. **96 lm/W** luminaire at Tq 25 °C and **92 lm/W** at ta 50 °C in 4000 K / CRI ≥ 97 (110 lm/W at CRI 70). Tolerance ±7 % on flux, ±5 % on power, at Vin = 230 V AC.

185 lm/W	× ≥ 55 %	× ≥ 94 %	= 96 lm/W
CRI 97 LED source at 700 mA	opal diffuser + openwork cladding	driver efficiency	luminaire efficacy (Tq 25 °C)

Distribution	Symmetrical 360° omnidirectional (type C in ENEC coding — published reference D-SLS-03-200-120A)
Photometric files	**LDT** and **IES** per reference and per colour temperature — LM-79 reports on assembled luminaire in progress
Photobiological safety	EN 62471 — risk group 0 (RG0), no UVA emission
Flux maintenance	LM-80 + TM-21 — L90B10 ≥ 100 000 h at ta 50 °C
Layout study	DIALux / Relux to EN 13201 (classes P, C, M), supplied with every project

Omnidirectional distribution — 360°



horizontal plane · cd/klm (indicative diagram) — uniform luminance

Vertical distribution — openwork pattern

Light exits through the pattern openings (≈ 45 % of the surface) and the diffuser: the useful flux on the ground is complemented by a low-luminance decorative component.

The opaque top cover limits upward emission; the lower part of the module stays solid to protect the strip.

LDT / IES files supplied per pattern and per CCT.

≥ 88 %	RG0	±7 %
opal diffuser transmission	photobiological group EN 62471	flux tolerance

PHOTOMETRIC TABLES · 5000 K & 4000 K · CRI 70

5000 K · CRI 70 · code 750 · Vin 230 V AC · modes F / DA / DAC · Rev. 10/2026

Tq 25 °C: laboratory | ta 50 °C: operating ambient

REFERENCE	POWER* W · Tq 25 °C	EFFICACY lm/W · Tq 25 °C	FLUX* lm · Tq 25 °C	POWER* W · ta 50 °C	EFFICACY lm/W · ta 50 °C	FLUX* lm · ta 50 °C
D-SLS-03-40-20A	20	110	2 200	20	106	2 120
D-SLS-03-40-30A	30	110	3 300	30	106	3 180
D-SLS-03-50-40A	40	110	4 400	40	106	4 240
D-SLS-03-50-50A	50	110	5 500	50	106	5 300
D-SLS-03-50-60A	60	110	6 600	60	106	6 360
D-SLS-03-100-80A	80	110	8 800	80	106	8 480
D-SLS-03-100-100A	100	110	11 000	100	106	10 600
D-SLS-03-200-120A	**120**	**110**	**13 200**	**120**	**106**	**12 720**
D-SLS-03-200-150A	150	110	16 500	150	106	15 900

4000 K · CRI 70 · code 740 · Vin 230 V AC · modes F / DA / DAC · Rev. 10/2026

Tq 25 °C: laboratory | ta 50 °C: operating ambient

REFERENCE	POWER* W · Tq 25 °C	EFFICACY lm/W · Tq 25 °C	FLUX* lm · Tq 25 °C	POWER* W · ta 50 °C	EFFICACY lm/W · ta 50 °C	FLUX* lm · ta 50 °C
D-SLS-03-40-20A	20	110	2 200	20	106	2 120
D-SLS-03-40-30A	30	110	3 300	30	106	3 180
D-SLS-03-50-40A	40	110	4 400	40	106	4 240
D-SLS-03-50-50A	50	110	5 500	50	106	5 300
D-SLS-03-50-60A	60	110	6 600	60	106	6 360
D-SLS-03-100-80A	80	110	8 800	80	106	8 480
D-SLS-03-100-100A	100	110	11 000	100	106	10 600
D-SLS-03-200-120A	**120**	**110**	**13 200**	**120**	**106**	**12 720**
D-SLS-03-200-150A	150	110	16 500	150	106	15 900

* Luminaire power and flux at Vin = 230 V AC, modes F / DA / DAC, CRI 70 — tolerance ±7 % on flux, ±5 % on power. The highlighted row is the 120 W reference configuration. Other CRI (80, 90, 97) and Tunable White: flux on request — ENEC-certified types, series 03 (20 – 200 W).

PHOTOMETRIC TABLES · 3000 K & 2700 K · CRI 70

3000 K · CRI 70 · code 730 · Vin 230 V AC · modes F / DA / DAC · Rev. 10/2026

Tq 25 °C: laboratory | ta 50 °C: operating ambient

REFERENCE	POWER* W · Tq 25 °C	EFFICACY lm/W · Tq 25 °C	FLUX* lm · Tq 25 °C	POWER* W · ta 50 °C	EFFICACY lm/W · ta 50 °C	FLUX* lm · ta 50 °C
D-SLS-03-40-20A	20	107	2 140	20	103	2 060
D-SLS-03-40-30A	30	107	3 210	30	103	3 090
D-SLS-03-50-40A	40	107	4 280	40	103	4 120
D-SLS-03-50-50A	50	107	5 350	50	103	5 150
D-SLS-03-50-60A	60	107	6 420	60	103	6 180
D-SLS-03-100-80A	80	107	8 560	80	103	8 240
D-SLS-03-100-100A	100	107	10 700	100	103	10 300
D-SLS-03-200-120A	**120**	**107**	**12 840**	**120**	**103**	**12 360**
D-SLS-03-200-150A	150	107	16 050	150	103	15 450

2700 K · CRI 70 · code 727 · Vin 230 V AC · modes F / DA / DAC · Rev. 10/2026

Tq 25 °C: laboratory | ta 50 °C: operating ambient

REFERENCE	POWER* W · Tq 25 °C	EFFICACY lm/W · Tq 25 °C	FLUX* lm · Tq 25 °C	POWER* W · ta 50 °C	EFFICACY lm/W · ta 50 °C	FLUX* lm · ta 50 °C
D-SLS-03-40-20A	20	91	1 820	20	88	1 760
D-SLS-03-40-30A	30	91	2 730	30	88	2 640
D-SLS-03-50-40A	40	91	3 640	40	88	3 520
D-SLS-03-50-50A	50	91	4 550	50	88	4 400
D-SLS-03-50-60A	60	91	5 460	60	88	5 280
D-SLS-03-100-80A	80	91	7 280	80	88	7 040
D-SLS-03-100-100A	100	91	9 100	100	88	8 800
D-SLS-03-200-120A	**120**	**91**	**10 920**	**120**	**88**	**10 560**
D-SLS-03-200-150A	150	91	13 650	150	88	13 200

* Luminaire power and flux at Vin = 230 V AC, modes F / DA / DAC, CRI 70 — tolerance ±7 % on flux, ±5 % on power. The highlighted row is the 120 W reference configuration. Other CRI (80, 90, 97) and Tunable White: flux on request — ENEC-certified types, series 03 (20 – 200 W).

PHOTOMETRIC TABLE · 6000 K · CRI 70 & CRI ≥ 97 / TUNABLE WHITE

REFERENCE	POWER* W · Tq 25 °C	EFFICACY lm/W · Tq 25 °C	FLUX* lm · Tq 25 °C	POWER* W · ta 50 °C	EFFICACY lm/W · ta 50 °C	FLUX* lm · ta 50 °C
6000 K · CRI 70 · code 760 · Vin 230 V AC · modes F / DA / DAC · Rev. 10/2026					*Tq 25 °C: laboratory | ta 50 °C: operating ambient*	
D-SLS-03-40-20A	20	110	2 200	20	106	2 120
D-SLS-03-40-30A	30	110	3 300	30	106	3 180
D-SLS-03-50-40A	40	110	4 400	40	106	4 240
D-SLS-03-50-50A	50	110	5 500	50	106	5 300
D-SLS-03-50-60A	60	110	6 600	60	106	6 360
D-SLS-03-100-80A	80	110	8 800	80	106	8 480
D-SLS-03-100-100A	100	110	11 000	100	106	10 600
D-SLS-03-200-120A	**120**	**110**	**13 200**	**120**	**106**	**12 720**
D-SLS-03-200-150A	150	110	16 500	150	106	15 900

* Luminaire power and flux at Vin = 230 V AC, modes F / DA / DAC, CRI 70 — tolerance ±7 % on flux, ±5 % on power. The highlighted row is the 120 W reference configuration. Other CRI (80, 90, 97) and Tunable White: flux on request — ENEC-certified types, series 03 (20 – 200 W).

CRI ≥ 97 (option HC) & Tunable White — 120 W reference configuration

96 lm/W
luminaire efficacy CRI ≥ 97 · Tq 25 °C

92 lm/W
luminaire efficacy CRI ≥ 97 · ta 50 °C

18 360 lm
flux 120 W · CRI ≥ 97 · 4000 K

2700 – 6500 K
Tunable White · D4i + DT8 (code 9TW)

The high colour-rendering LED strip (Ra ≥ 97) and the Tunable White version keep the same optical chain; flux per rating is obtained by multiplying the power by 96 lm/W (Tq 25 °C) or 92 lm/W (ta 50 °C). Other CRI (80, 90): flux on request.

9 wattages
20 → 150 W · ENEC types series 03

5 fixed CCTs
6000 · 5000 · 4000 · 3000 · 2700 K

±7 %
flux tolerance

CODING · ORDER REFERENCE

Reference structure

D-SLS	–	03	–	200	–	120	–	A	–	9TW	–	LD	–	W10
Brand		Series		Size		Power		Type		CRI · CCT		Option		Option

Example: *D-SLS-03-200-120A* (ENEC-certified type) = 120 W module, size 200; CRI · CCT code **9TW** = CRI ≥ 97 Tunable White or **740** = CRI 70 / 4 000 K. Lower shaft 2 000 mm: **D-SLS-03-F20**.

Series · size · wattage

03 = cigar-type column. Size by range: **100** (60 – 120 W) · **200** (120 – 200 W).

Power ratings: 20 · 30 · 40 · 50 · 60 · 80 · 100 · 120 · 150 W (180 – 200 W on request).

CCT · CRI

750 = 5000 K · **740** = 4000 K · **730** = 3000 K · **727** = 2700 K · **718** = 1800 K

First digit = CRI: 7 = 70 (standard), 8 = 80, 9 = 90 — e.g. 940 = 4000 K / CRI 90 · **TW** = Tunable White 2200 – 6500 K (D4i + DT8)

Type

A = reference ENEC-certified type (omnidirectional)

B / C = pattern and distribution variants · LDT / IES files per pattern and per CCT on request.

Options

LD LidarMesh remote management · **SP20** external 20 kV SPD · **W10** 10-year warranty · **MAR** C5 anti-corrosion · **A12** 12 V auxiliary · **S3** 3 SDCM · **CL2** class II · **MOT** pattern · **RAL** colour

Combinable options, appended in this order at the end of the reference.

Reference examples

D-SLS-03-200-120A-9TW	Complete 4 m column — 120 W, CRI ≥ 97, Tunable White, D-SLS-03-F20 shaft.
D-SLS-03-50-60A-740	Retrofit module on existing shaft — 60 W, 4 000 K, CRI 70.
D-SLS-03-200-120A-9TW-LD-MAR-W10	Remotely managed seafront promenade — LiDAR, C5 anti-corrosion, 10-year warranty.

Quick pre-sizing

Average illuminance ≈ × UF × MF / area. Example: esplanade, one column per 10 × 10 m, UF 0.35 (360° flux, partly decorative), MF 0.85 → 18 360 lm × 0.35 × 0.85 / 100 m² ≈ **55 lx** ambient; for marker lighting (10 m spacing) EN 13201 class P3 is easily met. The DIALux / Relux study then confirms U0 uniformity.

WARRANTY & SERVICES

7-year warranty

Standard **7-year** warranty on the complete luminaire — LED module, optic, driver and SPD — for a compliant installation and an operating ambient temperature ≤ 50 °C.

10-year extension (W10)

On project registration at commissioning: warranty extended to **10 years**, including flux maintenance (L90) and spare-part availability.

Lighting studies

DIALux / Relux photometric study to NM EN 12193 / EN 13201, LDT / IES files, LED LM-80 reports and calculation notes for tender files.

Factory configuration

LED current (NFC), DA / DAC dimming profiles, DALI-2 addresses, OTP thresholds and D4i parameters factory-set per project sheet — luminaires ready to install.

LidarMesh commissioning

Integration of light points into **LidarMesh CMS**, scenario creation, operator training and remote assistance.

Spare parts & after-sales

Zhaga Book 18 LED modules, drivers, diffusers and gaskets available throughout the warranty period — on-site replacement without special tools.

Sales & technical contact

E-mail	sa@d-sls.com
WhatsApp	+39 333 765 0586
Web	www.d-sls.it
Head office	D-SLS SRL — Via Bocchetto 6, 20123 Milano (MI), Italia — P.IVA IT14260650966

PROJECT ROADMAP · FROM ORDER TO OPERATION

01 Survey & study	02 Validation	03 Manufacturing	04 Installation	05 Commissioning	06 Operation
DIALux / Relux · shaft survey · project sheet	DXF pattern · RAL colour · sample	laser cutting · factory driver configuration	module on existing shaft or complete column	LidarMesh CMS · scenarios · training	7 → 10 years · after-sales · parts available

Digital-Smart Lighting Solutions

D-SLS-03 • 20-150 W

D-SLS SRL — Digital Smart Lighting Solutions

Via Bocchetto 6 · 20123 Milano (MI) · Italia · P.IVA IT14260650966

sa@d-sls.com · WhatsApp +39 333 765 0586 · www.d-sls.it

Catalogue D-SLS-03 2026 · Rev. 10/2026 · Cigar-type light column, 20 – 150 W range ·
Non-contractual document: D-SLS reserves the right to modify specifications without notice.

www.d-sls.it

Direct WhatsApp

sa@d-sls.com