

Brightech

SOLAR STREET LIGHTING · SMART POLES · PRECINCT OPERATIONS

Solar Lighting Catalogue 2026

Off-grid solar street lighting, split-type systems, high-mast, pathway and garden luminaires, smart pole cameras and IoT control — supplied, installed and supported by Brightech.



CE

RoHS

LM-80

IP65 / IP66

5-YEAR WARRANTY

HOW TO ORDER

Brightech supplies and supports this range directly. Pricing is quoted per project — wattage mix, pole reuse, mounting heights, spans and site access change the number materially.

Build a project list at brightech.co.za/products, request a quotation at brightech.co.za/quote, or model a whole street at brightech.co.za/calculator.

THE RANGE

Matched to the road, not to the catalogue

Lighting a street well is a specification exercise. Road width, mounting height, spacing, canopy shading and the hours the street is actually used all change which luminaire is correct. This range covers every class from a 10W footpath bollard to a 200W high-mast array, so the specification can follow the road.

All-in-one solar street lights

Panel, battery, controller and LED in one sealed die-cast body. The fastest install and the lowest lifetime service cost. 10W-150W.

- Brightech Nova 80 AIO
- Brightech Lumen LX (60-140W)
- Brightech Lumen A (80-150W)
- Brightech Lumen FT (40-120W)
- Brightech Lumen Compact (10-20W)

Split-type solar street lights

Panel mounted separately from the luminaire — the right answer under tree canopy or where the panel must be aimed independently. 40W-200W.

- Brightech Split SB (40-120W)
- Brightech Split SD high-mast (60-200W)

Area, court and garden lighting

Wide-beam flood and decorative optics for parks, sports courts, parking areas and estate walkways. 15W-150W.

- Brightech Court CL (100-150W)
- Brightech Garden TY (15-30W)

Smart pole hardware

Turns an installed lighting pole into a safety and sensing site without trenching for power or fibre.

- Brightech Aegis 4G PTZ solar camera
- Brightech IoT lighting controller

ALL-IN-ONE · LEAD PRODUCT

Brightech Nova 80 AIO

The Brightech lead product for volume street-lighting rollouts. One SKU, one install method and one spares kit across an entire suburb — with a removable battery compartment so servicing is a swap, not a pole replacement.

CE

RoHS

LM-80

IP65

5-YEAR WARRANTY

210 LM/W



Product features

- Die-cast ADC12 one-piece heat sink with profile aluminium, treated with thickened anti-corrosion paint.
- Brand-new grade-A LiFePO4 cells: 2,500+ cycles, 6–8 year service life, 3–5 rainy days of autonomy.
- 4-core high-efficiency SMD 3030 LEDs at 210 lm/W with Lumileds chips and a high-transmittance optical lens.
- Monocrystalline panel with MPPT controller — full recharge in 4–6 hours of good sun.
- Microwave sensor: 100% output on motion, 30% hold when the street is empty.
- Sealed 4G IoT compartment for optional cloud control and telemetry.

Product parameters

MODEL	Nova 80 AIO
Power	80W
Solar panel	18V / 105W monocrystalline
Battery	LiFePO4 12.8V 45Ah (576Wh)
LED	4-core high-efficiency SMD 3030, 240 pcs
Luminous flux	16,800 lm
Efficacy	210 lm/W
Panel conversion efficiency	23.8%
Product size	1,610 × 460 × 130 mm
Net weight	16 kg
Controller	MPPT
Light angle	155° × 75°, transmittance >95%
Working mode	100% on motion, 30% without motion
Lighting method	Intelligent control + microwave induction + segmented time control
Cloud management	IoT control management system (optional)
Autonomy	3–5 rainy days
Material / rating	ADC12 die-cast aluminium · IP65

APPLICATIONS

Road lighting · Urban streets · Industrial parks · Highways · Sidewalks · Car parks · Countryside

RECOMMENDED MOUNTING HEIGHT

10–12 m

ALL-IN-ONE · HIGHEST OUTPUT

Brightech Lumen LX Series

The highest-output all-in-one in the range, with an adjustable and removable head. Specified for arterials, dual carriageways and airport approaches where uniformity across a wide carriageway matters more than unit cost.

CE RoHS LM-80 IP65 220 LM/W ADJUSTABLE HEAD



Product features

- Adjustable and removable luminaire head — aimed on site, serviced without dismantling the mount.
- AL6063 + ADC12 die-cast radiator with thickened anti-corrosion paint.
- 220 lm/W with Lumileds LED chips and a 90%+ transmittance PC lens.
- No additional wiring required; multiple mounting brackets for flexible pole placement.
- Microwave sensing plus segmented time control; 82 mm lamp-post adapter.

Product parameters

MODEL	LX-60	LX-80	LX-100	LX-120	LX-140
Power	60W	80W	100W	120W	140W
Solar panel	18V/93.5W	18V/117W	18V/139W	36V/158W	36V/175W
Battery (LiFePO4)	12.8V 45Ah 576Wh	12.8V 60Ah 768Wh	12.8V 75Ah 960Wh	25.6V 45Ah 1152Wh	25.6V 60Ah 1536Wh
LED	SMD5050 56 pcs	SMD5050 84 pcs	SMD5050 112 pcs	SMD5050 140 pcs	SMD5050 140 pcs
Luminous flux	13,200 lm	17,600 lm	22,000 lm	26,400 lm	30,800 lm
Product size (mm)	1195×457×129	1420×457×129	1556×457×129	1772×457×129	1932×457×129
Net weight	16.86 kg	19.52 kg	22.95 kg	25.8 kg	30.8 kg
Efficacy	220 lm/W				
Material	AL6063 + ADC12 aluminium				
Controller	MPPT boost controller				
Lamp post adapter	82 mm				
Lighting method	Microwave sensing + segmented time control				
Autonomy	3-5 rainy days				
Protection grade	IP65				

APPLICATIONS

Arterials · Dual carriageways · Airport approach roads · Highways · Industrial estates

RECOMMENDED MOUNTING HEIGHT

6-13 m depending on wattage

ALL-IN-ONE · HEAVY DUTY

Brightech Lumen A Series

A heavy-duty all-in-one for wide roads, ports, yards and mine access routes, running up to 150W with a 300W panel and a separate removable battery compartment.

CE

RoHS

LM-80

220 LM/W

REMOVABLE BATTERY

Product features



- Die-casting + profile aluminium + 1060 pure aluminium body for maximum heat transfer.
- High-performance LiFePO4 pack in a removable compartment; 3-5 days without sunlight.
- 220 lm/W efficacy with a 75° × 155° optic at >95% transmittance.
- Intelligent control plus segmented time control; MPPT controller optional.
- 50,000+ hour rated LED lifespan.

Product parameters

MODEL	A-80	A-100	A-120	A-150
Power	80W	100W	120W	150W
Solar panel	18V/150W Mono	36V/180W Mono	36V/240W Mono	36V/300W Mono
Panel size (mm)	1130×679×4	1370×679×4	1790×679×4	1940×770×4
Battery (LiFePO4)	12.8V 60Ah 768Wh	25.6V 45Ah 1152Wh	25.6V 60Ah 1536Wh	25.6V 75Ah 1920Wh
Luminous flux	17,600 lm	22,000 lm	26,400 lm	33,000 lm
Product size (mm)	1175×725×100	1415×725×120	1825×725×120	1985×815×120
Efficacy	220 lm/W			
Panel conversion efficiency	23.8%			
Material	Die-casting + profile aluminium + 1060 pure aluminium			
Controller	MPPT optional			
Light angle	75° × 155°, transmittance >95%			
Lighting mode	Intelligent control + segmented time control			
Autonomy	3-5 rainy days			

APPLICATIONS

Wide roads · Ports and yards · Mine access roads · Logistics hubs · Border posts

RECOMMENDED MOUNTING HEIGHT

6-18 m depending on wattage

ALL-IN-ONE · INTEGRATED PANEL

Brightech Lumen FT Series

A compact integrated all-in-one for residential streets, estate roads and internal precinct routes where a full arterial luminaire would be over-specified.

CE

RoHS

IP65

MICROWAVE SENSOR



Product features

- Single sealed body — panel, battery, controller and optic in one unit.
- Grade-A LiFePO4 storage with 2,500+ cycle life.
- High-transmittance optical lens for soft, glare-controlled illumination.
- Microwave induction with segmented time control for overnight energy management.
- Quick bracket mounting on new or existing poles.

Product parameters

MODEL	FT-40	FT-60	FT-80	FT-100	FT-120
Power	40W	60W	80W	100W	120W
Autonomy	3-5 rainy days				
Controller	MPPT controller				
Material	Die-cast aluminium + PMMA optic				
Lighting method	Intelligent control + microwave induction + segmented time control				
Protection grade	IP65				
Panel conversion efficiency	23.8%				
Battery chemistry	Grade-A LiFePO4, 2,500+ cycles				

APPLICATIONS

Residential streets · Estate roads · Precinct internal routes · School surrounds · Clinics

RECOMMENDED MOUNTING HEIGHT

5-10 m depending on wattage

ALL-IN-ONE · PATHWAY

Brightech Lumen Compact Series

A low-wattage pathway and footpath luminaire for walkways, parks, courtyards and estate paths — the smallest unit in the range and the fastest to install.

CE

RoHS

180 LM/W

REPLACEABLE BATTERY

Product features

- Easy to install and maintain, with a replaceable battery compartment.
- LiFePO4 battery supporting 2–3 rainy days; 2,500+ cycles, 6–8 year life.
- 180 lm/W using Lumileds LED chips.
- Monocrystalline panel with PWM controller, 4–6 hour charge.
- Fixed dimming profile: 100% for 4 hours, 50% for 2 hours, 30% for the final 6 hours.



Product parameters

MODEL	C-10	C-15	C-20
Power	10W	15W	20W
Solar panel	6V/35W Mono		
Battery (LiFePO4)	3.2V 30Ah	3.2V 52Ah	3.2V 72Ah
LED	SMD3030 144 pcs	SMD3030 144 pcs	SMD3030 192 pcs
Luminous flux	1,800 lm	2,700 lm	3,600 lm
Product size (mm)	755×305×100		
Efficacy	180 lm/W		
Material	Die-cast aluminium + PMMA		
Controller	PWM controller		
Light angle	70° × 140°, transmittance >95%		
Lighting method	100% for 4 h, 50% for 2 h, 30% for the last 6 h		
Autonomy	2–3 rainy days		

APPLICATIONS

Footpaths · Parks · Courtyards · Estate walkways · Perimeter paths

RECOMMENDED MOUNTING HEIGHT

4–7 m depending on wattage

SPLIT TYPE

Brightech Split SB Series

A split-type system with the panel mounted separately from the luminaire. The correct specification under tree canopy, on shaded boulevards, or anywhere the panel must be aimed independently of the road.

CE

RoHS

LM-80

IP66

190 LM/W

ADJUSTABLE SLEEVE

Product features

- Monocrystalline panel on an adjustable sleeve — aimed at true solar north on site.
- Integrated MPPT controller; full recharge in 4–6 hours.
- Replaceable battery compartment for straightforward field servicing.
- LiFePO4 storage, 3–5 rainy days of backup, 2,500+ cycles, 6–8 year durability.
- 190 lm/W Lumileds LED with a high-transmittance optical lens and reduced glare.



Product parameters

MODEL	SB-40	SB-60	SB-80	SB-100	SB-120
Power	40W	60W	80W	100W	120W
Solar panel	18V/80W	18V/120W	18V/160W	18V/200W	36V/240W
Battery (LiFePO4)	12.8V 30Ah 384Wh	12.8V 45Ah 576Wh	12.8V 60Ah 768Wh	12.8V 75Ah 960Wh	25.6V 45Ah 1152Wh
LED	SMD3030 96 pcs	SMD3030 160 pcs	SMD3030 160 pcs	SMD3030 240 pcs	SMD3030 240 pcs
Luminous flux	7,600 lm	11,400 lm	15,200 lm	19,000 lm	22,800 lm
Product size (mm)	430×202×78	538×220×78	538×220×78	538×265×78	538×265×78
Panel size (mm)	550×760×25	800×760×30	1040×760×30	1320×760×30	1540×760×30
Efficacy	190 lm/W				
Material	Die-cast aluminium + PMMA				
Controller	MPPT controller				
Light angle	Type 2 / 3 / 4 / 5, transmittance >95%				
Lighting method	100% for 4 h, 50% for 2 h, 30% for the last 6 h				
Autonomy	3 rainy days				

APPLICATIONS

Tree-lined boulevards · Shaded streets · Riverfronts · Heritage avenues · Estate main roads

RECOMMENDED MOUNTING HEIGHT

5–15 m depending on wattage

SPLIT TYPE · HIGH MAST

Brightech Split SD Series

High-mast split-type lighting up to 200W for intersections, interchanges, taxi ranks, stadium surrounds and open yards where a single tall mast must light a wide area.

CE

RoHS

IP66

HIGH MAST



Product features

- Separate high-capacity panel array with adjustable tilt for optimal winter yield.
- High-capacity LiFePO4 bank sized for continuous winter operation.
- MPPT charge control with configurable segmented dimming.
- Die-cast aluminium luminaire with wide-area optics.
- Designed for mast-mounted installation with ground-level battery servicing options.

Product parameters

MODEL	SD-60	SD-80	SD-100	SD-120	SD-150	SD-200
Power	60W	80W	100W	120W	150W	200W
Controller	MPPT controller					
Battery chemistry	Grade-A LiFePO4					
Autonomy	3-5 rainy days					
Material	Die-cast aluminium					
Lighting method	Intelligent control + segmented time control					
Protection grade	IP66					

APPLICATIONS

Intersections · Interchanges · Taxi ranks · Stadium surrounds · Open yards · Mine plant areas

RECOMMENDED MOUNTING HEIGHT

8–18 m depending on wattage

AREA & COURT LIGHTING

Brightech Court CL Series

Wide-beam solar flood lighting for sports courts, parking areas, community halls and open public spaces where coverage matters more than road uniformity.

CE

RoHS

IP66

WIDE BEAM



Product features

- Wide-beam flood optic for even coverage across courts and open areas.
- Die-cast aluminium housing with a toughened front lens.
- High-capacity LiFePO4 storage with MPPT charge control.
- Programmable segmented dimming so evening use is prioritised.
- Pole, wall or bracket mounting.

Product parameters

MODEL	CL-100	CL-120	CL-150
Power	100W	120W	150W
Battery chemistry	Grade-A LiFePO4		
Controller	MPPT controller		
Optic	Wide-beam flood		
Material	Die-cast aluminium + toughened lens		
Autonomy	3-5 rainy days		
Protection grade	IP66		

APPLICATIONS

Sports courts · Parking areas · Community halls · Open public spaces · Loading yards

RECOMMENDED MOUNTING HEIGHT

6-12 m depending on application

GARDEN & DECORATIVE

Brightech Garden TY Series

Decorative solar garden and courtyard luminaires for estates, guesthouses, office parks and public gardens — amenity lighting rather than road lighting.

CE

RoHS

IP65

DECORATIVE

Product features

- Decorative optic with soft, low-glare distribution.
- Integrated panel and LiFePO4 battery in a sealed body.
- Dusk-to-dawn operation with segmented dimming.
- Corrosion-resistant finish for coastal and high-humidity sites.
- Pole-top mounting on standard garden columns.



Product parameters

MODEL	TY-15	TY-18	TY-20	TY-30
Power	15W	18W	20W	30W
Battery chemistry	Grade-A LiFePO4			
Operation	Dusk to dawn with segmented dimming			
Material	Die-cast aluminium + PMMA diffuser			
Autonomy	2-3 rainy days			
Protection grade	IP65			

APPLICATIONS

Estate gardens · Courtyards · Office parks · Guesthouses · Public gardens

RECOMMENDED MOUNTING HEIGHT 2.5-4 m

SMART POLE HARDWARE

Brightech Aegis 4G PTZ Solar Camera

A self-powered 4G pan-tilt-zoom dome camera that mounts on the same pole as the luminaire. It turns an installed lighting network into a safety network without trenching for power or fibre.

- IP66
- 4G LTE
- 5 MP
- AI DETECTION
- TWO-WAY AUDIO



Product features

- 5 megapixel imaging with full-colour night vision and triple-mode illumination.
- 266° horizontal pan and 105° vertical tilt with 10 programmable preset positions.
- AI-powered human detection and intrusion alerts with audible and visual warnings.
- Two-way audio for live voice intervention from the operations room.
- Cloud recording plus local TF card backup up to 128 GB.
- IP66 weatherproof with 4,000V lightning and surge protection.
- Plug-and-play 4G with built-in SIM, real-time signal strength and data usage reporting.

Product parameters

MODEL	Aegis 4G PTZ
Sensor	5 MP, 1/3" CMOS
Lens	4 mm fixed focus
Resolution	Main 2304 × 1296 · sub 640 × 360
Frame rate	15 fps
Compression	H.264 / H.265, dual stream
Audio	AAC, G711 · two-way audio
Rotation	Pan max 266° · tilt max 105° · 0.1°-20°/s
Illumination range	Infrared 10-30 m · white light 10-20 m
Minimum illumination	Colour 0.1 lux · B/W 0.01 lux
IR LEDs	8 array LEDs (4 white + 4 infrared)
Storage	Cloud storage + TF card up to 128 GB
Connectivity	4G LTE FDD B1/B3/B5/B8 · TDD B34/B38/B39/B40/B41
Solar panel	18V / 40W monocrystalline
Power	DC 12V, ≤10W
Protection	IP66 · 4,000V lightning and surge protection

APPLICATIONS

Transit hubs · Crime hotspots · Precinct entrances · Parks · Mine perimeters · Schools

RECOMMENDED MOUNTING HEIGHT

Pole-mounted alongside the luminaire, 4-10 m

SMART POLE HARDWARE

Brightech IoT Lighting Controller

The module that takes a pole from a standalone light to a managed asset. It reports charge state, burn hours, dimming profile and faults, and accepts remote schedule changes.

4G LTE

REMOTE DIMMING

FAULT ALERTS

1KONNEKT MANAGED



Product features

- Fits the sealed IoT compartment on Brightech all-in-one and split-type luminaires.
- Reports battery state of charge, panel yield, burn hours and fault codes.
- Remote dimming schedules and group commands, per pole or per street.
- Fault and tamper alerts raised to the operations view rather than reported by residents.
- SIM, APN and data managed centrally through the Brightlink 1Konnekt platform.
- Feeds the BrightCore operations dashboard used by the city, estate or precinct operator.

Product parameters

MODEL	IoT Controller
Telemetry	Battery SoC, panel yield, burn hours, fault codes, tamper
Control	Remote dimming schedules, per pole or per group
Connectivity	4G LTE with managed SIM and APN
Management platform	Brightlink 1Konnekt (device and SIM) + BrightCore (operations)
Mounting	Integrated IoT compartment on Brightech luminaires
Protection	Sealed within the luminaire body, IP65 / IP66

APPLICATIONS

Municipal networks · Estates and HOAs · Precincts · Mines · Agricultural sites

RECOMMENDED MOUNTING HEIGHT

Integrated — no separate mounting required

ORDERING AND SUPPORT

Buy it, and have it supported here

Brightech supplies, installs, commissions and supports this entire range in South Africa and across the region. Warranty claims, spares and battery swaps are handled locally — you deal with Brightech, not with a factory on another continent.

1 Specify

Use brightech.co.za/products to build a project list, or brightech.co.za/calculator to model a whole street including monthly cost per household.

2 Request a quotation

Submit the list at brightech.co.za/quote. Pricing is quoted per project, never published — wattage mix, pole reuse, mounting heights and site access all change it.

3 Site survey

For anything larger than a single street, Brightech surveys road class, pole condition, spans, mounting heights and shading before quoting.

4 Install and commission

Brightech crews install and commission, and train the client's own maintenance team on battery swaps and fault handling.

5 Operate

Optional IoT control brings every pole into one dashboard, with SIM and data managed through Brightlink 1Konnekt.

BRIGHTECH

brightech.co.za

Hardware, installation and support: brightech.co.za/contact

Request a quotation: brightech.co.za/quote Street calculator: brightech.co.za/calculator

Connectivity and device management: brightlink.co Research and prototyping: brightlab.co.za