

SEPARATE-PANEL SOLAR LED LUMINAIRE

Compact, off-grid lighting with independent solar panel positioning, Nichia LED optics and BMS-protected LiFePO4 energy storage.

6500 K

NICHIA LED

2,400 lm

MAX. FLUX*

IP66

INGRESS PROTECTION*

2 YEARS

PRODUCT WARRANTY

ACTUAL INSTALLED UNIT



Figure 1 | Actual product installation

TECHNICAL SPECIFICATIONS

OPTICAL & CONTROLS

LED source / CCT	Nichia / 6500 K
Maximum light output	2,400 lm*
Motion detector	Integrated PIR sensor
Lighting control	High (%100) / low (%20) lighting levels
Remote operation	Included

SOLAR & ENERGY STORAGE

Solar module	14.25 W monocrystalline
Charge control	3.2 V
Battery configuration	4 x 6 Ah LiFePO4 cells
Battery safeguards	Integrated BMS
Cycle-life objective	2,000 cycles

CONSTRUCTION & INSTALLATION

Luminaire dimensions	300 x 100 mm
Panel dimensions	420 x 300 mm incl. feet
Housing / finish	Aluminium / powder coating
Mounting bracket	Steel / tilt up to 45 deg.
Solar connection cable	3 m, extendable
Ingress protection	IP66
Metal housing impact	IK08 (metal housing only)
Fixture weight	Approx. 3 kg

SOLAR & OPERATING PARAMETERS

DAILY SOLAR EXPOSURE
6-8 hours of direct sunlight

RECOMMENDED MOUNTING
Up to 5 m

PV MODULE LONGEVITY **10-year high-performance target**

Runtime varies with irradiation, season, sensor mode and installation.

Cycle life and PV longevity are stated objectives, not additional product warranties

Note: 90 W equivalent is a comparative class, not the measured electrical power consumption.

EXPECTED LIGHTING DURATION
14 h average / up to 16 h

TYPICAL COVERAGE
Approx. 80 m2 (site-dependent)



ACTUAL LIGHTING APPLICATION

Original field photograph supplied by Yakan Aydınlatma - not a simulation or photometric render.

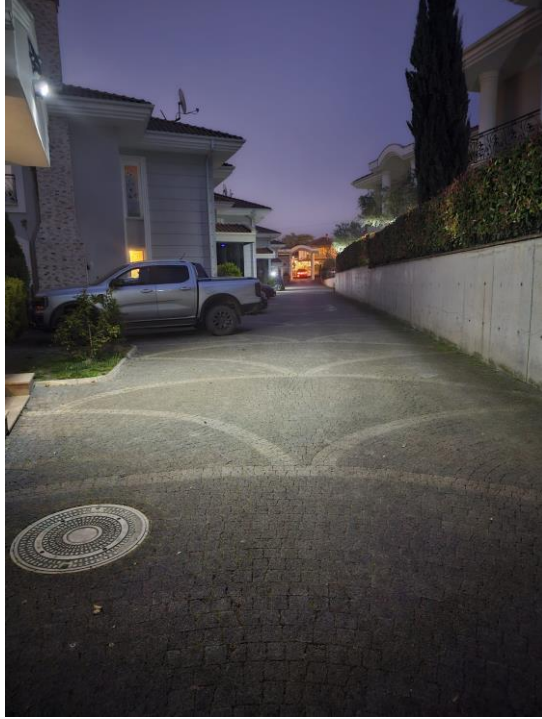


Figure 2 | Actual night-time illumination

FIELD REFERENCE

Residential driveway. This image shows the actual lighting effect but is not a calibrated lux/uniformity test.

INSTALLATION REQUIREMENTS

01 Solar access

Keep panel free from shading; allow 6-8 hours of direct sunlight.

02 Solar connection

Separate panel with a 3 m extendable cable.

03 Mechanical fixings

Verify support capacity, fixings and local wind loads.

04 Qualified installation

Have the system installed by an experienced electrician.

SUPPORTING TEST FILES / DOCUMENT SCOPE

FILE / REPORT	TESTED COMPONENT / MODEL	RELEVANCE TO Y.A.126030
NICHIA LED	NF2W757GRT-V3 - 6500 K LED ranks	COMPONENT ONLY LED datasheet; not fixture certification.
UN 38.3	3.2 V / 6 Ah	TESTED CELL ONLY Cell transport report, not assembled pack.
MERCURY SCREEN	12.8 V pack	
EMC REPORT	CGS EMC-26288 - Y.A.128018 test	DoC
LVD ATTESTATION	PTC 2026-PTC-6937 - YKN model list	DoC

Product warranty: 2 years. All performance figures depend on the stated operating conditions.