



lighting your way



NAIT PLUS MT-60 LED

A step up in size and performance for motorways and bigger roads.

Reaching up to almost 15.000 lumen with 60 pieces of high power LEDs, this luminaire takes the lighting up to another level. It has an entry level lumen package that can comply with demands for more complexed and traffic heavy roads and conflict areas that demand higher level of illumination. Luminaire has been developed in conjunction with

the latest controlling technology, which can adjust the luminous output according to the preset schedule, which has been synced with average annual daily traffic during the dark part of the day. This feature is a great additional energy saving potential and at the same a great improvement of life quality at night.





Advancing to the big city with NAIT plus MT-60 LED



PERFORMANCE DATA

System flux: 8433,0 lm - 14734,9 lm

System power: 81,4 - 111,5 W

CCT: 2700 K, 3000 K, 4000 K

CRI: ≥ 70 , ≥ 80

Classification: IEC protection class I / II, IP66, IK09

Surge protection: 10 kV (L/N-ground), 6 kV (L-N)

Smart lighting: Virtual midnight, AstroDIM,
StepDIM, DALI

On request: 4-pin socket (ZHAGA book 18), CLO

Overtime

performance: L80B10 100.000 hours at $T_a=25^\circ\text{C}$

Certification: ENEC, CE

INSTALLATION

Mounting device: For pole spigots from $\Phi 42$ to $\Phi 60$ mm

Fixation type: post top / side entry

Tilt angle: $0^\circ / \pm 5^\circ / \pm 10^\circ / \pm 15^\circ$

Connecting: IP66 fast connector (2/3 or 5 pole)

FEATURES

Net weight: 9,25 kg

Pre-wiring: preinstalled with fast connector

- Default: 3-pin fast connector IP66 on
0,2m 3G1 cable

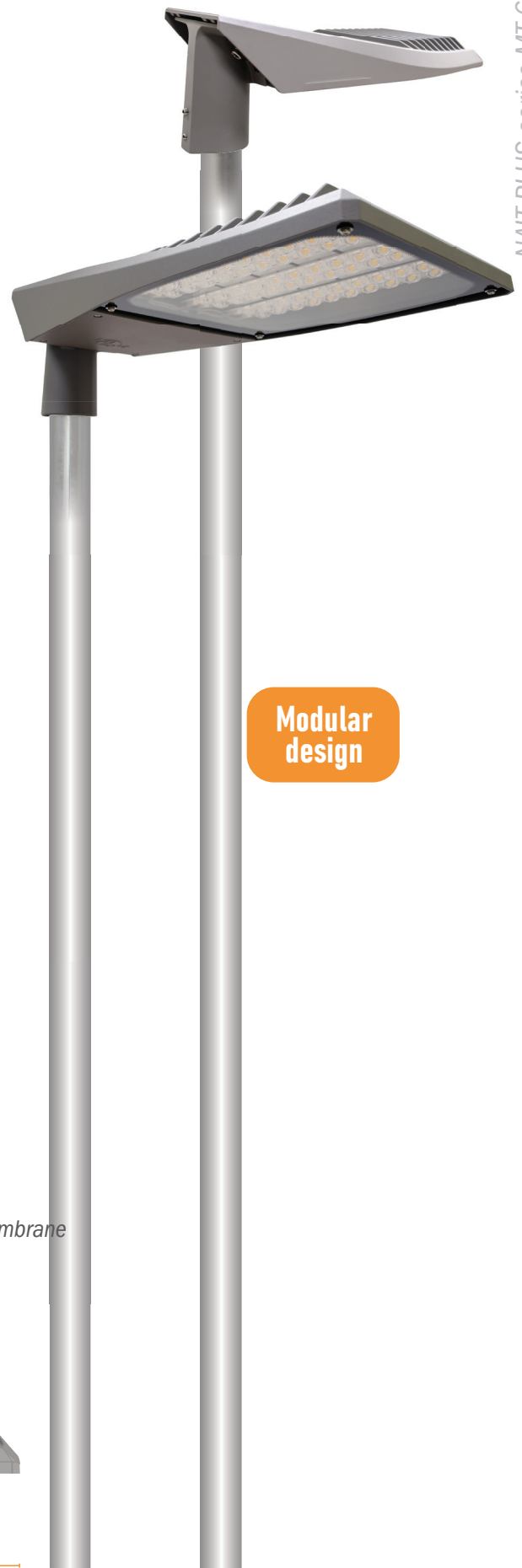
- Optional: custom cable length with or
without connector

TYPICAL PROJECT CASE

- Installation height 10-14 m
- various column configuration
- motorized traffic
- moderate to high speed
- up to three lanes
- with pedestrians



2,75 m - 3,75 m



Modular design

MATERIALS

Housing material: High pressure die-cast aluminum

Finish: Polyester powder-coated paint in RAL 9007

Optic material: PMMA High transparent

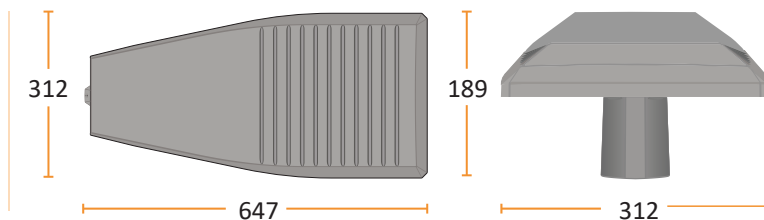
Optical cover: OPTIWHITE 5 mm tempered glass

Cable gland: stainless steel with pressure equalization membrane

Fixation bolts: stainless steel grade A4

MEASUREMENTS:

units: mm



PRINTED CIRCUIT BOARD AND OPTICS

Property features

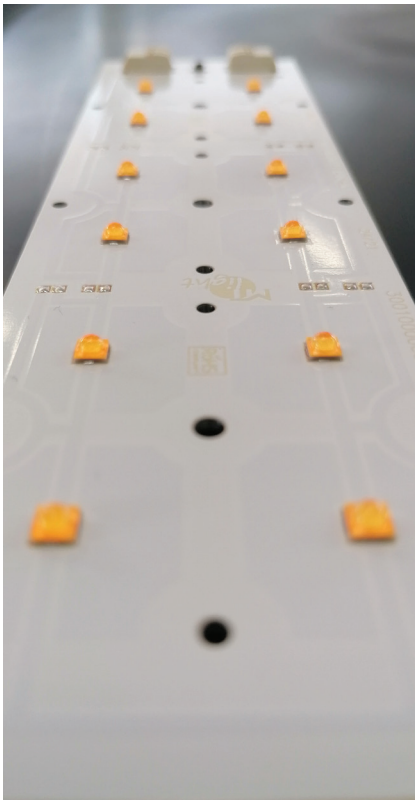
- *our design*
- *good thermal dissipation*
- *independence from other module providers*
- *a diverse selection of color temperatures with personalized options*
- *CRI choice from 70 to 90*

Highlighting the details

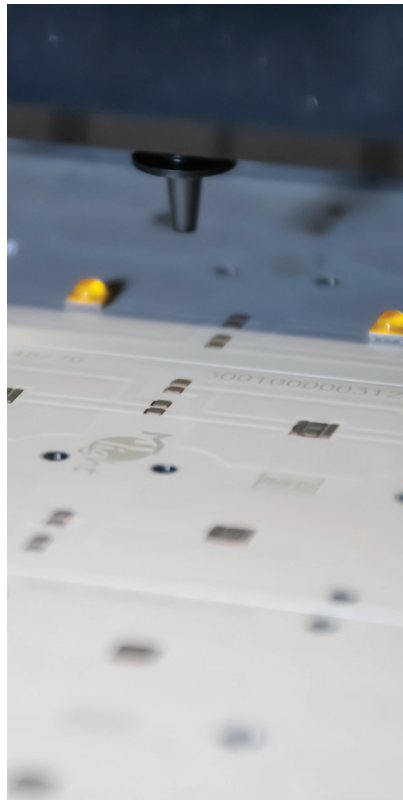
PRINTED CIRCUIT BOARD MADE IN SLOVENIA, OPTICS BY LEDIL

PCB was designed and made in Slovenia through years of experience and testing

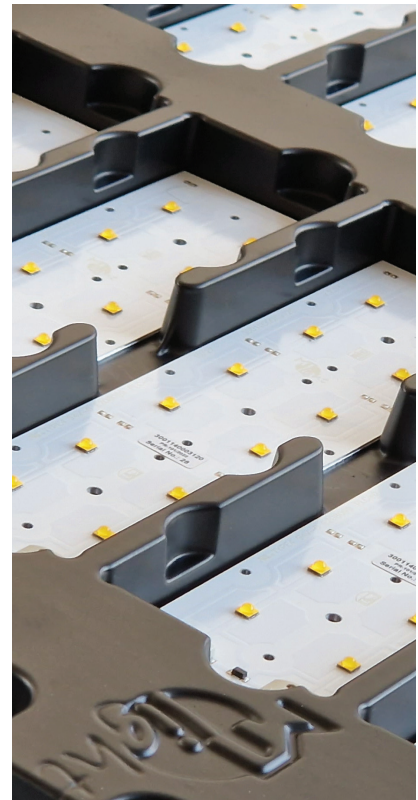
All LED modules are equipped with TVS diode to prevent overstress.



Circuit boards are made from aluminum with 1,5 W/mK thermal conductivity.
Circuit distances are suitable for voltages higher than 300 V.



Pick and place process with reflow soldering profile for each batch of modules.

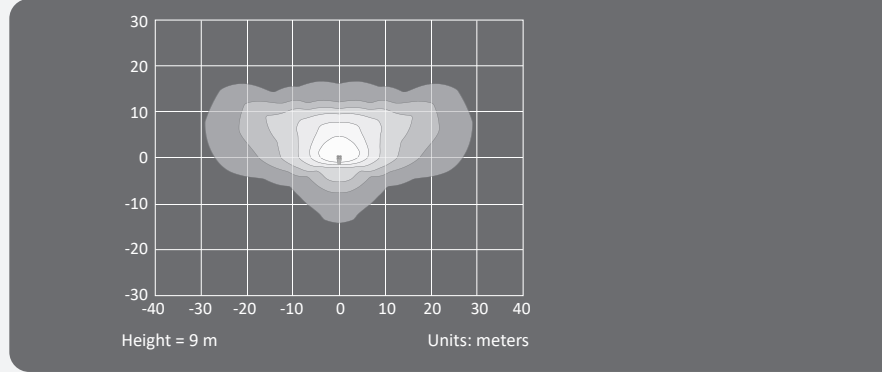
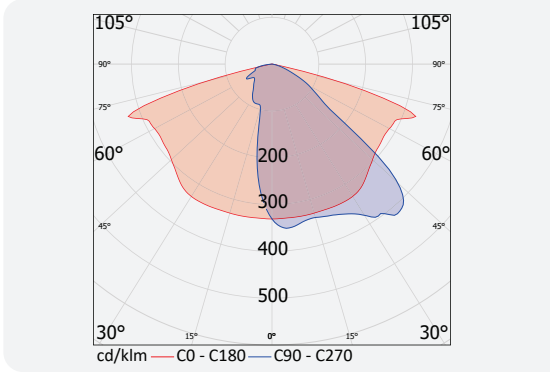


We use personalized trays for easier storage and to prevent LED contact

Commonly used optics with NAIT PLUS MT 60 LED

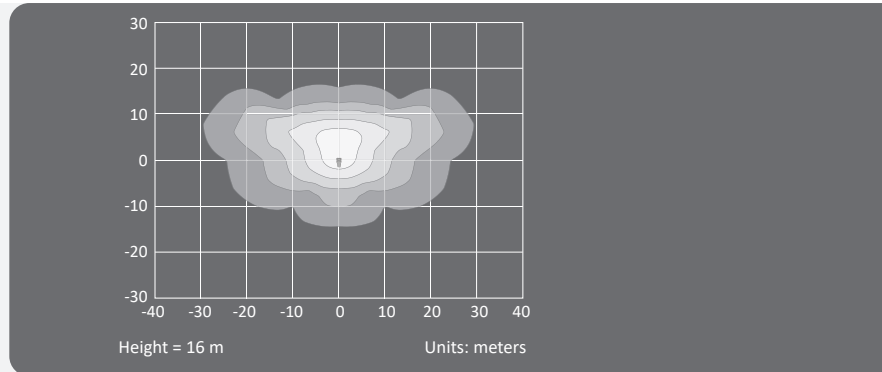
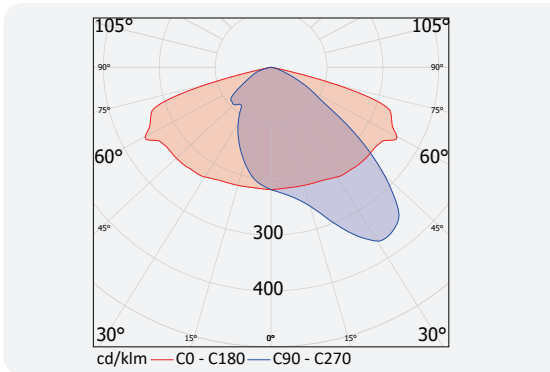
CO optic

Beam with excellent longitudinal luminance uniformity fulfilling EN13201 M-class requirements where road width is equal to or less the pole height.



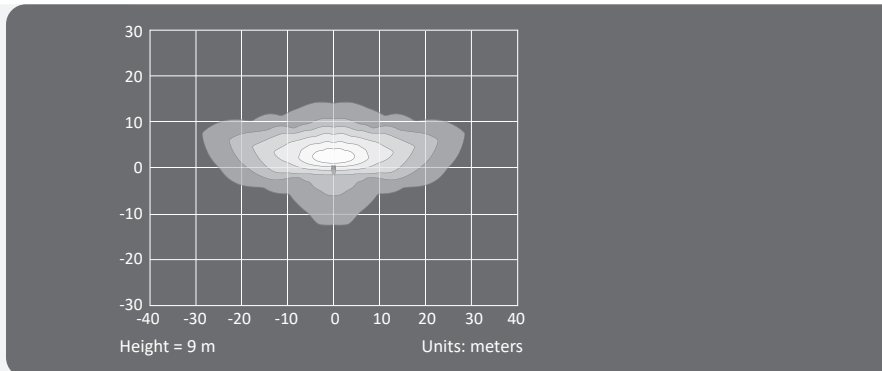
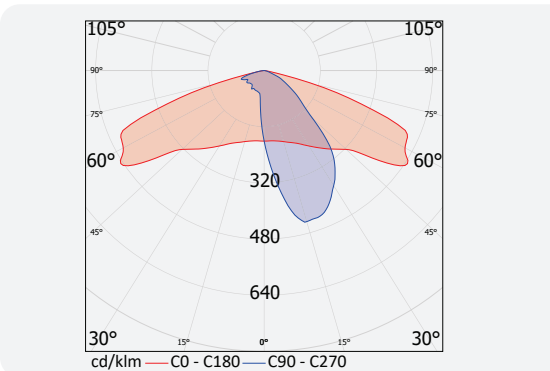
NA optic

Beam with excellent longitudinal luminance uniformity for staggered pole setups fulfilling EN13201 M-class requirements where road width is equal or less that the pole height.



ND optic

IESNA Type II (medium) beam applicable for European P-class standard pedestrian lighting and M-class roads.



All additional optics are available on pg. 65.

NAIT PLUS MT 60 LED Ordering codes

housing	LED	CCT/CRI	power	optic	operating mode	surge protection	wiring	RAL	el. class	controls
NAIT PLUS	MT60LEDHP	722	80 W	WD	ON/OFF	BI	QCS	9007	CL1	NC
		727	85 W	WA	ON/OFF-CLO	10kV	1 m	9007P	CL2	ZH
		730	90 W	DA	Astro DIM	15kV	2 m	9007E		NE
		740	95 W	CO	Astro DIM-CLO	20kV	3 m			
		822	100 W	PC	Step DIM		4 m			
housing: NAIT PLUS		827	105 W	ND	Step DIM-CLO		5 m-16 m			Different controls: NC-no control, ZH-ZHAGA socket, NE-NEMA socket
LED: MT60LEDHP-60 high power LED		830	110 W	H3	DALI					Electrical class: CL1 (earthed), CL2 (double insulated)
		840		H4	DALI-CLO					RAL options: 9007-standard colour, 9007P-additional primer + standard colour (on request). 9007E-eluxation+standard colour (on request)
CCT/CRI: Different CCT and CRI are available		Options of wiring: QCS-quick connect system, 1 m-16 m different cable length from 1 m to 16 m, scale is 1 m								
Power: from 80 W to 110 W		Surge protection: BI-built in standards of driver, 10kV-additional SP to driver, 50kV-additional SP to driver, 20kV-additional SP to driver								
Optics: several optics are available		Operating mode: several operating modes are available								

This guideline should give you a brief overview of the configuration options of the NAIT PLUS MT 60 LED luminaire. Please contact us if you have any further questions about the configuration.

Sample of ordering code: NAIT PLUS-MT60LEDHP-722-80W-WD-ONOFF-BI-QCS-9007-CL1-NC



lighting your way

