



*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:**  $\geq 70$ ,  $\geq 80$

**Classification:** IEC protection class I / II, IP66, IK10

**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

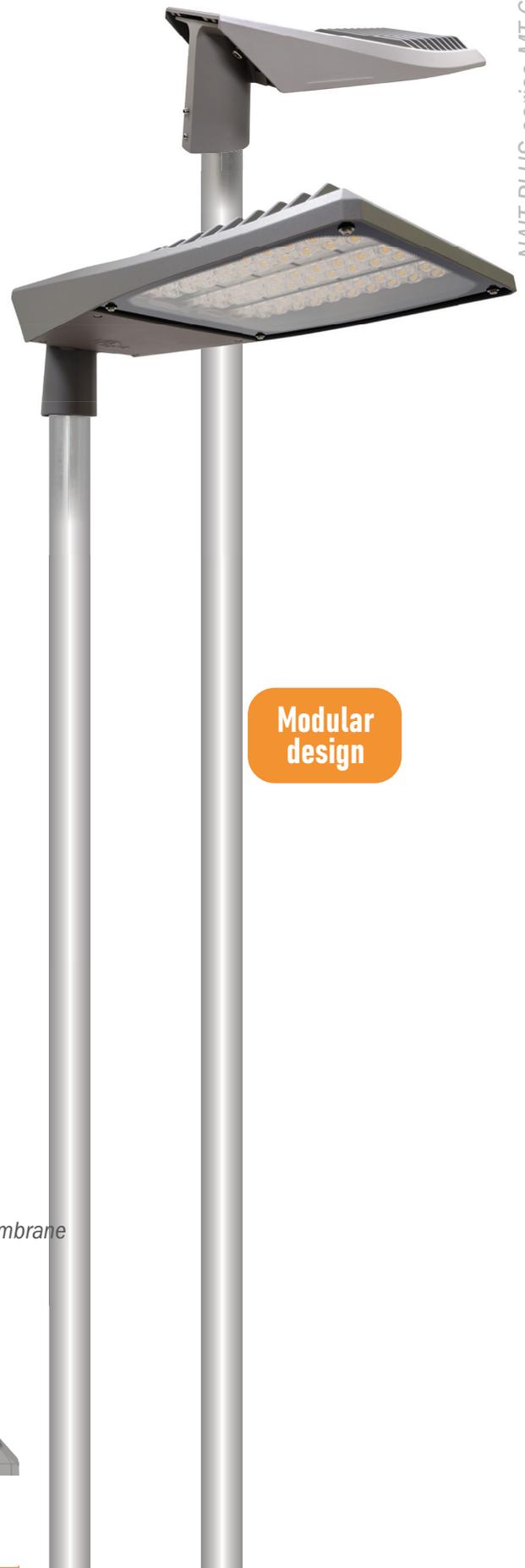
- Default: 3-pin fast connector IP66 on  
0,2m 3G1 cable

- 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



## MATERIALS

**Housing material:** *High pressure die-cast aluminum*

**Finish:** *Polyester powder-coated paint in RAL 9007*

**Optic material:** *PMMA High transparent*

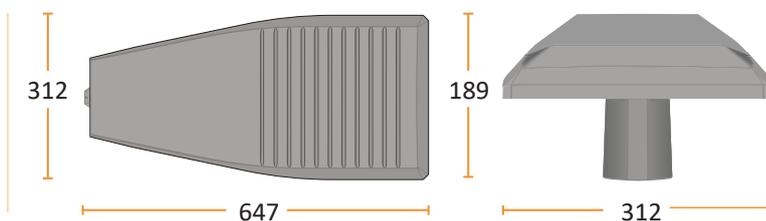
**Optical cover:** *OPTIWHITE 5 mm tempered glass*

**Cable gland:** *stainless steel with pressure equalization membrane*

**Fixation bolts:** *stainless steel grade A4*

## MEASUREMENTS:

units: mm



## PRINTED CIRCUIT BOARD AND OPTICS

### Property features

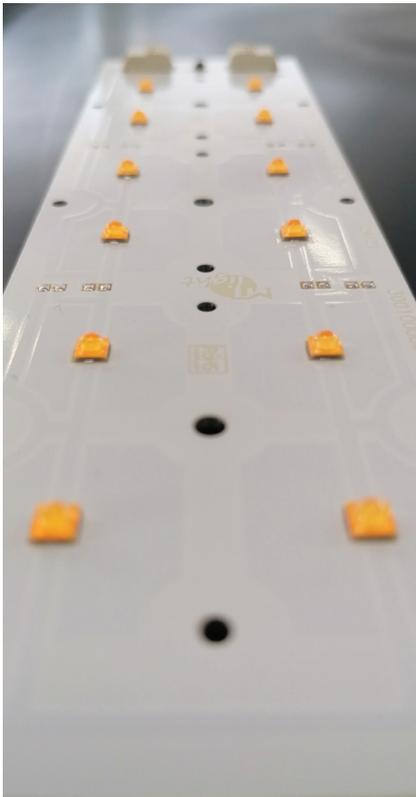
- *our design*
- *good thermal dissipation*
- *independence from other module providers*
- *a diverse selection of color temperatures with personalized options*
- *CRI choice from 70 to 90*

# Highlighting the details

## PRINTED CIRCUIT BOARD MADE IN SLOVENIA, OPTICS BY LEDIL

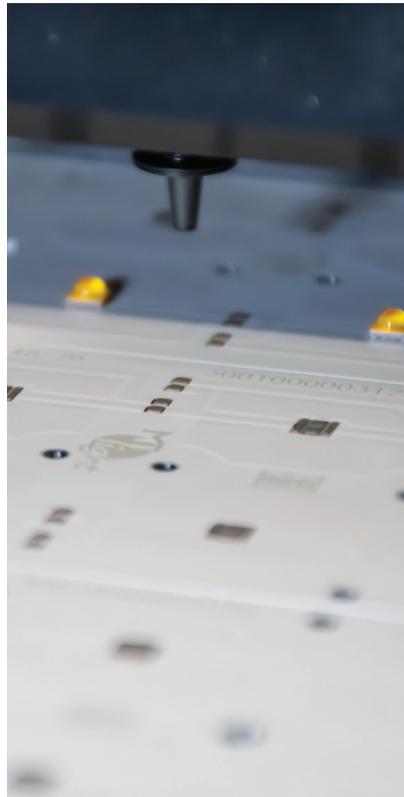
PCB was designed and made in Slovenia through years of experience and testing

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

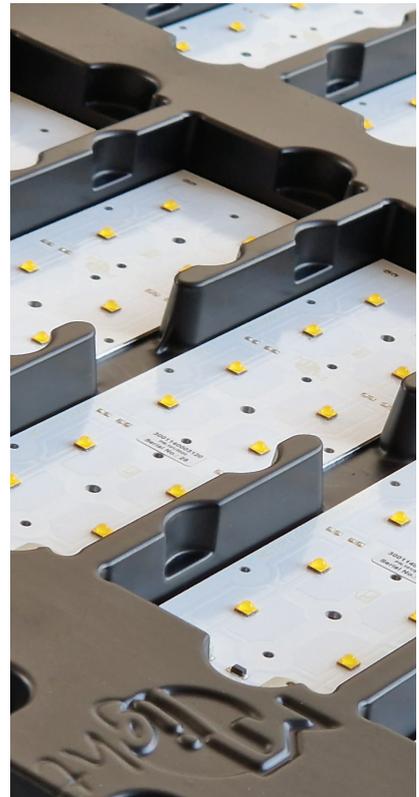


Circuit boards are made from aluminum with 1,5 W/mK thermal conductivity.

Circuit distances are suitable for voltages higher than 300 V.



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

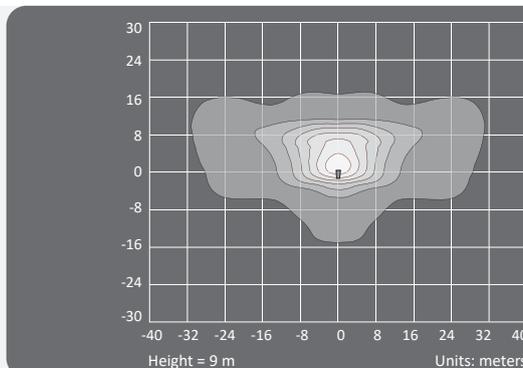
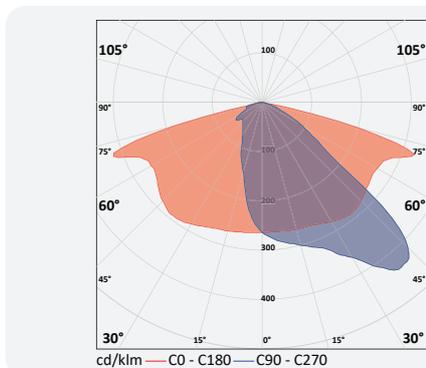


We use personalized trays for easier storage and to prevent LED contact

# Commonly used optics with NAIT PLUS MT 60 LED

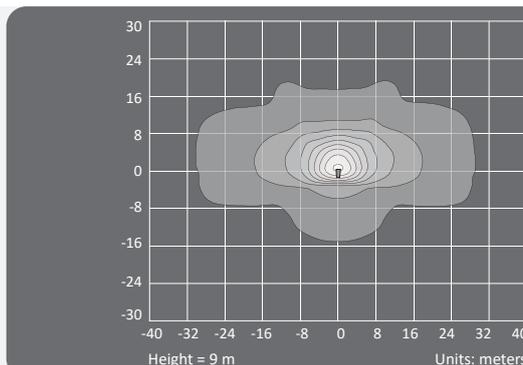
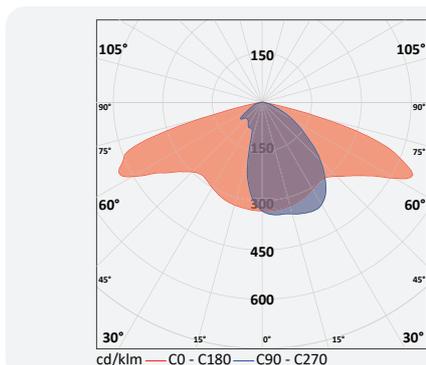
## CO optic

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



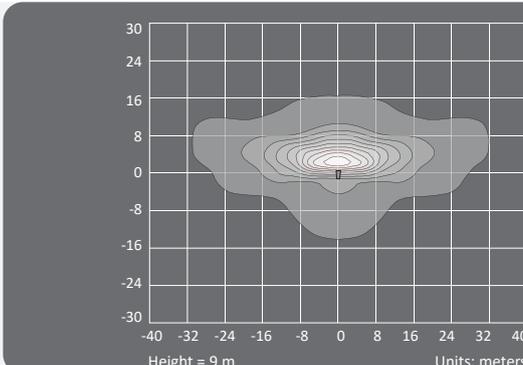
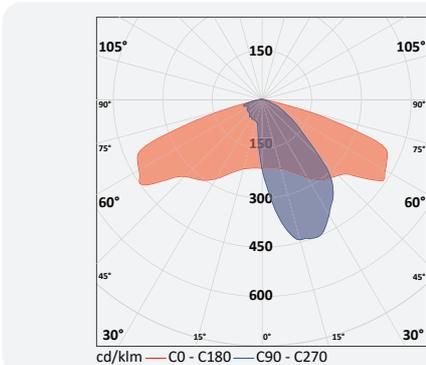
## WD optic

Universal road lighting beam with excellent mixed illuminance and luminance uniformity. Typically IESNA Type III (medium).



## 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			
housing: NAIT PLUS	LED: MT60LEDHP-60 high power LED	822	100 W	PC	Step DIM		4 m			Different controls: NC-no control, ZH-ZHAGA socket, NE-NEMA socket
		827	105 W	ND	Step DIM-CLO		5 m-16 m			Electrical class: CL1 (earthed), CL2 (double insulated)
		830	110 W	H3	DALI					RAL options: 9007-standard colour, 9007P-additional primer + standard colour (on request). 9007E-eluxation+standard colour (on request)
		840		H4	DALI-CLO				Options of wiring: QCS-quick connect system, 1 m-16 m different cable length from 1 m to 16 m, scale is 1 m	
CCT/CRI: Different CCT and CRI are available		Surge protection: BI-built in standards of driver, 10kV-additional SP to driver, 50kV-additional SP to driver, 20kV-additional SP to driver								
Power: from 80 W to 110 W		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



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