



DOZER

Projectors



Dozer projectors represent a cutting-edge lighting solution with impeccable design, high efficiency, and diverse optical options. Engineered for durability, they withstand extreme environmental conditions, ensuring long-lasting performance worldwide. The series offers four optical options—narrow, medium, wide, and asymmetric—allowing flexible combinations for tailored lighting solutions. Each module can have the same or different optical properties, providing limitless design possibilities. Manufactured with Litpa's trusted quality, Dozer projectors comply with the highest international standards, holding CE, RoHS, and TSE certifications. Supported by rigorous R&D and comprehensive testing, they deliver superior resilience and reliability, making them the perfect choice for demanding professional applications.

PROJECTOR COMBINATIONS: REVOLUTIONIZING LIGHTING

Dozer projectors represent a cutting-edge series poised to revolutionize lighting applications with impeccable designs, high efficiency, and diverse optical options, opening significant possibilities for lighting designers and providing unparalleled convenience for practitioners. Every component is crafted from the finest, most durable materials. Rigorous considerations for tough natural conditions, including humidity, dust, rain, snow, and extreme temperatures, have been factored in, with tests conducted under these circumstances. LITPA's DOZER series delivers a product that withstands time in any corner of the globe, from deserts to polar regions. Developing separate modules tailored to optical, mechanical, and electrical characteristics allows optimal module combinations. LITPA DOZER seamlessly blends armature production expertise with cutting-edge projector technology.

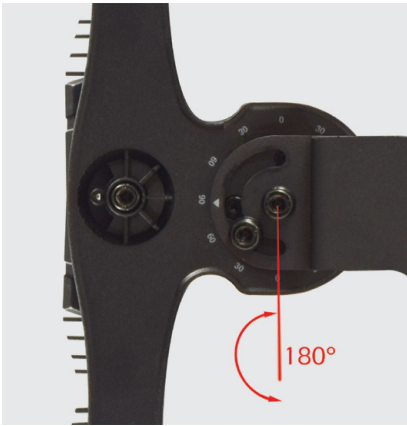
OPTICAL DIVERSITY AND UNPARALLELED FLEXIBILITY

To cater to designers' diverse needs in projectors, LITPA DOZER presents four distinct optical options, catering to a wide array of applications: narrow angle, medium angle, wide angle, and asymmetric light distributions. Dozer projectors are meticulously crafted to achieve optimal efficiency in these light distributions. The flexibility of Dozer projectors allows for production with all modules possessing the same optical properties, or each module having a different optical structure. These optical options can be seamlessly combined within the projector, and each independent section can be oriented differently, offering designers and users limitless possibilities. This extensive flexibility surpasses the capabilities of a projector with a single optical structure, providing a broad spectrum of applications to achieve the desired outcome in various settings.

RELIABLE AND CERTIFIED PERFORMANCE

Dozer series projectors are crafted with the renowned LITPA quality and adhere to stringent criteria, ensuring seamless operation for numerous years. Every component utilized in these fixtures undergoes a rigorous research and development (R&D) process, with each material attaining certification. The projectors boast CE and RoHS certification, while their power specifications are thoroughly documented by TSE, accompanied by a TSE certificate. LITPA goes beyond standard requirements by subjecting its products to type tests at levels significantly exceeding prescribed values. This approach assesses the resilience of Dozer projectors against additional adverse environmental conditions, guaranteeing their steadfast performance even in the most challenging surroundings.

UNPRECEDENTED FLEXIBILITY



The special design of DOZER projectors allows optical structures to be directed at different angles and specific points on the field, providing users with unparalleled adaptability. DOZER goes beyond conventional projectors by offering a comprehensive 180-degree orientation as a whole, allowing for precise adjustments and orientations after the projector is mounted.

Further enhancing its adaptability, the superior structure developed by LITPA for DOZER projectors grants each module with different optical features within the projector a remarkable 360-degree orientation. This groundbreaking feature means that each module can be positioned independently at different points, giving users unparalleled control and customization for diverse lighting applications.

LITPA DOZER projectors redefine flexibility in lighting applications by offering a multitude of alternatives with various combinations of different modules. The design of DOZER projectors is ingeniously crafted to answer affirmatively to the question of whether a projector can be both narrow-angle, wide-angle, and asymmetrical simultaneously.

OPTIMAL INSTALLATION CONDITIONS

To ensure flawless compliance with installation conditions, the process begins with the installation of the luminaire. The mounting arms of DOZER projectors are meticulously designed to prevent the obstruction of light from other projectors and eliminate shadow casting, particularly in pole-mounted applications. These mounting arms are crafted from highly durable materials, incorporating robust mechanical and static precautions to withstand any oscillations, vibrations, or environmental disturbances.

EXCEPTIONAL DURABILITY AND RESISTANCE



The fixtures deliver outstanding performance in measurements conducted through the LED connection point and LED, even in high ambient temperatures. The projector body is constructed from Al6063 material, ensuring exceptional strength. Al141 material is employed in the joints of moving parts. Following the application of solvent-based butoxy-2-propanol to enhance corrosion resistance, a specialized 80-micron-thick polyester-based paint is applied over a 50-micron-thick zinc-based primer, specifically formulated for these environments to serve anti-corrosive purposes. Critical moving parts are fortified with Al141 material, providing reliability and longevity to the joints. To enhance resistance to corrosion, the projector body undergoes a thorough cleaning process with a solvent-based butoxy-2-propanol solution. Subsequently, a specialized anti-corrosive treatment is applied, consisting of an 80-micron-thick polyester-based paint layered on top of a 50-micron-thick zinc-based primer. This meticulous coating process is tailored to withstand harsh environmental conditions, further fortifying the DOZER projectors against the effects of corrosion and ensuring longevity in diverse settings.

DURABLE DESIGN FOR HARSH CONDITIONS



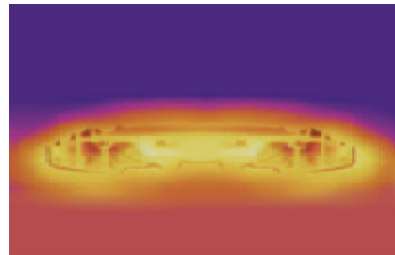
LITPA DOZER projectors are engineered with a robust and durable design to withstand a wide range of natural conditions. The optical parts boast an impressive IP67 protection class, ensuring their resilience in challenging environments. Additionally, the driver boxes are meticulously crafted to provide an IP65 protection class, offering enhanced protection for the essential electronic components. All cable connections in DOZER projectors are made with glands, contributing to the overall robustness of the fixtures. This design choice ensures secure and protected cable connections, adding an extra layer of durability to the luminaires. To fortify the optical assembly, a special silicone gasket is incorporated between the optical polycarbonate lens and the body. This gasket serves as a protective barrier, preventing the ingress of external elements and contributing to the overall longevity and reliability of the DOZER projectors. The comprehensive protection measures in place underscore the commitment to durability and performance, making DOZER projectors suitable for diverse and demanding environmental conditions.

LIGHT CONTROL PRECISION WITH SPECIAL LIGHT BLOCKER SCREEN



Effective heat management is a top priority in DOZER projectors, and LITPA has implemented specialized features to address this crucial aspect. The unique cooler shape and design of DOZER projectors facilitate the efficient transfer of high heat conduction generated by the LEDs. A critical component in this heat management system is the 1.6 mm thick aluminum PCB, designed to effectively conduct and transfer heat to the projector body. To optimize heat conduction and dissipation, a specialized thermal material, Alkoxy Cure, is utilized with these PCBs. This material enhances the heat transfer between the projector and the body, ensuring that the heat generated by the LEDs is efficiently transferred to the body and subsequently discharged. The projector bodies are intricately designed to facilitate the swift release of heat to the surrounding environment. This comprehensive approach to heat management in DOZER projectors contributes to their overall efficiency, performance, and longevity in various environmental conditions.

EFFICIENT HEAT MANAGEMENT



The inclusion of a special light blocker screen enables the precise control and restriction of the emitted light in the fixtures. This level of light control is particularly crucial in various sports applications, residential area lighting, or locations that could impact traffic routes. The adjustable screen plays a vital role in preventing applications from generating glare or undesirable effects. Developed specifically for LITPA DOZER projectors, this screen aims to reduce light pollution that may arise post-installation. The optical structures of DOZER projectors, tailored to their designated usage areas, strive not only to minimize luminaire inefficiency and application requirements but also to mitigate light pollution. Any undesired light effects that may manifest can be effortlessly managed with these screens, which can be added post-application, allowing for adjustments in inclination and viewing angles.



PORT LIGHTINGS: COMPREHENSIVE SOLUTIONS FOR PRACTICAL NEEDS

In the development of the DOZER series projectors, LITPA has not only focused on creating high-quality lighting solutions but has also developed practical accessories and solutions to meet a variety of needs. The luminaire bodies are crafted using special coating techniques, ensuring resistance to environmental conditions characterized by high levels of corrosion. This dedication to robust construction enhances the

durability and longevity of the projectors, even in challenging environments. LITPA DOZER goes beyond providing general area lighting solutions and extends its offerings to cater to specific needs in port lighting. The inclusion of crane lighting solutions demonstrates a nuanced understanding of the unique requirements in port environments. These projectors are designed not only to

illuminate the general area but also to track the movement of cranes, offering a comprehensive lighting solution tailored to the dynamic nature of port operations. By providing versatile solutions that encompass a range of lighting needs in ports, LITPA DOZER ensures that users have access to a holistic and efficient lighting infrastructure, contributing to the overall functionality and safety of port environments.

AREA AND SQUARE LIGHTING: ENHANCING URBAN SPACES



Squares and intersections, serving as vital hubs in our cities, are crucial not only for their technical functionalities but also for the impact they have on people's experiences. Achieving the correct lighting level is essential to maximize smoothness and minimize negative impacts on city residents. LITPA DOZER fixtures prioritize both technical excellence and the well-being of inhabitants, particularly in urban settings. Maintaining a balance that avoids disturbing the surrounding city residents and minimizing negative effects on nearby buildings is of paramount importance. The DOZER fixtures excel in achieving this delicate equilibrium through their advanced optical solutions

and specially developed accessories. These features contribute to creating well-lit urban spaces that enhance the overall experience for residents and visitors. The issue of glare, caused by projectors and affecting drivers' visibility, is a critical factor influencing traffic flow in these areas. LITPA DOZER addresses this challenge with its projectors, offering flexible orientation capabilities and alternative solutions to minimize glare effects. Whether illuminating the outdoor areas of a factory or large urban squares, LITPA DOZER ensures a comprehensive lighting solution that contributes positively to the aesthetics, functionality, and safety of various urban environments.



SPORTS FIELDS: TAILORED OPTICAL SOLUTIONS FOR SPORTS LIGHTING

DOZER projectors from LITPA are designed to cater to the diverse optical requirements of different sports branches, recognizing that each sport has its unique lighting standards. The projectors offer various solutions tailored to the specific needs of each sports activity. Achieving the desired illumination level for a particular sports branch is crucial,

and LITPA DOZER ensures precision in its optical structures to meet these requirements effectively. In sports lighting, factors such as glare and glare control play a significant role, and LITPA DOZER projectors address these considerations with specialized accessories for accurate light control. The flexibility of LITPA DOZER projectors

enables tailored solutions suitable for a broad spectrum of sports facilities — from amateur and club courts to mini football fields and professional arenas. LITPA DOZER aims to provide the most suitable lighting solution for any sports facility, emphasizing adaptability and performance tailored to the unique needs of each application.



RAL COLORS

- Std. 9005
- Opt. 9007
- 9006
- 7016
- 9016



DOZER 450



Code	Beam Angle	Luminous Flux	System Power	Led	Weight
ZPX 450 NB	15°	49.800 lm	450 W	Mid-Power Led	12 kg
ZPX 450 MB	45°	55.950 lm	450 W	Mid-Power Led	12 kg
ZPX 450 WB	90°	58.500 lm	450 W	Mid-Power Led	12 kg
ZPX 450 AS	Asymmetrical	56.250 lm	450 W	Mid-Power Led	12 kg

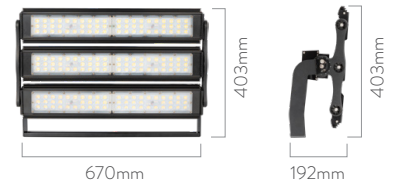
Body: Aluminum Extruded

Lens: PMMA

Color Temperature: 3000-4000-5000-6500K

Driver: Included

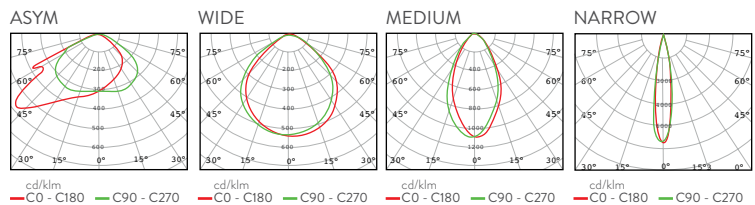
Voltage: 220~240VAC



BOX DIMENSIONS
70x43x20 cm



BOX WEIGHT
12.5 kg



RAL COLORS

- Std.  9005
- Opt.  9007
-  9006
-  7016
-  9016



DOZER 300



Code	Beam Angle	Luminous Flux	System Power	Led	Weight
ZPX 300 NB	15°	33.200 lm	300 W	Mid-Power Led	7 kg
ZPX 300 MB	45°	37.300 lm	300 W	Mid-Power Led	7 kg
ZPX 300 WB	90°	39.000 lm	300 W	Mid-Power Led	7 kg
ZPX 300 AS	Asymmetrical	37.500 lm	300 W	Mid-Power Led	7 kg

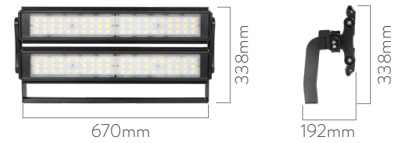
Body: Aluminum Extruded

Lens: PMMA

Color Temperature: 3000-4000-5000-6500K

Driver: Included

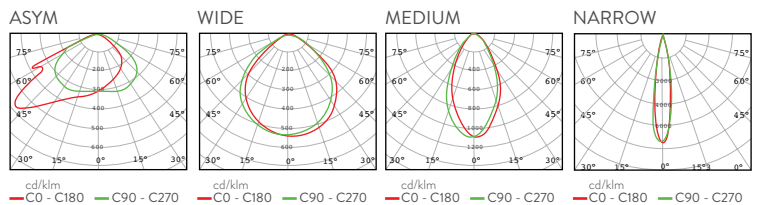
Voltage: 220~240VAC



BOX DIMENSIONS
70x30x20 cm



BOX WEIGHT
7.5 kg



RAL COLORS

- Std. 9005
- Opt. 9007
- 9006
- 7016
- 9016



DOZER 150

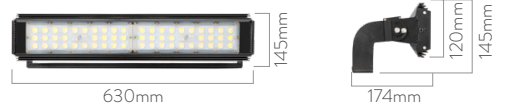


Code	Beam Angle	Luminous Flux	System Power	Led	Weight
ZPX 150 NB	15°	16.600 lm	150 W	Mid-Power Led	4.5 kg
ZPX 150 MB	45°	18.650 lm	150 W	Mid-Power Led	4.5 kg
ZPX 150 WB	90°	19.500 lm	150 W	Mid-Power Led	4.5 kg
ZPX 150 AS	Asymmetrical	18.750 lm	150 W	Mid-Power Led	4.5 kg

Body: Aluminum Extruded
Driver: Included

Lens: PMMA
Voltage: 220~240VAC

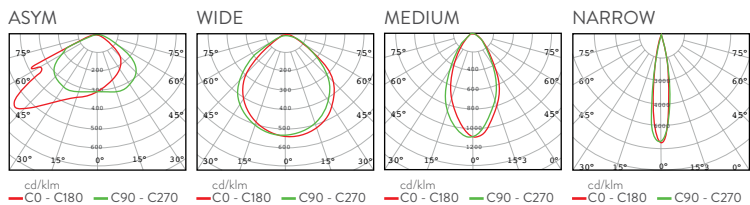
Color Temperature: 3000-4000-5000-6500K



BOX DIMENSIONS
65x20x20 cm



BOX WEIGHT
5 kg





RAL COLORS

- Std.  9005
- Opt.  9007
-  9006
-  7016
-  9016

DOZER 75



Code	Beam Angle	Luminous Flux	System Power	Led	Weight
ZPX 75 NB	15°	8.300 lm	75 W	High-Power Led	2.5 kg
ZPX 75 MB	45°	9.320 lm	75 W	Mid-Power Led	2.5 kg
ZPX 75 WB	90°	9.750 lm	75 W	Mid-Power Led	2.5 kg
ZPX 75 AS	Asymmetrical	9.380 lm	75 W	Mid-Power Led	2.5 kg

Body: Aluminum Extruded

Lens: PMMA

Color Temperature: 3000-4000-5000-6500K

Driver: Included

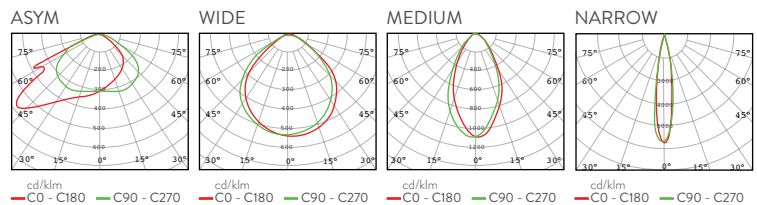
Voltage: 220~240VAC



BOX DIMENSIONS
45x20x20 cm



BOX WEIGHT
3 kg



GENERAL

Color Temperature :	3000K-4000K-5000K
Transformer :	Driver
Number of Drivers :	1 - 2 Piece
Optical Cover Type:	PMMA
Interface Control :	-
Connection :	5 pole terminal
Protection Class IEC:	I Class
Light Source Type :	Midpower 6V Outdoor Led
CE Mark :	CE
Eu RoHS compliance:	Yes

WORKING CHARACTERISTICS

Input Voltage :	220~240VAC
Input Frequency :	50 to 60 Hz
Inrush Current :	Cold start 85A
Power Factor (min.):	PF >0.96
Total Harmonic Distortions :	THD <10
Current Ripple :	< %5
Efficiency :	> %90
Control and Dimming:	Optional

APPLICATION CONDITIONS

Ambient Temperature Range :	-40 to +55 °C
Performance Ambient Temperature :	Tq 25°C
Maximum Dimming Level :	10% (Optional)

APPROVAL AND APPLICATION

Protection Class :	Optical System IP67 Housing IP65
Mechanical strength code :	IK09
Surge arrester (common/differential) :	6kV / 4kV

MATERIAL INFORMATION

Body Material :	Al6063
Mounting Material :	3mm thick HRP sheet
Optical Material :	PMMA
Optical Cover/Lens Material :	PMMA
Colour :	Black-Gray

TIME DEPENDENT PERFORMANCE (IIEC COMPLIANT)

Lumen maintenance in average lifetime :	50.000 h
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DOZER 450

INITIAL PERFORMANCE (IEC COMPLIANT)

Initial Input Luminous Flux (System Flux):	49.800 - 58.500 lm
Luminous Flux Tolerance:	+/-5%
Luminaire Efficiency at Start:	110 - 130 lm/W
Color Temperature:	3000-4000-5000 K
CRI:	70
Initial Input Power:	450 W
Power Consumption Tolerance:	+/-10%
Initial CRI Tolerance:	+/-2

DOZER 150

INITIAL PERFORMANCE (IEC COMPLIANT)

Initial Input Luminous Flux (System Flux):	16.600 - 19.500 lm
Luminous Flux Tolerance:	+/-5%
Luminaire Efficiency at Start:	110 - 130 lm/W
Color Temperature:	3000-4000-5000 K
CRI:	70
Initial Input Power:	150 W
Power Consumption Tolerance:	+/-10%
Initial CRI Tolerance:	+/-2

DOZER 300

INITIAL PERFORMANCE (IEC COMPLIANT)

Initial Input Luminous Flux (System Flux):	33.200 - 39.000 lm
Luminous Flux Tolerance:	+/-5%
Luminaire Efficiency at Start:	110 - 130 lm/W
Color Temperature:	3000-4000-5000 K
CRI:	70
Initial Input Power:	300 W
Power Consumption Tolerance:	+/-10%
Initial CRI Tolerance:	+/-2

DOZER 75

INITIAL PERFORMANCE (IEC COMPLIANT)

Initial Input Luminous Flux (System Flux):	8.300 - 9.750 lm
Luminous Flux Tolerance:	+/-5%
Luminaire Efficiency at Start:	110 - 130 lm/W
Color Temperature:	3000-4000-5000 K
CRI:	70
Initial Input Power:	75 W
Power Consumption Tolerance:	+/-10%
Initial CRI Tolerance:	+/-2