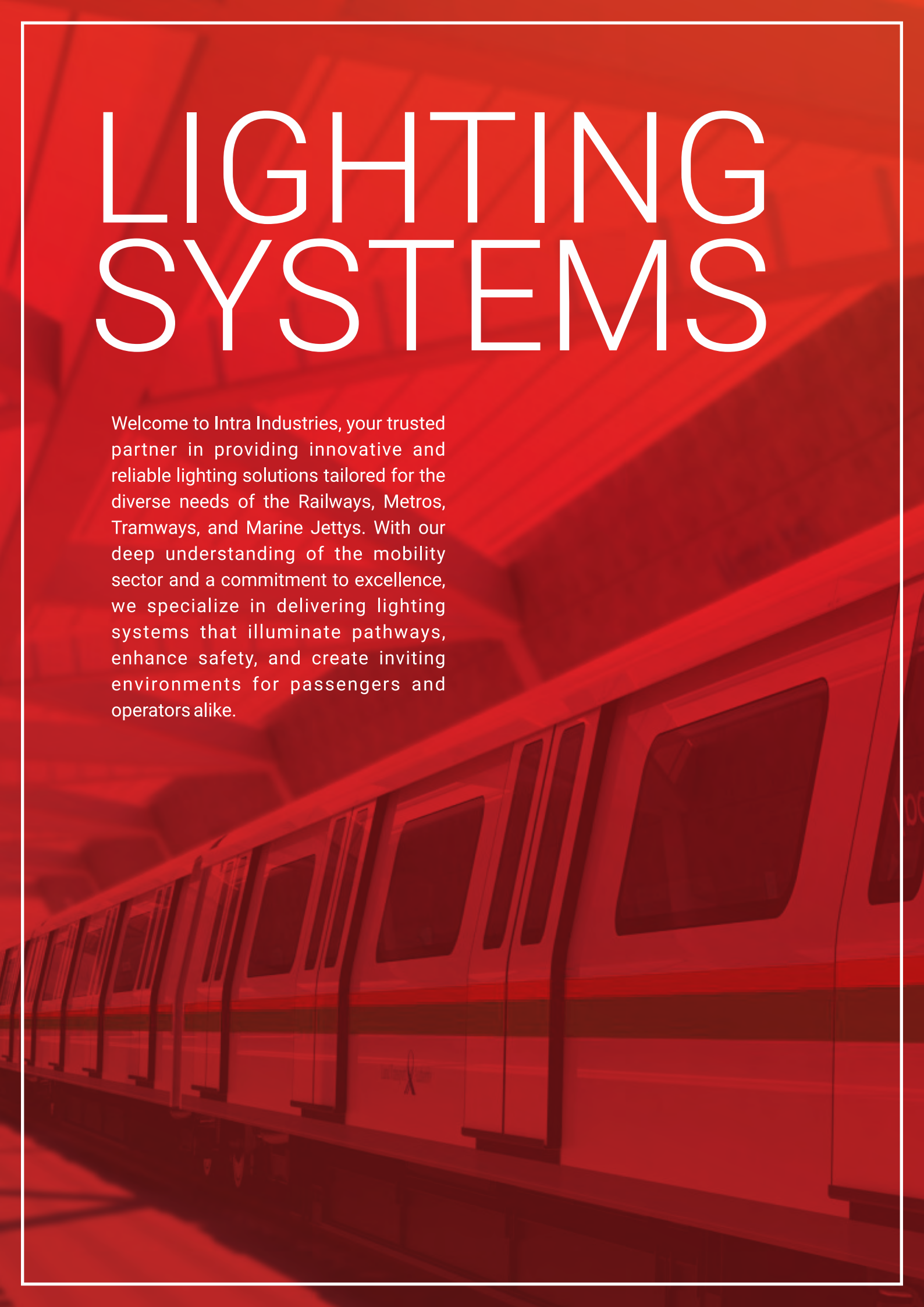




EDIFY THE WORLD
WITH INNOVATION

LIGHTING SYSTEMS

Welcome to Intra Industries, your trusted partner in providing innovative and reliable lighting solutions tailored for the diverse needs of the Railways, Metros, Tramways, and Marine Jettys. With our deep understanding of the mobility sector and a commitment to excellence, we specialize in delivering lighting systems that illuminate pathways, enhance safety, and create inviting environments for passengers and operators alike.



LIGHTING SYSTEMS FOR MOBILITY



ILLUMINATE WITH PRECISION AND PERFORMANCE

We believe that lighting is more than just illumination; it's about creating experiences, ensuring safety, and optimizing energy efficiency. Our state-of-the-art lighting solutions are designed to meet the unique challenges of various mobility applications, delivering consistent performance, durability, and aesthetic appeal.

Partner with Intra Industries for innovative, reliable, and high-performance lighting solutions that meet the evolving needs of the mobility sector. Whether you are planning a new railway station, metro line, tramway network, or marine jetty, we have the expertise and resources to illuminate your project with precision and excellence.

Contact us today to discover how Intra Industries can light up your mobility solutions and contribute to creating brighter, safer, and more efficient environments for passengers and operators across India.

SPECIALIZED LIGHTING SOLUTIONS FOR MOBILITY



Railways

Our lighting systems for Indian Railways are engineered to withstand the rigorous demands of railway environments. With robust construction, superior light output, and energy-efficient designs, we ensure optimal visibility and safety for passengers and railway staff.



Metros

Enhance the modern appeal of metro stations and trains with our cutting-edge lighting solutions. Designed for reliability and performance, our metro lighting systems offer seamless integration, low maintenance, and exceptional energy efficiency, contributing to a comfortable and welcoming atmosphere for commuters.



Tramways

Illuminate tramway tracks and stations with precision-engineered lighting solutions from Intra Industries. Our tramway lighting systems are tailored to meet the specific requirements of urban transit, providing clear visibility, enhanced safety, and a distinctive aesthetic touch to tram routes.



Marine Jettys

Navigate marine environments with confidence using our durable and weather-resistant lighting systems for jettys and ports. Built to withstand harsh marine conditions, our marine lighting solutions ensure reliable performance, extended lifespan, and optimal visibility for marine operations and safety.

WHY CHOOSE INTRA INDUSTRIES LIGHTING SYSTEMS?



Quality and Reliability

Our lighting systems are manufactured using high-quality materials and components, ensuring durability, longevity, and consistent performance even in challenging environments.



Energy Efficiency

We prioritize energy-efficient designs and technologies, helping our clients reduce energy consumption, lower operating costs, and contribute to a sustainable future.



Customization

With our in-house design and manufacturing capabilities, we offer customized lighting solutions tailored to meet the unique requirements and specifications of each project.



Expertise and Support

Backed by a team of skilled professionals and industry experts, we provide comprehensive support, from initial consultation and design to installation, maintenance, and after-sales service.

Standards	Railway Applications	Remarks
IEC60571-2012	Electronic Equipment used on rolling stock	Dry Heat ,Damp Heat
IEC 60529 -2019	Degrees of protection provided by enclosures (IP Code)	IP 65 and IP 67
EN 45545-2 -2020	Standard on the safety of the railway sector	Performance, Fire Safety HL2 /HI3
IEC 61000-3/EN 50155:2017, EN 50121-3-2:2017	Series Electromagnetic compatibility (EMC) - Part 3: Limit - ALL PARTS	Compliance in Class A
IEC 61373 -2010	Rolling stock equipment - Shock and vibration tests	Category 1, Class A

LED Corridor, Doorway, Gangway & Passenger Area (5W- 18W)

- Corridor
- Doorway
- Gangway
- Passenger Area



SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Wattages	5W-18W
Voltage (i/p and o/p)	Input Voltage 230V, 50 Hz Output Voltage,48V
PF	≥0.95
THD	<10%
Operating Temperature	-5°C

LED SPECIFICATION

LED Life	50000 hours
Ra/CRI	80+
CCT	6500K, 2000K, 4000K
Lumen/Watt (LED)	150 lm/watt

MECHANICAL SPECIFICATIONS

Material used for enclosures is Deep Drawn high grade sheet metal

Material for Diffusers : Polycarbonate of Sabic (HL3 - EN45545) make V0 grade

MECHANICAL SPECIFICATIONS

Ingress Protection	Ip66+
External Surge Protection	YES
EMI EMC (EN_)	YES
Short Circuit Protection	YES
Over Voltage Protection	YES

LED Night Light with Berth Indication (1W)

Berth Indication



SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Wattages	5W-18W
Voltage (i/p and o/p)	Input Voltage 230V, 50 Hz Output Voltage :- 48V
PF	≥0.95
THD	<10%
Operating Temperature	-5°C to +55°C

LED SPECIFICATION

LED Life	50000 hours
Ra/CRI	80+
CCT	6500K, 2000K, 4000K
Lumen/Watt (LED)	150 lm/watt

MECHANICAL SPECIFICATIONS

Housing is made of sheet metal with anti rust powder coating material for diffuser clear Polycarbonate of VO grade Sabic (HL3 - EN45545)

MECHANICAL SPECIFICATIONS

Ingress Protection	Ip66+
External Surge Protection	YES
EMI EMC	YES
Short Circuit Protection	YES
Over Voltage Protection	YES

LED Lavatory, Mirror Light (9W)

- Lavatory Lighting
- Mirror Lighting



SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Wattages	9W
Warranty	5 Years
PF	≥0.95
THD	< 10%
Operating Temperature	-5°C to +55°C

MECHANICAL SPECIFICATIONS

Material used for enclosure is Deep drawn high grade sheet metal

Material for diffuser: Polycarbonate of Sabic (HL3 - EN45545) ; Gaskets, PCB, PC diffuser make VO grade

LED SPECIFICATION

LED Life	50000 hours
Ra/CRI	80+
CCT	6500K, 2000K, 4000K
Lumen/watt (LED)	150lm/watt

Micro Controller based LED Emergency Lighting System

Emergency LED



SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Wattages	9W
Warranty	5 Years
PF	≥ 0.95
THD	$< 10\%$
Operating Temperature:	-5°C to $+55^{\circ}\text{C}$

LED SPECIFICATION

Ingress Protection	Ip66+
External Surge Protection	YES
EMI EMC	YES
Short Circuit Protection	YES
Over Voltage Protection	YES

LED Based Berth Reading Light

Reading Light



SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Wattages	5W-18W
Voltage (i/p and o/p)	Input Voltage 230V, 50 Hz Output Voltage :- 48V
PF	≥0.95
THD	< 10%
Operating Temperature	-5°C to +55°C

LED SPECIFICATION

LED Life	50000 hours
Ra/CRI	80+
CCT	6500K, 2000K, 4000K
Lumen/Watt (LED)	150 lm/watt

MECHANICAL SPECIFICATIONS

Housing is made of sheet metal with anti rust powder coating material for diffuser clear Polycarbonate of VO grade Sabic (HL3 - EN45545)

MECHANICAL SPECIFICATIONS

Ingress Protection	Ip66
External Surge Protection	YES
EMI EMC	YES
Short Circuit Protection	YES
Over Voltage Protection	YES

Signal Lighting System

Signal Lights



SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

PF	≥ 0.8
THD	< 20%
Operating Temperature	-5°C to +55°C

MECHANICAL SPECIFICATIONS

Material used for cover: Glass
Enclosure material for appropriate
Heat Dissipation – Plastic ABS Body
Material for diffuser: Polycarbonate
Sabic (HL3 - EN45545)

LED SPECIFICATION

LED Life	50000 hours
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MECHANICAL SPECIFICATIONS

Ingress Protection	Ip66
External Surge Protection	YES
EMI EMC	YES
Short Circuit Protection	YES
Over Voltage Protection	YES

Conv. AC chair Car, EMU & DEMU Coaches (Type S)

- Corridor
- Doorway
- Gangway
- Passenger area



SPECIFICATIONS

Rated Voltage	110V AC/DC (90-140V)
Protection	High Voltage Protection up to 200-205 AC/DC
Rated Power	18W (Max)
Rated Voltage	90-140 V AC/DC
Service Life	>50,000 hours
Ingress Protection	IP 65
Colour	Blue, White
LED Driver	Intra make as per RDSO/PE/SPEC/TL/0091-2016 (REV 1)
Wiring	Input connection with cage clamp type Wago /Paras make connector
Light Housing	Mild Steel

Berth Reading Light (Upper Birth) for LHB Coaches (Type –F2) with USB Mobile Charging Socket

- Corridor
- Doorway
- Gangway
- Passenger area



SPECIFICATIONS

Rated Voltage	110V AC/DC (90-140V)
Protection	High Voltage Protection Up to 30-32V AC/DC
Rated Power	18W (Max)
Rated Voltage	90-140 V AC/DC
Service Life	>50,000 hours
Ingress Protection	IP 65
Colour	Cool white: Colour temperature range 5000K to 7000 K
LED Driver	Intra make as per RDSO/PE/SPEC/TL/0091-2016 (REV 1)
Wiring	Input connection with cage clamp type Wago /Paras make connector
Light Housing	Mild Steel

Berth Reading Light Universal with USB

Reading Light



SPECIFICATIONS

Rated Voltage	110V AC/DC (90-140V)
Protection	High Voltage Protection Up to 30-32V AC/DC
Rated Power	2W (Max)
Rated Voltage	90-140 V AC/DC
Service Life	>50,000 hours
Ingress Protection	IP 65
Colour	Cool white: Colour temperature range 5000K to 7000 K
LED Driver	Intra make as per RDSO/PE/SPEC/TL/0091-2016 (REV 1)
Wiring	Input connection with cage clamp type Wago /Paras make connector
Light Housing	Mild Steel

LED Luminaries for T-18 Door Indication Inner

Doorway



SPECIFICATIONS

LED	Mild power LED, UL Certified
Colour Temperature	Red
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Maximum Wattage	5W
Body	SS 304/PC
Wiring	E-beam cable with WAGO/ PHOENIX connector
Weight:	< 200 gms
Ingress Protection	IP – 54

LED Luminaries for T-18 Door Indication Outer

Doorway



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	Red
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Maximum Wattage	1W
Body	SS 304/PC
Wiring	E-beam cable with WAGO/ PHOENIX connector
Weight	< 200 gms
Ingress Protection	IP – 54

LED Luminaries for T-18 Driver Spot Light

Spot Light



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 – 7000 K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Maximum Wattage	5W
Body	Aluminum / PC
Wiring	E-beam cable with WAGO/ PHOENIX connector
Weight	250 gms
Ingress Protection	IP – 54 (Extendable upto IP66)

LED Luminaries for T-18 Gangway Light

Gangway

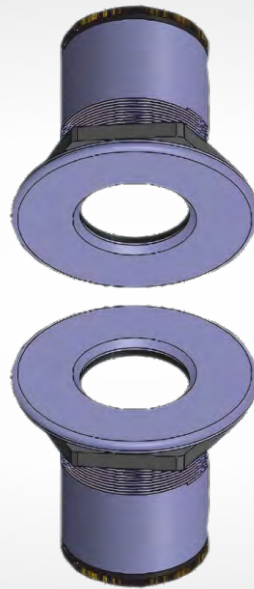


SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 – 7000 K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (77 – 140 V)
Maximum Wattage	9W
Body	Aluminum / PC
Wiring	E-beam cable with WAGO/ PHOENIX connector
Weight	700 gms
Ingress Protection	IP – 54
Macadam Ellipse	< 5-step

LED Luminaries for T-18 Lavatory Light

Lavatory Light

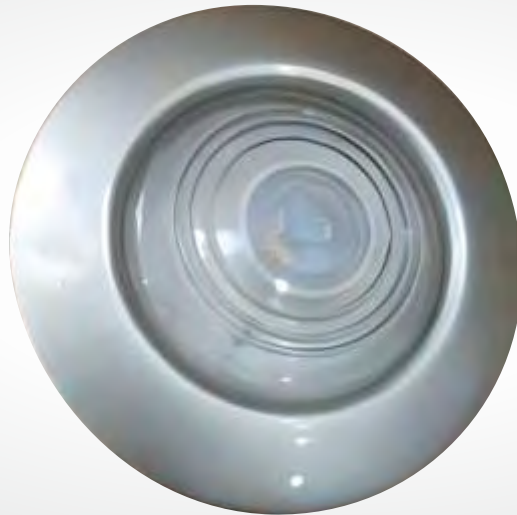


SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 – 7000 K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Maximum Wattage	5W
Body	Aluminum / PC
Wiring	E-beam cable with WAGO/ PHOENIX connector
Weight	250 gms
Ingress Protection	IP – 54 (Extendable upto Ip66)

LED Luminaries for T-18 Reading Light

Reading Light



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	3000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Maximum Wattage	1W
Body	Aluminum / PC
Wiring	E-beam cable with WAGO/ PHOENIX connector
Weight	< 200 gms
Ingress Protection	IP – 54

LED Luminaries for T-18 Saloon Light

- Corridor
- Doorway
- Gangway
- Passenger Area



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Maximum Wattage	18W
Body	MS powder coated
Wiring	Low Beam / High Beam, E-Beam cable with WAGO/Phoenix connector
Weight	2.5 kg
Ingress Protection	IP – 54
Lens	PC

LED Luminaries for T-18 PAIL Light

- Corridor
- Doorway
- Gangway
- Passenger Area



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Maximum Wattage	3W
Body	Aluminum
Wiring	Low Beam / High Beam, E-Beam cable with WAGO/Phoenix connector
Ingress Protection	IP – 54

LED Luminaries for T-18 Pantry Light

Pantry Lighting



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Maximum Wattage	9W
Body	Aluminum
Wiring	E-Beam cable with WAGO/ Phoenix connector
Weight	700 grams
Ingress Protection	IP – 54

LED Luminaries for T-18 Disaster Management Light

Emergency LED

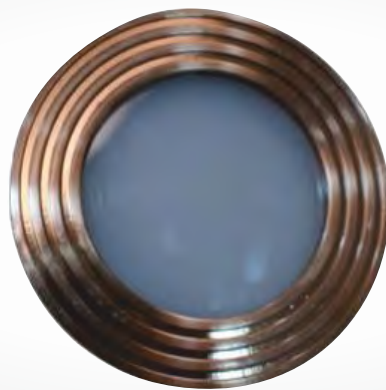


SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Maximum Wattage	10W (Charging Power)
Body	MS CRC
Wiring	Low Beam/ High Beam, E-Beam cable with WAGO/ Phoenix connector
Weight	800 grams
Ingress Protection	IP – 54
Battery	Rechargeable 7Ah

LED Luminaries for T-18 Cab Emergency Light

Emergency LED



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Maximum Wattage	5-9W
Body	Aluminum
Wiring	Low Beam/ High Beam, E-Beam cable with WAGO/ Phoenix connector
Weight	700 grams
Ingress Protection	IP – 54

Coupe Lights

Ceiling with Direct & Indirect Light

2AC/3AC Tier



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Body	Aluminum
Wiring	Low Beam/ High Beam, E-Beam cable with WAGO/ Phoenix connector
Length	0.80M Approx.
Ingress Protection	IP – 54

Coupe Lights Ceiling with Direct & Indirect Light

1AC Tier



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Body	Aluminum
Wiring	Low Beam/ High Beam, E-Beam cable with WAGO/ Phoenix connector
Length	1.2 M Approx.
Ingress Protection	IP – 54

Snack Table Light Assembly

1AC Tier & 2AC Tier

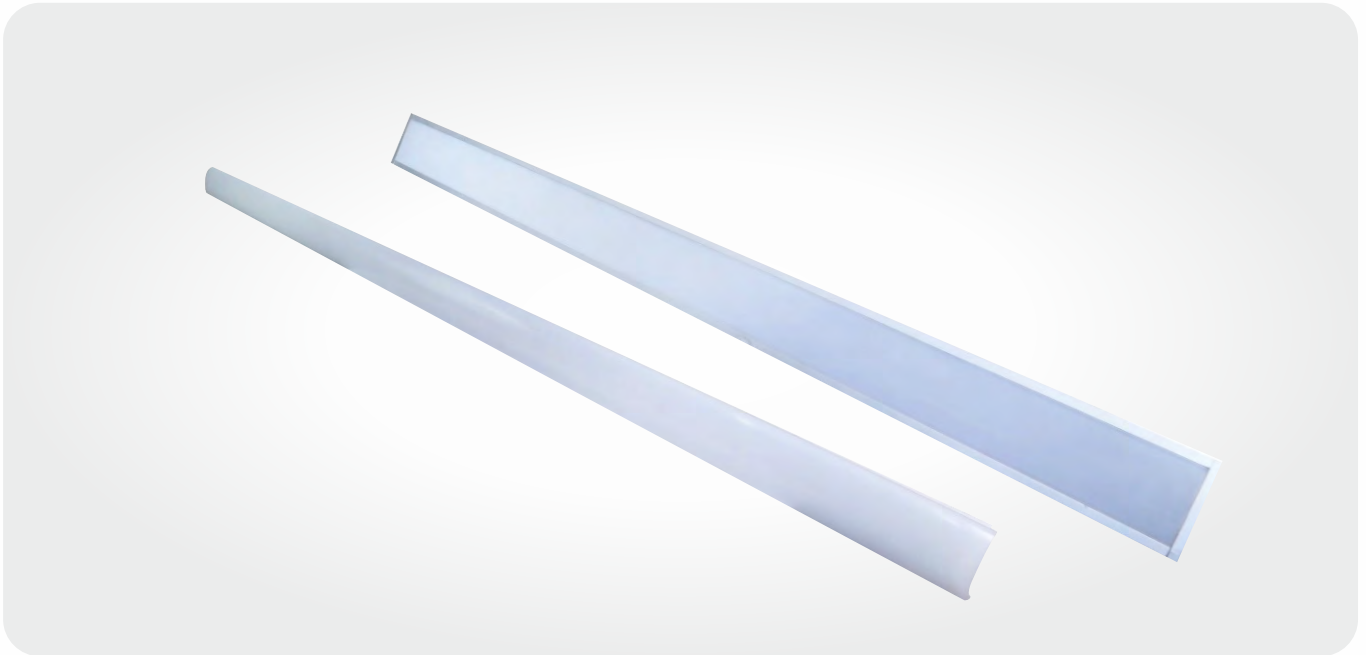


SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Body	Aluminum
Wiring	Low Beam/ High Beam, E-Beam cable with WAGO/ Phoenix connector
Length	0.60 M Approx.
Ingress Protection	IP – 54

Corridor Area Lights (With Night light) 3A Direct & Indirect Lights

3AC Tier

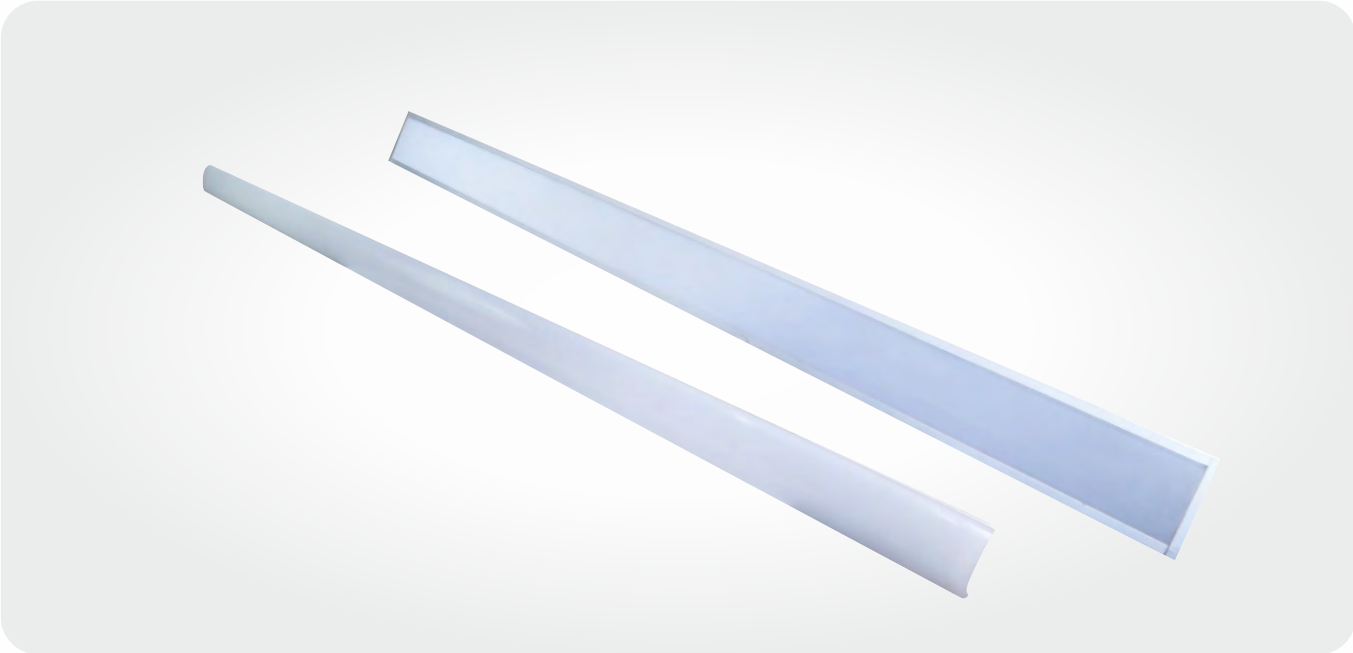


SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Body	Aluminum
Wiring	Low Beam/ High Beam, E-Beam cable with WAGO/ Phoenix connector
Length	1.0 M Approx.
Ingress Protection	IP – 54

Corridor Area Lights (With Night light)- 2A Direct & Indirect Lights

2AC Tier

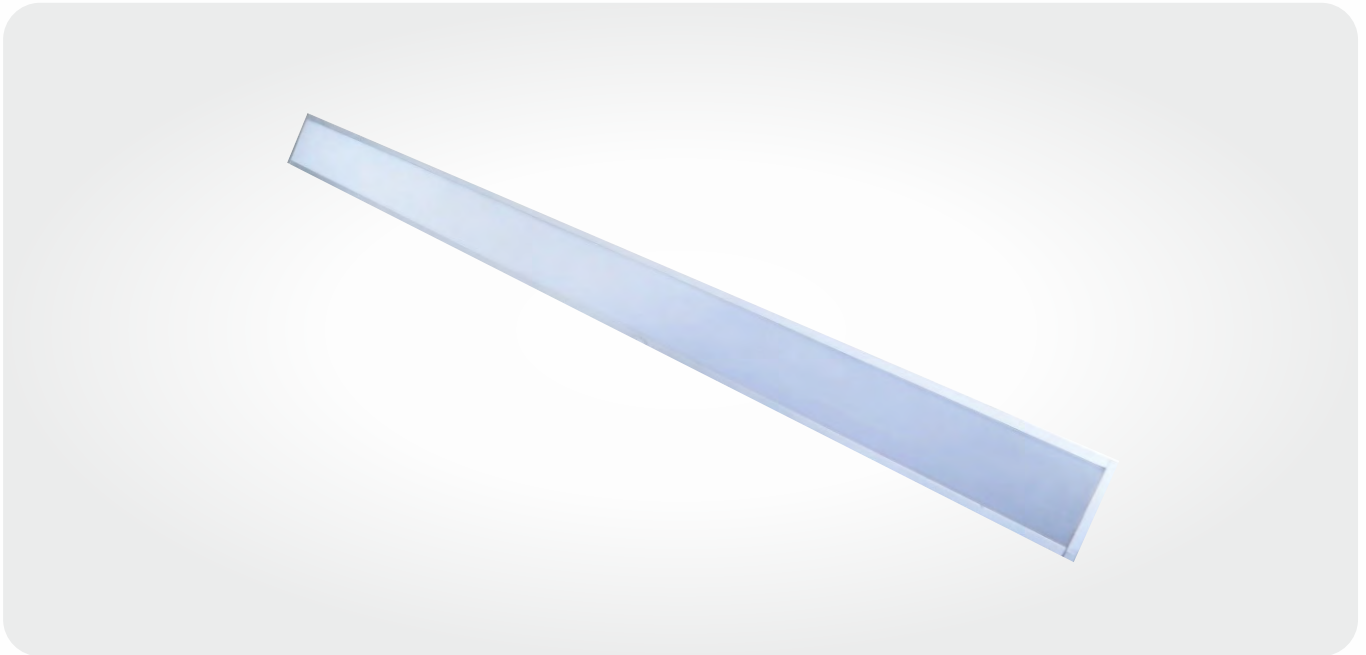


SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Body	Aluminum
Wiring	Low Beam/ High Beam, E-Beam cable with WAGO/ Phoenix connector
Length	1.0 M Approx.
Ingress Protection	IP – 54

Corridor Area Lights

1AC Tier



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Body	Aluminum
Wiring	Low Beam/ High Beam, E-Beam cable with WAGO/ Phoenix connector
Length	0.80 M Approx.
Ingress	Protection: IP – 54

Spot Light for Coupe

1AC Tier



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Body	Aluminum
Wiring	Low Beam/ High Beam, E-Beam cable with WAGO/ Phoenix connector
Ingress Protection	IP – 54

Luggage Rack Light

3AC Tier



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Body	Aluminum
Wiring	Low Beam/ High Beam, E-Beam cable with WAGO/ Phoenix connector
Length	2.1 M
Ingress Protection	IP – 54

Reading Lights with USB Charger + 3-Pin Socket & It's Switch Module.

1AC Tier, 2AC Tier
& 3AC Tier



SPECIFICATIONS

LED	White, Mid power LED, UL Certified
Colour Temperature	6000 - 7000K
LED Output efficiency	150 lm/W
LED Life	> 50,000 hours
CRI	>80
Operating Voltage	110 V DC (70 – 140 V)
Body	Aluminum (Grade)
Wiring	Low Beam/ High Beam, E-Beam cable with WAGO/ Phoenix connector
Ingress Protection	IP – 54



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