

VersaBeam Tunnel Lights

Applications

Designed specifically for safety illumination of road tunnels as per different zones specified in CIE:88 and other relevant illumination standards.



Features

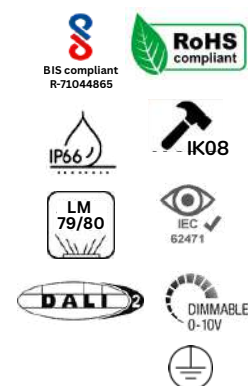
- Complies to IS-10322, IEC-60529, IEC-61000
- Lighting Design compliant to CIE:88 and IRC-SP:99
- Side mounting and center mounting optics options
- Higher system efficacy options 150 lm/W and 170 lm/W
- 100,000 hours long product life

Enhancements

- DALI dimmable with DALI certified mark
- Loop-In Loop-Out Facility

Tender Description

LED flood light luminaire with total input power consumption of 100W. Delivered lumen output of 15000 lm at efficacy ≥ 150 lm/W. CCT 5700K. CRI >70 . Pressure die-cast aluminum heat sink for ensuring LED $T_j < 85^\circ\text{C}$ and Driver $T_c < 80^\circ\text{C}$ as per ISTMT tests. IP66. IK08. Operating ambient temperature (t_a) range -10°C to $+50^\circ\text{C}$. Mean rated service life $L_{70}(t_a 45^\circ\text{C}) > 100,000$ hrs. Rotationally asymmetric elliptical light distribution suitable for fencing illumination is achieved through a UV-stabilized PC lens. Suspension through eye bolts and cradle mounting. Constant current driver with an input voltage range of 100VAC ~ 300VAC. Power Factor >0.95 . THD $< 10\%$. In-built surge protection up to 6kV in the driver, with an additional 10kV internal SPD. Short Circuit Protection, Overload Protection, Over Voltage Protection, Under Voltage Protection, Reverse Polarity Protection, 440V AC protection for up to 8 hours, and Thermal Protection in the driver. Connection through single phase 3 core cable, earthing mandatory.



Optical and LED

Delivered System Efficacy	> 150 lumens per watt
Beam Angle	Symmetric & Asymmetric both beam angle options
Optics Type	Refractive beam angle control suitable for tunnels
MOC of optical lens / diffuser	UV-stabilised optical-grade polycarbonate
Correlated Color Temperature	6500K / 5700K (Other CCT available on request)
Color Rendering Index (CRI)	Min. 70 (other CRI available on request)
Median Useful L70B50 life	> 100,000 burning hours @ Ta = 45 °C
Flicker / Ripple	Flicker free, < 5% ripple

Operating and Electrical

Type of Driver	Constant Current Type
Safety Protection Class (IEC)	Class I, Earthing is mandatory
Connection Type	3 core 1.0 sq. mm copper mains cable Loop in & Loop out facility (optional)
Rated input power supply	Single Phase AC, 240V, 50Hz / 60Hz
Input voltage range	100 VAC ~ 300 VAC
Power Factor	> 0.95
Total Harmonic Distortion	< 10% at Full Load
Inbuilt Protections	6kV (Driver)+10 kV (SPD) inbuilt surge protection 440 VAC protection Over voltage protection (cut-off, re-strike) Thermal overload protection Output short-circuit protection Reverse polarity protection
Power Consumption Tolerance	+ / - 10%

Controls and Dimming

Dimmable & Controls	DALI / Analog / Scheduled Dimming (optional)
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Mechanical and Housing

Housing MOC	Pressure die cast aluminium
Powder Coating	UV-resistant anti-corrosive polyester powder coating
Installation Arrangement	Mounting cradle
IP Ratings	IP66 (Dust penetration protected, jet-proof)
IK Ratings	IK10 (20 Joules vandal protected)
Ambient Temperature	-10 °C to +50 °C
Dimensions	347 X 226
Color	Black

Product Code Nomenclature

VersaBeam-TN-100W 7 40 S TNA

Product
Family
Name

Tunnel
Light

Wattage

CRI >70

CCT
6500K
5700K
4000K

Centre mounting (TNA)
Side mounting (TNB)

ON-OFF Switching (S)
DALI Dimmable (D)

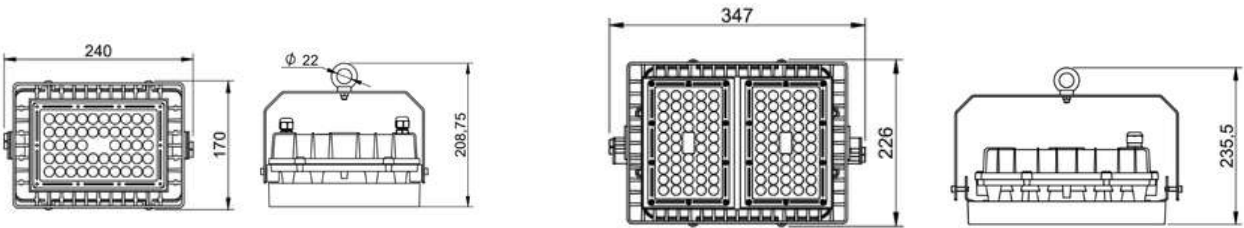
Available Variants

System Wattage	80W	100W	120W	150W	200W	240W	300W	400W	500W
Lumen Output	12000 Lumens	15000 Lumens	18000 Lumens	22500 Lumens	30000 Lumens	36000 Lumens	45000 Lumens	60000 Lumens	75000 Lumens

Product Photos



GA Drawings



Thermal Images

