
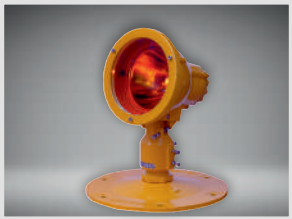
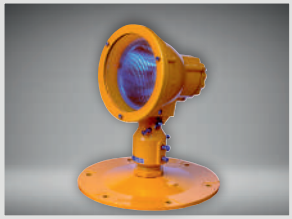
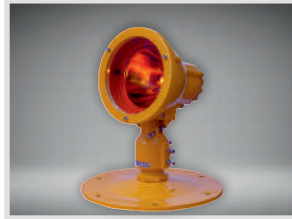





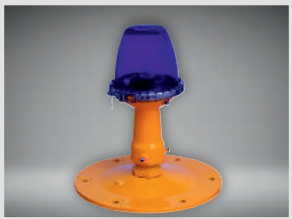













# HALOGEN ELEVATED LIGHT

				
Type	ApproachLight	Side Row Light	Threshold / Wing Bar Light	Runway End Light
Variants	Elevated Uni-directional L-862 E 	Elevated Uni-directional, 	Elevated Uni-directional, 	Elevated Uni-directional 
Electrical Specs	Min. Average Cd: 20000 Input Power: 2.8A~6.6A Power (W): 150/200W Lamp Life: >1000hrs	Min. Average Cd: 5000 Input Power: 2.8A~6.6A Power (W): 200W Lamp Life: >1000hrs	Min. Average Cd: 10000 Input Power: 2.8A~6.6A Power (W): 200W Lamp Life: >1000hrs	Min. Average Cd: 2500 Input Power: 2.8A~6.6A Power (W): 150/200W Lamp Life: >1000hrs
Standards	ICAO Annex 14 Volume I AC 150-5345-46	ICAO Annex 14 Volume I AC 150-5345-46	ICAO Annex 14 Volume I AC 150-5345-46	ICAO Annex 14 Volume I AC 150-5345-46
Model No.	VAS-APL-1	VAS-APS-1	VAS-RTL-1 / VAS-RWB-1	VAS-REN-1
				
Type	ApproachLight	Taxiway Light	Threshold / Wing Bar Light	Runway Guard Light
Variants	Elevated Uni-directional L-862    	Elevated Uni-directional, L-861 T 	Elevated Uni-directional, L-880, L-881 	Elevated Uni-directional 
Electrical Specs	Min. Average Cd: W-10000,Y-4000, R-1500 Input Power: 2.8A~6.6A Power (W): 150/200W Lamp Life: >1000hrs	Min. Average Cd: 02 Input Power: 2.8A~6.6A Power (W): 45W Lamp Life: >1000hrs	Min. Average Cd: W-30000, R-15000 Input Power: 2.8A~6.6A Power (W): 200W X 3 Lamp Life: >1000hrs	Min. Average Cd: 3000 Input Power: 2.8A~6.6A Power (W): 150W X 2 Lamp Life: >1000hrs
Standards	ICAO Annex 14 Volume I AC 150-5345-46	ICAO Annex 14 Volume I AC 150-5345-46	ICAO Annex 14 Volume I AC 150-5345-46	ICAO Annex 14 Volume I AC 150-5345-46
Model No.	VAS-REL-1	VAS-TXE-H	VAS-PAPI-3L-H	VAS-RGL-H

# LED ELEVATED APPROACH LIGHT

High-intensity, Uni-directional, Elevated Runway Approach, Threshold, Threshold Wingbar & Runway End lights used in SAPL & ICAO category I, II & III runways. Siderow Barrette used in ICAO category II & III runways.

## KEY USP

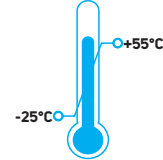
- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment



ICAO & FAA Compliance  
verified by third-party testing

## KEY FEATURES

- ✓ Dimming curve compliant with ICAO Part-5 and FAA EB 67D
- ✓ Minimal spares inventory; only color filter varies across fittings
- ✓ Vertical beam adjustment: 0°–25° for precise alignment
- ✓ Optional angle-setting tool for accurate installation
- ✓ LED life >50,000 hours for long-lasting performance
- ✓ No realignment required after LED module replacement



Smooth outer glass surface for easy cleaning and reduced dirt build-up

Front-side LED module replacement without opening the internal circuitry

Horizontal beam adjustment: 0° to 20° on each side

Light-weight, corrosion-resistant aluminium alloy body with powder coating for environmental protection

Jet blast resistant withstands 480 kph

Integrated frangible coupling designed to enhance aircraft operational safety

## AVAILABLE TYPES OF LIGHTING UNIT



APPROACH LIGHT



SIDEROW BARRETTE LIGHT



RUNWAY THRESHOLD LIGHT



THRESHOLD WING BAR LIGHT



RUNWAY END LIGHT

## TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1
		Aerodrome Design Manual DOC 9157 Part 4&6
	DGCA	CAR Series B Part-I Section 4
	FAA Compliance	AC-150/5345-46F
Engineering Brief 67D		
Performance	Power Factor	>0.9
	Environmental Temp.	-25°C to +55°C
	Energy Consumption	48W
Electrical supply	Power Supply	2.8A~6.6A

## PHOTOMETRIC DATA

Light Type	Standard	Main beam		Color	Required Min. Average Cd	Actual Average Cd
		H	V			
Approach Light	ICAO fig. A2-1	±10°	2.5° - 13.5°	White	20000	23775
Approach Siderow Light	ICAO fig. A2-2	±7° (Toe in 2°)	1.5° - 11.5°	Red	5000	6130
Threshold Light	ICAO fig. A2-3	±5.5° (Toe in 3.5°)	1° - 10°	Green	10000	11854
Threshold Wingbar Light	ICAO fig. A2-4	±7° (Toe in 2°)	0.5° - 10.5°	Green	10000	11251
Runway End Light	ICAO fig. A2-8	±6°	0.25° - 4.75°	Red	2500	3294
Chromaticity	ICAO Annex. 14 Fig A1-1b					

## ORDERING INFORMATION

Light Type	Direction	Light Colour	Light Source	Light Model No.
Approach Light	Uni-Directional	White	LED	VAS-APL-L
Siderow Barrette Light	Uni-Directional	Red	LED	VAS-APS-L
Runway Threshold Light	Uni-Directional	Green	LED	VAS-RTL-L
Threshold Wing Bar Light	Uni-Directional	Green	LED	VAS-RWB-L
Runway End Light	Uni-Directional	Red	LED	VAS-REN-L

# LED ELEVATED RUNWAY EDGE LIGHT

High intensity, Bi-directional, Elevated Runway Edge lights that can be used for category I, II & III systems for Runways width of 45M as well as of 60M.

## KEY USP

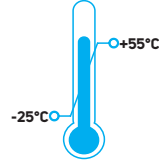
- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment



**ICAO & FAA Compliance**  
verified by third-party testing

## KEY FEATURES

- ✓ Modular design for easy handling and maintenance
- ✓ Proprietary driving circuit with advanced thermal management for enhanced reliability and long service life
- ✓ LED life >50,000 hours for long-lasting performance
- ✓ Runway edge light with circling guidance is available on request.



Smooth outer glass surface for easy cleaning and reduced dirt build-up



Easy LED module replacement with no optical adjustment required.



Jet blast resistant withstands 480 kph



Integrated frangible coupling designed to enhance aircraft operational safety



Runway edge light designed with integrated provision for circling guidance

Light-weight, corrosion-resistant aluminium alloy body with powder coating for environmental protection



## AVAILABLE TYPES OF LIGHTING UNIT



WHITE/WHITE



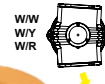
WHITE/YELLOW



WHITE/RED



YELLOW/RED



Runway Centerline



# TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1
		Aerodrome Design Manual DOC 9157 Part 4&6
	DGCA	CAR Series B Part-I Section 4
	FAA Compliance	AC-150/5345-46F
Engineering Brief 67D		
Performance	Power Factor	>0.9
	Environmental Temp.	-25°C to +55°C
	Energy Consumption	40W
Electrical supply	Power Supply	2.8A~6.6A

# PHOTOMETRIC DATA

Light Type	Standard	Main beam		Color	Required Min. Average Cd	Actual Average Cd
		H	V			
Runway Edge Light	ICAO fig. A2-9 (width 45 mtr.)	±5.5° (Toe in 3.5°)	0 7°	White	10000	11520
	ICAO fig. A2-10 (width 60 mtr.)	±6.5° (Toe in 4.5°)		Red	1500	1524
				Yellow	4000	6780
With Circling Guidance Light	ICAO Clause No. 5.3.9.9	360°	0° to 15°	White	75	50
Chromaticity	ICAO Annex. 14 Fig A1-1b					

# ORDERING INFORMATION

Light Type	Direction	Light Colour	Light Source	Light Model No.
Runway Edge Light Without Circling Guidance	Bi-Directional	White/White	LED	VAS-REL-W/W-L-1
		White/Yellow	LED	VAS-REL-W/Y-L-1
		White/Red	LED	VAS-REL-W/R-L-1
		Yellow/Red	LED	VAS-REL-Y/R-L-1
Runway Edge Light With Circling Guidance	Bi-Directional	White/White	LED	VAS-REL-W/W-L-2
		White/Yellow	LED	VAS-REL-W/Y-L-2
		White/Red	LED	VAS-REL-W/R-L-2
		Yellow/Red	LED	VAS-REL-Y/R-L-2

# LED ELEVATED TAXIWAY EDGE LIGHT

Low-Intensity, Omni-directional, elevated taxiway edge LED light that can be used in SAPL & ICAO category I, II & III systems.

## KEY USP

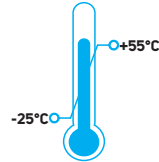
- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment



**ICAO & FAA Compliance  
verified by third-party testing**

## KEY FEATURES

- ✓ Compact and attractive design with strong wind resistance
- ✓ Operates on 3-step or 5-step constant current mode
- ✓ LED life >50,000 hours for long-lasting performance
- ✓ Saves up to 80% power compared to incandescent lamps
- ✓ Available in both 230V AC & 6.6A version



Smooth outer dome eliminates the build-up of dirt & easy to clean



Easy LED module replacement with no optical adjustment required.



Light-weight, corrosion-resistant aluminium alloy body with powder coating for environmental protection

Jet blast resistant withstands 480 kph

Integrated frangible coupling designed to enhance aircraft operational safety

## AVAILABLE TYPES OF LIGHTING UNIT



## TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1
		Aerodrome Design Manual DOC 9157 Part 4&6
	DGCA	CAR Series B Part-I Section 4
	FAA Compliance	AC-150/5345-46F
Engineering Brief 67D		
Performance	Power Factor	>0.9
	Environmental Temp.	-25°C to +55°C
	Energy Consumption	9W
Electrical supply	Power Supply	2.8A~6.6A
		230V

## PHOTOMETRIC DATA

Light Type	Standard	Main beam		Color	Required Min. Average Cd	Actual Average Cd
		H	V			
Taxiway Edge Light	ICAO Clause No. 5.3.18.8	360°	0°-6°	Blue	2	>4
		360°	6°-75°		0.2	>0.2
Chromaticity	ICAO Annex. 14 Fig A1-1b					

## ORDERING INFORMATION

Light Type	Direction	Light Colour	Light Source	Light Model No.
Taxiway Edge Light	Omni-Directional	Blue	LED	VAS-TXE-L

# LED ELEVATED RUNWAY GUARD LIGHT

Runway Guard Light (RGL) is installed at taxiway runway intersections to warn pilots and vehicle operators before entering an active runway. It enhances visibility and safety in low visibility conditions and helps prevent runway incursions.

## KEY USP

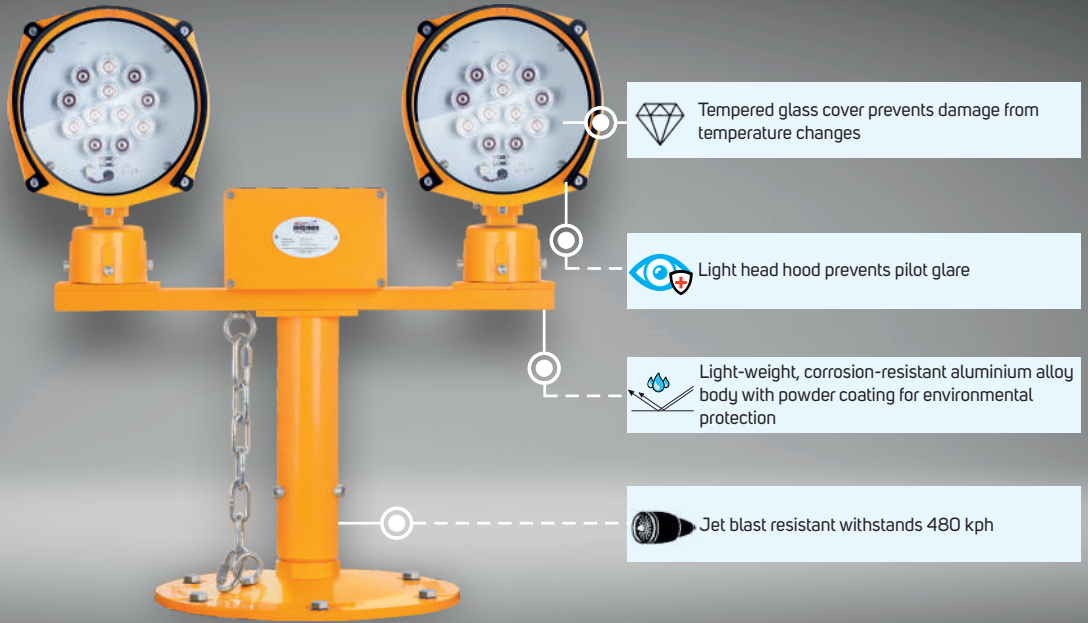
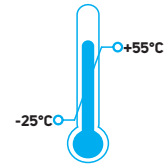
- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment



ICAO & FAA Compliance  
verified by third-party testing

## KEY FEATURES

- ✓ Compact and attractive design with strong wind resistance
- ✓ Flashes 45-50 times per minute, LED emits light alternately
- ✓ LED life >50,000 hours for long-lasting performance
- ✓ Professional heat dissipation ensures long LED life
- ✓ Available in both 230V AC & 6.6A version



## AVAILABLE TYPES OF LIGHTING UNIT



## TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1
		Aerodrome Design Manual DOC 9157 Part 5&6
	FAA Compliance	AC-150/5345-46F Engineering Brief 67D
	IEC	TS 61827
Performance	Power Factor	>0.9
	Environmental Temp.	-25°C to +55°C
	Energy Consumption	31W
Electrical supply	Power Supply	2.8A~6.6A
		230V

## PHOTOMETRIC DATA

Light Type	Standard	Main beam		Color	Required Min. Average Cd	Actual Average Cd
		H	V			
Runway Guard Light	ICAO Fig. A2-25	+8°	+8°	Yellow	3000	3900
	ICAO Fig. A2-24	+8°	+8°			
Chromaticity	ICAO Annex. 14 Fig A1-1b					

## ORDERING INFORMATION

Light Type	Direction	Light Colour	Light Source	Light Model No.
Runway Guard Light	Uni-Directional	Yellow	LED	VAS-RGL-L

# LED PORTABLE AVIATION CHARGEABLE LIGHT

Portable Aviation Chargeable LED Light which can be used in Airport Construction, Emergency Airport Lighting & Temporary Airport Lighting.

## KEY USP

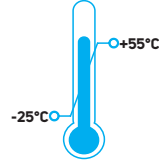
- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment



ICAO & FAA Compliance  
verified by third-party testing

## KEY FEATURES

- ✓ Quick to deploy and easy to store
- ✓ Light also have battery indication
- ✓ LED life >50,000 hours for long-lasting performance
- ✓ The light automatically cuts off the power supply once fully charged



Light-weight, corrosion-resistant aluminium alloy body with powder coating for environmental protection



ON/OFF Switch Button



Brightness can be adjusted in three levels using a potentiometer



Battery Charging Indication



USB Charging Port



Light ON indication



## AVAILABLE TYPES OF LIGHTING UNIT



## TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1
	FAA Compliance	AC 150/5345-50B
Performance	Battery Backup	>24 hour
	Battery Power	3.2V, 18Ah
	Charging Time	8 hours (Approx)
Electrical supply	Power Supply	230V
		Charging by Solar Panel (optional)

## PHOTOMETRIC DATA

Light Type	Standard	Main beam		Color	Required Min. Average Cd	Actual Average Cd
		H	V			
Portable Aviation Chargeable Light LED	FAA : AC 150/5345-50B	360°	0°-6°	White	20	20
				Yellow	6.2	6.2
				Green	6.2	6.2
				Red	1.8	1.8
				Blue	1.4	1.4
		360°	6°-9°	White	10	10
				Yellow	3.1	3.1
				Green	3.1	3.1
				Red	0.9	0.9
				Blue	0.7	0.7
		360°	9°-14°	White	2	2
				Yellow	.62	.62
				Green	.62	.62
				Red	.18	.18
				Blue	.14	.14
Chromaticity	ICAO Annex. 14 Fig A1-1b					

## ORDERING INFORMATION

Light Type	Direction	Light Colour	Light Source	Light Model No.
Portable Aviation Chargeable Light LED	Omni-Directional	White, Yellow, Green, Red, Blue	LED	VAS-PACL-L

# LED INSET TAXIWAY CENTERLINE LIGHT

## TYPE OF LIGHTS COVERED

- ✓ Taxiway Centerline
- ✓ Turn pad
- ✓ Stop bar
- ✓ Intermediate holding position

## KEY USP

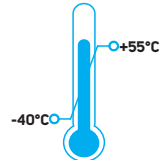
- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment

## KEY FEATURES

- ✓ ICAO, IEC & FAA compliant design for reliable airfield lighting
- ✓ Built-in surge protection for enhanced electrical safety
- ✓ Energy-efficient long-life LEDs for low power consumption
- ✓ High-efficiency power factor circuit for stable performance
- ✓ Advanced thermal management for extended service life
- ✓ Smooth & fully dimmable operation as per standards
- ✓ High-temperature grade capacitors for driver reliability
- ✓ Tempered glass optical prism resistant to thermal shock



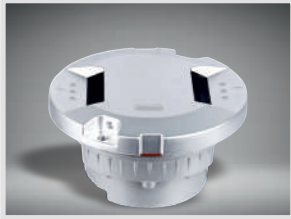
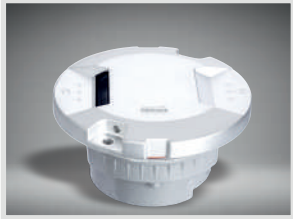
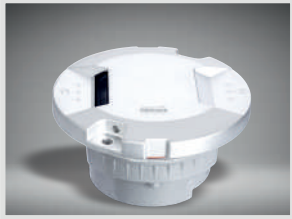
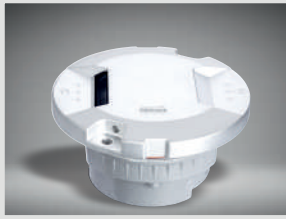




TS 61827



ICAO, IEC & FAA Compliance verified by third-party testing



## AVAILABLE TYPES OF LIGHTING UNIT

			
Type Taxiway Centerline Straight Light	Type Taxiway Centerline Straight Light	Type Turn Pad Straight (TCL) Light	Type Stop Bar (TCL) Light
Variants 8" Bi-directional, L-852 C	Variants 8" Uni-directional, L-852 C	Variants 8" Uni-directional, L-852 C	Variants 8" Uni-directional, L-852 S
			
Type Intermediate Holding Position (TCL) Light	Type Taxiway Centerline Curved Light	Type Taxiway Centerline Curved Light	Type Turn Pad Curved (TCL) Light
Variants 8" Uni-directional, L-852 D	Variants 8" Bi-directional, L-852 D	Variants 8" Uni-directional, L-852 D	Variants 8" Uni-directional, L-852 S

## TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1 Aerodrome Design Manual DOC 9157 Part 4&5
	FAA Compliance	AC-150/5345-46F Engineering Brief 67D
	IEC	TS 61827
Performance	Power Factor	>95%
	Environmental Temp.	-40°C to +55°C
Electrical supply	Power Supply	2.8A~6.6A

## ELECTRICAL PARAMETERS

Light Type	Direction	Colour	Rated Power	SIT	LED Life Span
Taxiway Centerline Straight, Turn Pad Straight, Stop Bar, Intermediate Holding Position Light	Uni-/ Bi-directional	Red / Green / Yellow / Green/Green Yellow/Yellow Green/Yellow	8W / 15W	15W / 25W	50,000 hrs

## PHOTOMETRIC DATA

Light Type	Standard	Main beam		Color	Required Min. Average Cd	Actual Average Cd
		H	V			
Taxiway Centerline Straight Light	ICAO Fig. A2-12	±10°	1° - 8°	Green Yellow	200	240
Taxiway Centerline Curved Light	ICAO Fig. A2-14	±19.25°	1° - 10°	Green Yellow	200	240
Turn Pad Straight (TCL) Light	ICAO Fig. A2-12	±10°	1° - 8°	Green	200	260
Turn Pad Curved (TCL) Light	ICAO Fig. A2-14	±19.25°	1° - 10°	Green	200	250
Stop Bar (TCL) Light	ICAO Fig. A2-12	±10°	1° - 8°	Red	200	230
Intermediate Holding Position (TCL) Light	ICAO Fig. A2-12	±10°	1° - 8°	Yellow	200	240
Chromaticity	ICAO Annex. 14 Fig A1-1b					

## ORDERING INFORMATION

Light Type	Direction	Light Colour	Light Source	Light Model No.
Taxiway Centerline Straight,	Uni-/ Bi-directional	Green	LED	VAS-ITCL-8-S-G-L-X
Turn Pad (TCL) Straight,		Yellow	LED	VAS-ITCL-8-S-Y-L-X
Stop Bar (TCL)		Red	LED	VAS-ITCL-8-S-R-L-X
Intermediate Holding Position(TCL) Lights		Green/Yellow	LED	VAS-ITCL-8-S-G/Y-L-X
		Yellow/Yellow	LED	VAS-ITCL-8-S-Y/Y-L-X
		Green/Green	LED	VAS-ITCL-8-S-G/G-L-X
Taxiway Centerline Curved,	Uni-/ Bi-directional	Green	LED	VAS-ITCL-8-C-G-L-X
Turn Pad (TCL) Curved,		Yellow	LED	VAS-ITCL-8-C-Y-L-X
		Green/Yellow	LED	VAS-ITCL-8-C-G/Y-L-X
		Yellow/Yellow	LED	VAS-ITCL-8-C-Y/Y-L-X
		Green/Green	LED	VAS-ITCL-8-C-G/G-L-X

# LED INSET TAXIWAY EDGE OR ASMGL LIGHT

## TYPE OF LIGHTS COVERED

- ✓ Taxiway Edge Light
- ✓ Aircraft Stand Manoeuvring Guidance Light

## KEY USP

- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment

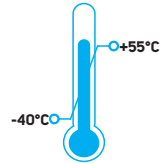
## KEY FEATURES

- ✓ ICAO, IEC & FAA compliant design for reliable airfield lighting
- ✓ Built-in surge protection for enhanced electrical safety
- ✓ Energy-efficient long-life LEDs for low power consumption
- ✓ High-efficiency power factor circuit for stable performance
- ✓ Advanced thermal management for extended service life
- ✓ Smooth & fully dimmable operation as per standards
- ✓ High-temperature grade capacitors for driver reliability
- ✓ Tempered glass optical prism resistant to thermal shock



TS 61827

ICAO, IEC & FAA Compliance verified by third-party testing



Modular Design easy and quick replacement of components

Sealant-free prism fixing for quick maintenance

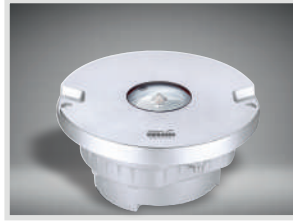
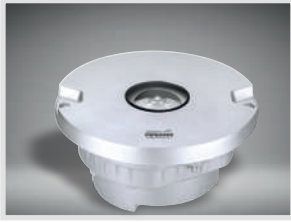
High-strength forged aluminium top cover with excellent corrosion resistance and heat dissipation

Fail-Open Protection for Safe & Reliable Monitoring

Inbuilt water-tightness test valve for harsh environments




## AVAILABLE TYPES OF LIGHTING UNIT



Type

Taxiway Edge Light

Stand Manoeuvring Guidance Light

Variants 8" Omni-directional,  L-852 T

8" Omni-directional, 

## TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1 Aerodrome Design Manual DOC 9157 Part 4&5
	FAA Compliance	AC-150/5345-46F Engineering Brief 67D
	IEC	TS 61827
Performance	Power Factor	>95%
	Environmental Temp.	-40°C to +55°C
Electrical supply	Power Supply	2.8A~6.6A

## ELECTRICAL PARAMETERS

Light Type	Direction	Colour	Rated Power	SIT	LED Life Span
Taxiway Edge Light	Omni-directional	Blue	7W	15W	50,000 hrs
Aircraft Stand Manoeuvring Guidance Light	Omni-directional	Yellow	7W	15W	50,000 hrs

## PHOTOMETRIC DATA

Light Type	Standard	Main beam		Color	Required Min. Average Cd	Actual Average Cd
		H	V			
Taxiway Edge Light	ICAO Clause No. 5.3.18.8	360°	0°-6°	Blue	2	>4
		360°	6°-75°		0.2	>0.2
Aircraft Stand Manoeuvring Guidance Light	ICAO doc 9157 ADM Part 4, Chapter 12, Clause No.12.2	360°	1°-8°	Yellow	60	63
Chromaticity	ICAO Annex. 14 Fig A1-1b					

## ORDERING INFORMATION

Light Type	Direction	Light Colour	Light Source	Light Model No.
Taxiway Edge Light	Omni-Directional	Blue	LED	VAS-ITEL-8-B-L-X
Aircraft Stand Manoeuvring Guidance Light	Omni-Directional	Yellow	LED	VAS-IASMGL-8-Y-L-X

# LED INSET RUNWAY CENTERLINE, RUNWAY TOUCHDOWN ZONE OR RAPID EXIT TAXIWAY INDICATOR LIGHTS

## TYPE OF LIGHTS COVERED

- ✓ Runway Centerline
- ✓ Runway Touchdown Zone Light
- ✓ Rapid Exit Taxiway Indicator Light

## KEY USP

- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment

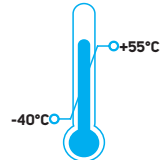
## KEY FEATURES

- ✓ ICAO, IEC & FAA compliant design for reliable airfield lighting
- ✓ Built-in surge protection for enhanced electrical safety
- ✓ Energy-efficient long-life LEDs for low power consumption
- ✓ High-efficiency power factor circuit for stable performance
- ✓ Advanced thermal management for extended service life
- ✓ Smooth & fully dimmable operation as per standards
- ✓ High-temperature grade capacitors for driver reliability
- ✓ Tempered glass optical prism resistant to thermal shock



TS 61827

ICAO, IEC & FAA Compliance verified by third-party testing



Modular Design easy and quick replacement of components



Sealant-free prism fixing for quick maintenance

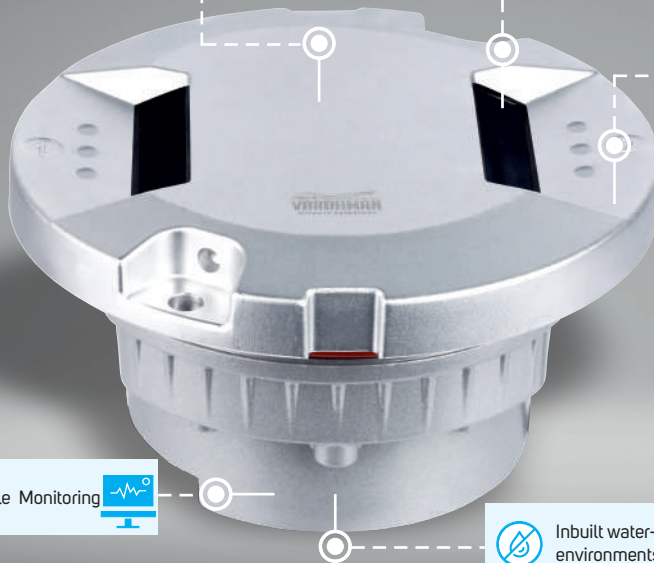


High-strength forged aluminium top cover with excellent corrosion resistance and heat dissipation

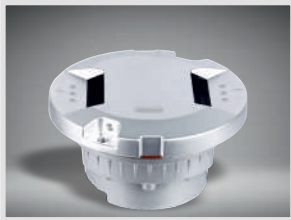
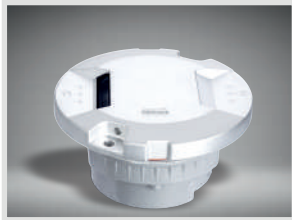
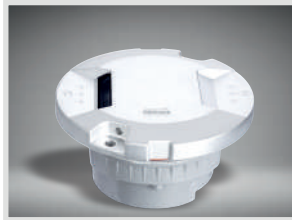
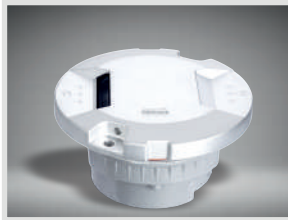




Fail-Open Protection for Safe & Reliable Monitoring



Inbuilt water-tightness test valve for harsh environments



## AVAILABLE TYPES OF LIGHTING UNIT

				
Type	Runway Centerline Light	Runway Centerline Light	Runway Touchdown Zone Light	Rapid Exit Taxiway Indicator Light
Variants	8" Bi-directional, L-850 A 	8" Uni-directional, L-850 A 	8" Uni-directional, L-850 B 	8" Uni-directional, 

## TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1 Aerodrome Design Manual DOC 9157 Part 4&5
	FAA Compliance	AC-150/5345-46F Engineering Brief 67D
	IEC	TS 61827
Performance	Power Factor	>95%
	Environmental Temp.	-40°C to +55°C
Electrical supply	Power Supply	2.8A~6.6A

## ELECTRICAL PARAMETERS

Light Type	Direction	Colour	Rated Power	SIT	LED Life Span
Runway Centerline, Runway Touchdown Zone Light	Uni-/ Bi-directional	Red, White	8W / 17W / 17W / 26W	15W/ 25W/ 45W	50,000 hrs
Rapid Exit Taxiway Indicator Light		White/Red White/White			

## PHOTOMETRIC DATA

Light Type	Standard	Main beam		Color	Required Min. Average Cd	Actual Average Cd
		H	V			
Runway Centerline Light	ICAO Fig. A2-6	±5°	0° - 7°	White	5000	5600
	ICAO Fig. A2-7	±5°	0° - 9°	White	5000	5600
	ICAO Fig. A2-6	±5°	0° - 7°	Red	750	780
	ICAO Fig. A2-7	±5°	0° - 9°	Red	750	780
Rapid Exit Taxiway Indicator Light	ICAO Fig. A2-6	±5°	0° - 7°	Yellow	2000	2100
	ICAO Fig. A2-7	±5°	0° - 9°	Yellow	2000	2100
Runway Touchdown Zone Light	ICAO Fig. A2-5	±5° (Toe in 4°)	2° - 9°	White	5000	5400

## ORDERING INFORMATION

Light Type	Direction	Light Color	Light Source	Light Model No.
Runway Centerline Light	Uni-/ Bi-directional	White	LED	VAS-IRCL-8-W-L-X
		Red	LED	VAS-IRCL-8-R-L-X
		White/White	LED	VAS-IRCL-8-W/W-L-X
		White/Red	LED	VAS-IRCL-8-W/R-L-X
Runway Touchdown Zone Light	Uni-directional	White	LED	VAS-IRTDZL-8-W-L-X
Rapid Exit Taxiway Indicator Light	Uni-directional	Yellow	LED	VAS-IRETIL-8-Y-L-X

# LED INSET APPROACH, SIDE ROW, THRESHOLD, THRESHOLD WING BAR, RUNWAY END THRESHOLD CUM END LIGHTS

## TYPE OF LIGHTS COVERED

- ✓ Approach Light
- ✓ Side Row Light
- ✓ Threshold & Threshold Wing Bar Light
- ✓ Runway End Light
- ✓ Runway Threshold Cum End Light

## KEY USP

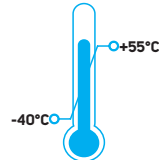
- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment

## KEY FEATURES

- ✓ ICAO, IEC & FAA compliant design for reliable airfield lighting
- ✓ Built-in surge protection for enhanced electrical safety
- ✓ Energy-efficient long-life LEDs for low power consumption
- ✓ High-efficiency power factor circuit for stable performance
- ✓ Advanced thermal management for extended service life
- ✓ Smooth & fully dimmable operation as per standards
- ✓ High-temperature grade capacitors for driver reliability
- ✓ Tempered glass optical prism resistant to thermal shock



TS 61827



ICAO, IEC & FAA Compliance verified by third-party testing

Modular Design easy and quick replacement of components



Sealant-free prism fixing for quick maintenance



High-strength forged aluminium top cover with excellent corrosion resistance and heat dissipation


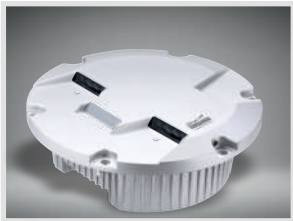
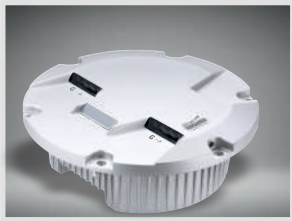
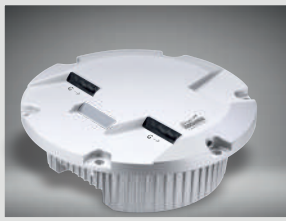




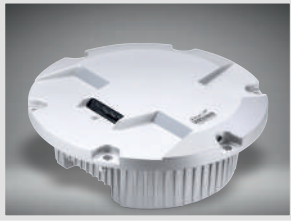
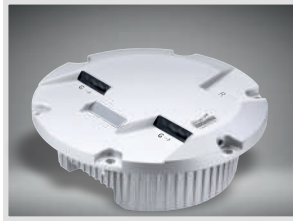


Fail-Open Protection for Safe & Reliable Monitoring



Inbuilt water-tightness test valve for harsh environments



## AVAILABLE TYPES OF LIGHTING UNIT

				
Type	Approach Light	Side Row Light	Threshold Light	Threshold Wing Bar Light
Variants	12" Uni-directional, 	12" Uni-directional, 	12" Uni-directional,  L-850 E	12" Uni-directional,  L-850 E
				
Type	Runway End Light	Runway Threshold Cum End Light		
Variants	12" Uni-directional,  L-850 D	12" Bi-directional,  L-850 D		

## TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1 Aerodrome Design Manual DOC 9157 Part 4&5
	FAA Compliance	AC-150/5345-46F Engineering Brief 67D
	IEC	TS 61827
Performance	Power Factor	>95%
	Environmental Temp.	-40°C to +55°C
Electrical supply	Power Supply	2.8A~6.6A

## ELECTRICAL PARAMETERS

Light Type	Direction	Colour	Rated Power	SIT	LED Life Span
Approach Light	Uni-directional	White	56W	65W	50,000 hrs
Side Row Light	Uni-directional	Red	23W	45W	50,000 hrs
Threshold & Threshold Wing Bar Light	Uni-directional	Green	44W	65W	50,000 hrs
Runway End Light	Uni-directional	Red	56W	65W	50,000 hrs
Runway Threshold Cum End Light	Bi-directional	Green/Red	56W	65W	50,000 hrs

## PHOTOMETRIC DATA

Light Type	Standard	Main beam		Color	Required Min. Average Cd	Actual Average Cd
		H	V			
Approach Light	ICAO fig. A2-1	±10°	2.5° - 13.5°	White	20000	23775
Approach Siderow Light	ICAO fig. A2-2	±7° (Toe in 2°)	1.5° - 11.5°	Red	5000	6130
Threshold Light	ICAO fig. A2-3	±5.5° (Toe in 3.5°)	1° - 10°	Green	10000	11854
Threshold Wingbar Light	ICAO fig. A2-4	±7°(Toe in 2°)	0.5° - 10.5°	Green	10000	11251
Runway End Light	ICAO fig. A2-8	±6°	0.25° - 4.75°	Red	2500	3294
Runway Threshold Cum End Light	ICAO fig. A2-3	±5.5°	1° - 10°	Green	10000	11864
	ICAO fig. A2-8	±6°	0.25° - 4.75°	Red	2500	3284
Chromaticity	ICAO Annex. 14 Fig A1-1b					

## ORDERING INFORMATION

Light Type	Direction	Light Colour	Light Source	Light Model No.
Approach Light	Uni-Directional	White	LED	VAS-IAPL-12-X-W-L-X
Side Row Light	Uni-Directional	Red	LED	VAS-IASL-12-X-R-L-X
Runway Threshold Light	Uni-Directional	Green	LED	VAS-IRTL-12-G-L-X
Threshold Wing Bar Light	Uni-Directional	Green	LED	VAS-IRTWL-12-X-G-L-X
Runway End Light	Uni-Directional	Red	LED	VAS-IREN-12-X-R-L-X
Runway Threshold Cum End Light	Bi-Directional	Green/Red	LED	VAS-IRT-ENL-12-G/R-L-X

# LED INSET RUNWAY EDGE LIGHT

High intensity, Bi-directional, Elevated Runway Edge lights that can be used for category I, II & III systems for Runways width of 45M as well as of 60M.

## KEY USP

- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment

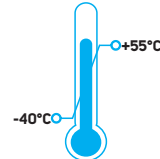
## KEY FEATURES

- ✓ ICAO, IEC & FAA compliant design for reliable airfield lighting
- ✓ Built-in surge protection for enhanced electrical safety
- ✓ Energy-efficient long-life LEDs for low power consumption
- ✓ High-efficiency power factor circuit for stable performance
- ✓ Advanced thermal management for extended service life
- ✓ Smooth & fully dimmable operation as per standards
- ✓ High-temperature grade capacitors for driver reliability
- ✓ Tempered glass optical prism resistant to thermal shock
- ✓ Runway edge light with circling guidance is available on request



TS 61827

ICAO, IEC & FAA Compliance verified  
by third-party testing



Modular Design easy and quick replacement of components



Fail-Open Protection for Safe & Reliable Monitoring



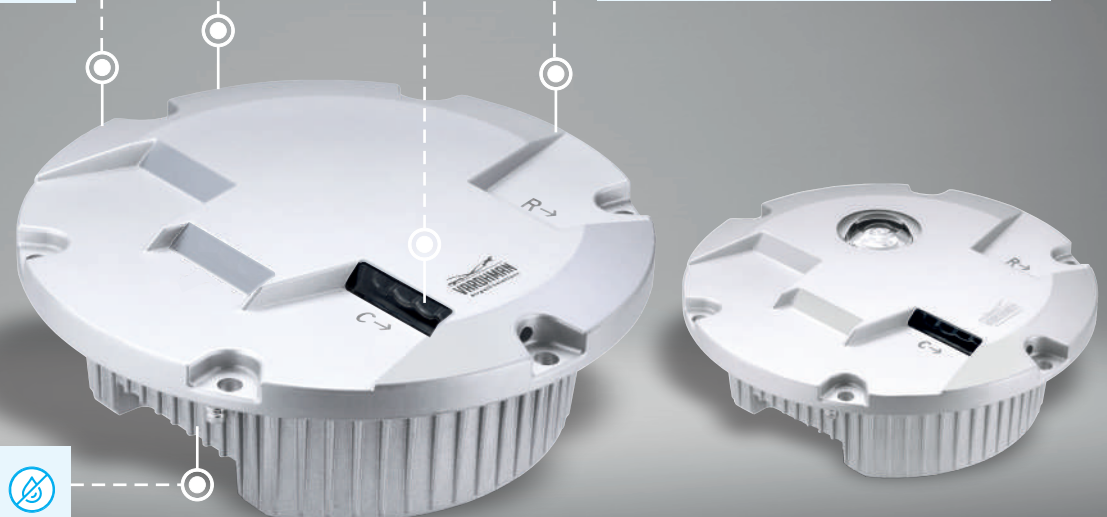
Sealant-free prism fixing for quick maintenance



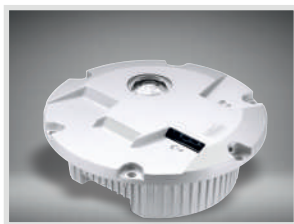
High-strength forged aluminium top cover with excellent corrosion resistance and heat dissipation











Inbuilt water-tightness test valve for harsh environments



## AVAILABLE TYPES OF LIGHTING UNIT



Type	Runway Edge Light	Runway Edge Light with Circling Guidance
Variants	12" Bi-directional, L850 C	12" Bi-directional, L850 C
		
		
		
		

## TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1 Aerodrome Design Manual DOC 9157 Part 4&5
	FAA Compliance	AC-150/5345-46F Engineering Brief 67D
	IEC	TS 61827
Performance	Power Factor	>95%
	Environmental Temp.	-40°C to +55°C
Electrical supply	Power Supply	2.8A~6.6A

## ELECTRICAL PARAMETERS

Light Type	Direction	Colour	Rated Power	SIT	LED Life Span
Runway Edge Light	Bi-directional	White/White	44W	65W	50,000 hrs
		White/Yellow	42W	65W	50,000 hrs
		Red/White	25W	45W	50,000 hrs
		Red/Yellow	27W	45W	50,000 hrs

## PHOTOMETRIC DATA

Light Type	Standard	Main beam		Color	Required Min. Average Cd	Actual Average Cd
		H	V			
Runway Edge Light	ICAO fig. A2-9 (width 45 mtr.)	±5.5° (Toe in 3.5°)	0 7°	White	10000	11520
	ICAO fig. A2-10 (width 60 mtr.)	±6.5° (Toe in 4.5°)		Red	1500	1524
				Yellow	4000	6780
With Circling Guidance Light	ICAO Clause No. 5.3.9.9	360°	0° to 15°	White	75	50
Chromaticity	ICAO Annex. 14 Fig A1-1b					

## ORDERING INFORMATION

Light Type	Direction	Light Colour	Light Source	Light Model No.
Runway Edge Light Without Circling Guidance	Bi-Directional	White/White	LED	VAS-IREL-12-W/W-L-1-X
		White/Yellow	LED	VAS-IREL-12-W/Y-L-1-X
		White/Red	LED	VAS-IREL-12-W/R-L-1-X
		Red/Yellow	LED	VAS-IREL-12-R/Y-L-1-X
Runway Edge Light With Circling Guidance	Bi-Directional	White/White	LED	VAS-IREL-12-W/W-L-2-X
		White/Yellow	LED	VAS-IREL-12-W/Y-L-2-X
		White/Red	LED	VAS-IREL-12-W/R-L-2-X
		Red/Yellow	LED	VAS-IREL-12-R/Y-L-2-X

# LED SEQUENCED FLASHING LIGHTING SYSTEM

## TYPE OF LIGHTS COVERED

- ✓ Elevated Sequenced flashing light
- ✓ Inset Sequenced flashing light

## KEY USP

- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment

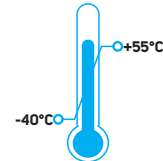
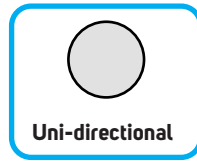
## KEY FEATURES

- ✓ ICAO Annex 14 Vol-1 compliant lighting precise light distribution & true runway colors for airfield safety
- ✓ Dedicated unit control cabinets clean, short, and easy-to-maintain cable layout
- ✓ Dual independent smart CPUs main and unit cabinets operate individually and sync via bus communication
- ✓ Real-time online fault detection instant system status and faster issue response
- ✓ LCD main control display stores and shows system operation logs clearly
- ✓ Remote monitoring & control live operational updates from a distance
- ✓ Lightning-protected circuits & cables power and communication lines fully shielded to meet standards



TS 61827

ICAO, IEC & FAA Compliance verified by third-party testing



Light-weight, corrosion-resistant aluminium alloy body with powder coating for environmental protection



Smooth outer glass surface for easy cleaning and reduced dirt build-up



Modular Design easy and quick replacement of components

Sealant-free prism fixing for quick maintenance

High-strength forged aluminium top cover with excellent corrosion resistance and heat dissipation

Inbuilt water-tightness test valve for harsh environments



# MASTER CONTROL UNIT

## Control Mode

The Local/Remote Control selection switch on the main control cabinet panel allows switching the control mode of the sequential flash system between:

- ✓ Local Control
- ✓ Tower Control

## Operation Interface

- ✓ Start and stop of the sequential flash lights
- ✓ Adjustment of flash light intensity levels
- ✓ Switching of flash frequency
- ✓ Display of system status information

## Status Indication

- ✓ The working status of each flash unit is indicated by an LED board on the panel



# FLASHING CONTROL UNIT

## Control and Functions

The sub-control board and its associated circuits inside the unit control box perform the following functions:

- ✓ Three-level light intensity control of the flash
- ✓ Flash triggering and flash detection
- ✓ Storage of flash-related data
- ✓ Feedback and return of status information to the main control cabinet

## Safety and Protection

Equipped with a door lock switch:

- ✓ When the box is opened for maintenance, the power is automatically cut off
- ✓ This does not affect the normal operation of other unit control boxes in the system

## Environmental Protection

An anti-condensation respirator device is installed at the bottom of the box to:

- ✓ Reduce humidity inside the control box
- ✓ Prevent condensation and maintain reliable operation



## TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1
		Aerodrome Design Manual DOC 9157 Part 4
	FAA Compliance	AC-150/5345-51B, AC-150/5345-46F
		E-2628B, Engineering Brief 67D
IEC	TS 61827	
Performance	Power Factor	>95%
	Environmental Temp.	-40°C to +55°C
Electrical supply	Rated Power for Elevated	38W at 230V
	Rated Power for Inset	58.5W at 230V

## PHOTOMETRIC DATA

Light Type	Standard	Flash frequency	Main beam		Color	Required Min. Average Cd	Actual Average Cd
			H	V			
Elevated SLFS, Inset SLFS	ICAO Fig. A2-1	Once or twice per second	±15°	±5°	White	20000	20000
Chromaticity	ICAO Annex. 14 Fig A1-1b						

## ORDERING INFORMATION

Light Type	Direction	Light Colour	Light Source	Light Model No.
Elevated SFLS LED	Uni-directional	White	LED	VAS-ESFLS-W-L
Inset SFLS LED	Uni-directional	White	LED	VAS-ISFLS-W-L
Master Control Unit	-	-	-	VAS-MCU
Flashing Control Unit	-	-	-	VAS-FCU

# LED ELEVATED IDENTIFICATION BEACON LIGHT

LED Elevated Airport Beacon is used to help pilots easily identify an airport from the air, especially at night or in low visibility conditions, or when surrounding lights make the airport difficult to see.

## KEY USP

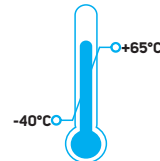
- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment

## KEY FEATURES

- ✓ ICAO & FAA compliant design for reliable airfield lighting
- ✓ Professional heat dissipation ensures long LED life
- ✓ High-efficiency power factor circuit for stable performance
- ✓ Designed to withstand wind speeds up to 161 km/h while delivering stable and efficient aviation lighting performance
- ✓ High-strength standard driving motor with long service life, low noise operation, and a flash rate of 22–26 flashes per minute.
- ✓ Controller is isolated from the LED head to protect it from heat and improve reliability



ICAO & FAA Compliance verified  
by third-party testing



Smooth outer glass surface for easy cleaning  
and reduced dirt build-up



Light-weight, corrosion-resistant aluminium alloy  
body with powder coating for environmental  
protection

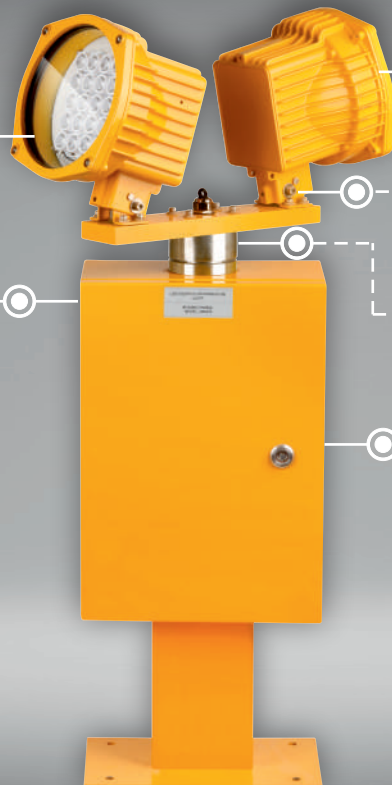


High-strength forged aluminium top head with  
excellent corrosion resistance and heat dissipation

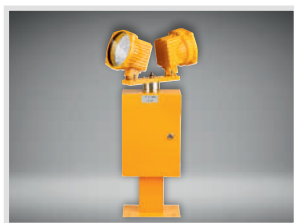
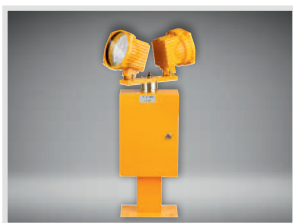
Vertical angle adjustable up to 5°

12 RPM rotation for consistent beacon signaling.

Modular Design easy and quick replacement of  
components



## AVAILABLE TYPES OF LIGHTING UNIT



Type	Identification Beacon Light	Identification Beacon Light
Variants	Bi-directional, L-801 A (Medium intensity)	Bi-directional, L-802 A (High intensity)

## TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1 Aerodrome Design Manual DOC 9157 Part 4&5
	FAA Compliance	AC-150/5345-12F, Engineering Brief 67D
Light Characteristics	Available Colors	Green and White
	Operation Mode	Steady burning
	LED Life Experience (hours)	>100,000
Electrical Characteristics	Operating Voltage	220/240AC
	Power(W)	190W

## PHOTOMETRIC DATA

Light Type	Standard	Flash frequency	Elevation Angle		Color	Intensity of Flash in Cd
			1°	2°		
Identification Beacon Light (L-801 A)	AC-150/5345-12F Clause No. 3.3.4	22-26 (fpm)	1°	2°	Alternate white and green	25,000
			3°	7°		50,000
			8°	10°		25,000
Identification Beacon Light (L-802 A)	AC-150/5345-12F Clause No. 3.3.4	22-26 (fpm)	1°	2°	Alternate white and green	37,500
			3°	7°		75,500
			8°	10°		37,500
Chromaticity	ICAO Annex. 14 Fig A1-1b					

**Note:** The effective intensity of colored lights must not be less than the values specified for white light multiplied by the following factors: yellow - Green - 0.15.

## ORDERING INFORMATION

Light Type	Direction	Light Color	Light Source	Light Model No.
Identification Beacon Light	Bi-directional	White and Green	LED	VAS-IB-GW-L

# LED AIRFIELD GUIDANCE ULTRA SLIM SIGN BOARD

Airfield Sign boards are used for providing guidance & information on runways & taxiways.

## TYPE OF SIGNBOARD

- ✓ VAS-SL-MAGS
- ✓ VAS-SL-SNI
- ✓ VAS-SL-WGS

## KEY USP

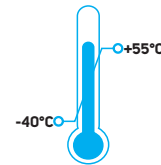
- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment



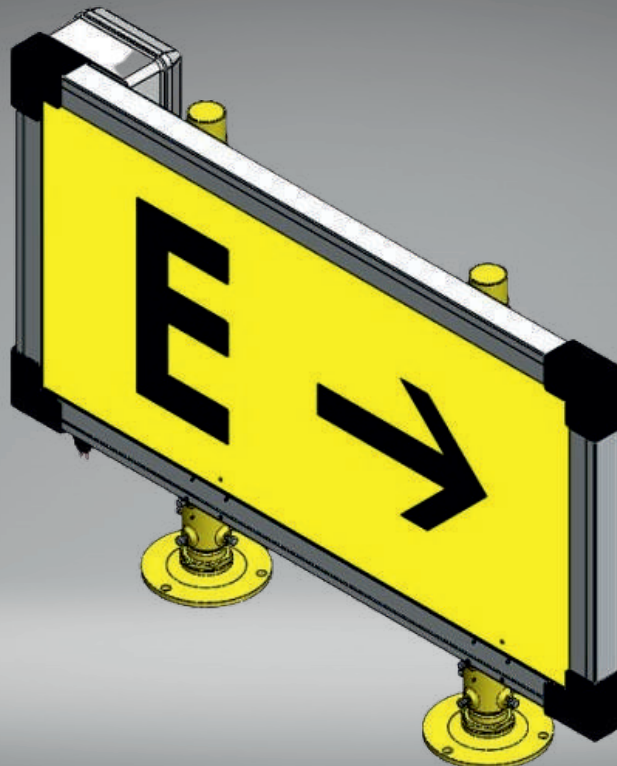
ICAO & FAA Compliance verified  
by third-party testing

## KEY FEATURES

- ✓ Easy installation and easy maintenance at low cost
- ✓ Ultra Slim Sign Board with 45 mm thickness
- ✓ Aluminium alloy extruded profile, light weight, corrosion resistant anodized, designed for use in harsh environments
- ✓ Any topology of CCR s designed in accordance with ICAO or FAA requirements can be used
- ✓ Energy-efficient long-life LEDs for low power consumption
- ✓ Equipped with single sided light source and evenly illuminated display with advance light guiding system
- ✓ An integrated, encapsulated electronic converter for Series circuit (2.8-6.6A) or 230VAC circuit



322 kph



## SIGNBOARD COLOR

Sign Board Type	Color	
	Back Ground	Text
Mandatory	Red	White
Location	Black	Yellow
Information	Yellow	Black

## TECHNICAL SPECIFICATION

Specification	Parameter	Description
Compliance	ICAO Compliance	ICAO Annex 14, Vol. 1 Aerodrome Design Manual DOC 9157 Part 6
	FAA Compliance	AC-150/5345-44
Performance	Power Factor	>95%
	Environmental Temp.	-40°C to +55°C
Electrical supply	Constant Current Regulator (Series System)	2.8A~6.6A
	Mains Power System (Constant Voltage)	230VAC

## POWER CONSUMPTION

Sign Board Length	Supply	Wattage (Appox.)	Transformer Size (Min.)
Up to 1m	6.6A	24W	30W
1m~1.5m	6.6A	24W-36W	45W
1.5m~2m	6.6A	36W-48W	65W
2m~3m	6.6A	48W-72W	100W

## PHOTOMETRIC DATA

For Visual range: <800m	
Color	Min. Required
Red	30 Cd/m <sup>2</sup>
Yellow	150 Cd/m <sup>2</sup>
White	300 Cd/m <sup>2</sup>

For Visual range: >800m	
Color	Min. Required
Red	10 Cd/m <sup>2</sup>
Yellow	50 Cd/m <sup>2</sup>
White	100 Cd/m <sup>2</sup>

# CONSTANT CURRENT REGULATOR & MICRO PROCESSOR CONSTANT CURRENT REGULATOR

## KEY USP

- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment



61820-3-2

**ICAO, IEC & FAA Compliance verified  
by third-party testing**

## KEY FEATURES

- ✓ Remote Control Operation
- ✓ Nominal RMS output current (2.8A, 3.4A, 4.1A, 5.2A, 6.6A)
- ✓ Failure Indications for SCR Fail, Over Current, Open Circuit with alarm and failure indication for insulation resistance
- ✓ Output Tapping Arrangements as per requirement
- ✓ EEPROM and RAM for record of faults or error in previous operation
- ✓ Stable Output Current
- ✓ HMI Control and Display Unit
- ✓ Parallel Communication
- ✓ Serial Communicatio
- ✓ Open Ckt 1 to 1.5A
- ✓ Current Regulation Error



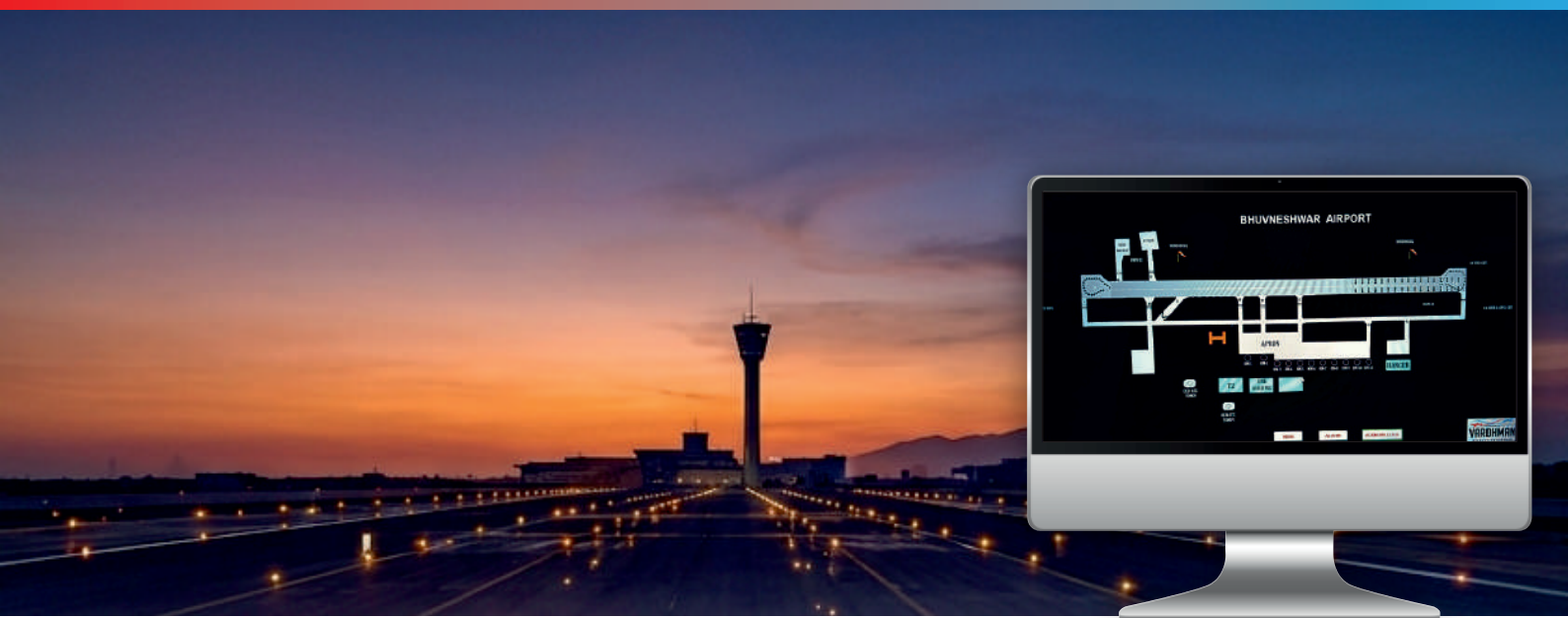
## Performance

- ✓ Efficiency: >90%
- ✓ Temperature Rise:  $\leq 60^{\circ}\text{C}$
- ✓ Output Current Stability:  $\pm 0.05\%$  of Nominal Current
- ✓ Current Output: 5 Steps (2.8A, 3.4A, 4.1A, 5.2A, 6.6A) and 7 steps is optional as per requirement.

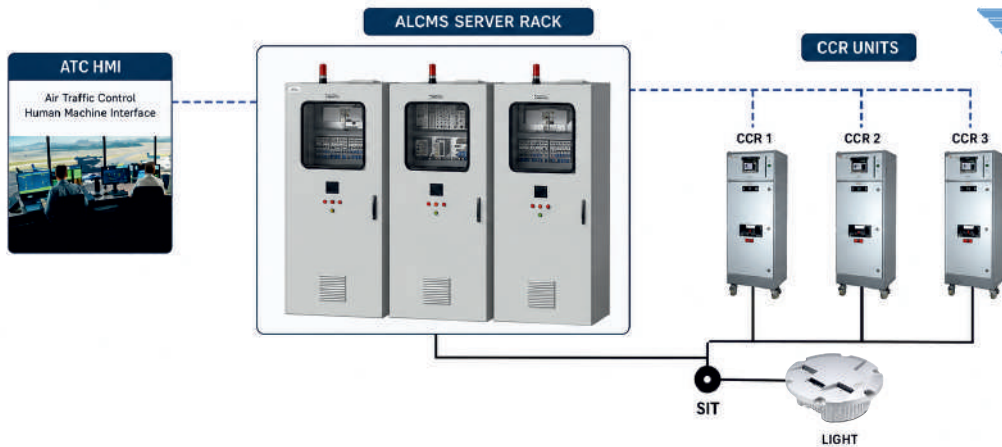
## Environmental Properties

- ✓ Relative Humidity:  $\leq 95\%$
- ✓ Working Temperature between  $-40^{\circ}$  to  $55^{\circ}$  degree
- ✓ Output Current Stability:  $\pm 0.05\%$  of Nominal Current
- ✓ Altitude Range of 0 to 10000 feet above Mean Sea Level
- ✓ Can withstand Salt laden atmosphere

# AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM



## ALCMS SYSTEM ARCHITECTURE



ICAO, IEC & FAA Compliance verified by third-party testing

## SYSTEM OVERVIEW

- ✓ Centralized ATC HMI captures operator commands and sends them to the ATC computer for processing and encoding.
- ✓ High-speed OFC/CAT-6 network ensures reliable communication with electrical vault processors.
- ✓ Electrical vault processors decode commands, execute actions, and return CCR status for real-time monitoring.
- ✓ Intuitive touchscreen HMIs with true-scale airfield mimic display for clear visualization and control.
- ✓ Enables time-critical control and monitoring of airfield lighting and integrated systems (sensors, NAVAIDs, weather, etc.)
- ✓ Advanced features include alarm management, utilities control, maintenance workflows, and rule-based routing in a layered interface.

## KEY FEATURES

- ✓ VAS-ALCMS enables centralized control and monitoring of airfield lighting and visual aids, enhancing operational safety while offering scalable functionality and seamless integration with airport systems.
- ✓ VAS-ALCMS is a distributed, scalable electrical vault control system that provides high-speed, redundant monitoring and control of airport lighting, featuring intuitive touchscreen HMIs and seamless subsystem integration to enhance operational efficiency and safety.
- ✓ VAS-ALCMS is a software-controlled, scalable system supporting full AGL-based ground movement guidance, with fail-safe operation that maintains last state and ensures equipment safety during network or power failures.

# PRIMARY CONNECTORS

## KEY USP

- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment



ICAO & FAA Compliance verified  
by third-party testing

## KEY FEATURES

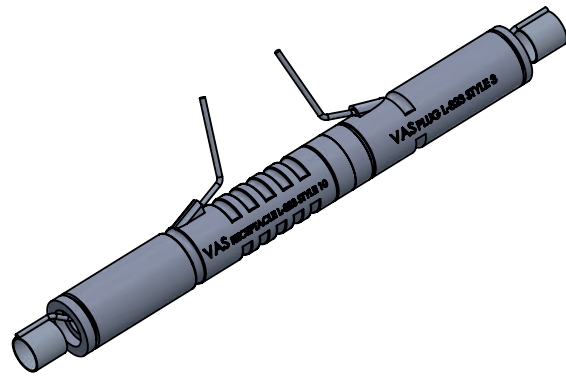
- ✓ Quick on-site installation.
- ✓ Connectors are resistant to abrasive chemicals and all weather conditions
- ✓ Impact resistance, fatigue resistance, tear strength, high friction resistance, and other high-performance mechanical properties.
- ✓ VAS connectors provide watertight and durable installation in any environment.

**FAA AC 150/5345-26, L-823, Styles 3 & 10, Class B**  
**ICAO Annex 14, Part 5, Electrical Systems**

### VAS PC (Unscreened)



### VAS PC-E (Screened)



## DIMENSIONAL DATA

VAS Type	Type	FAA Type	Conductor size	AWG	Cable diameter
VAS PC-1	Plug / Receptacle	Class-B Type I, Style-3 and 10	6 sq. mm <sup>2</sup>	8	10-13.5 mm
VAS PC-3	Plug / Receptacle	Class-B Type I, Style-3 and 10	16 sq. mm <sup>2</sup>	8	10-13.5 mm
VAS PC-E-1	Plug / Receptacle	Class-B Type I, Style-3 and 10	6 sq. mm <sup>2</sup>	12-10/8	14-17 mm
VAS PC-E-3	Plug / Receptacle	Class-B Type I, Style-3 and 10	16 sq. mm <sup>2</sup>	16-14	14-17 mm

## KEY USP

- ✓ Made in India Manufacturing Excellence
- ✓ Zero-Downtime Spare Support
- ✓ All-Weather, Power-Stable Performance
- ✓ Fastest Delivery & Deployment



ICAO & FAA Compliance verified  
by third-party testing

## KEY FEATURES

- ✓ Quick on-site installation.
- ✓ The plug and receptacle are delivered separately.
- ✓ Connector kits cover all currently available airfield lighting cables.
- ✓ Fast and easy watertight connection between the secondary cable and the series isolating transformer.
- ✓ VAS connectors provide watertight and durable installation in any environment.

## FAA AC 150/5345-26, L-823, Type II, Class B ICAO Annex 14, Part 5, Electrical Systems



**VAS SP 1-series (Plug)**



**VAS SR 1-series (Receptacle)**

## DIMENSIONAL DATA

VAS Type	Type	FAA Type	Conductor size	AWG	Cable diameter
VAS SP- 1	Plug	Plug, Class-B Style-5	1.5 to 2.5 mm <sup>2</sup>	16-14	11-12 mm
VAS SP- 1.1	Plug	Plug, Class-B Style-5	4.0 to 6.0 mm <sup>2</sup>	12-10/8	11-12 mm
VAS SP- 1.2	Plug	Plug, Class-B Style-5	4.0 to 6.0 mm <sup>2</sup>	12-10/8	11-12 mm
VAS SR- 1	Receptacle	Receptacle, Class-B Style-12	1.5 to 2.5 mm <sup>2</sup>	16-14	11-12 mm
VAS SR- 1.1	Receptacle	Receptacle, Class-B Style-12	4.0 to 6.0 mm <sup>2</sup>	12-10/8	11-12 mm
VAS SR- 1.2	Receptacle	Receptacle, Class-B Style-12	4.0 to 6.0 mm <sup>2</sup>	12-10/8	11-12 mm

## KEY USP

- ✓ Made in India Manufacturing Excellence
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## ENCAPSULATION

VAS encapsulation consists of low-pressure insert molding and high-pressure over-molding technologies, which provides durable and hermetically sealed encapsulation for the most sensitive PCBs, embedded cable assemblies, connectors, and various power electronic components in harsh underground electrical environments. VAS molding technology provides:

- ✓ Excellent bonding
- ✓ Economic production output and price competitiveness
- ✓ Consistent quality of automated manufacturing process

## MATERIALS

The transformer is duly insulated and covered with Thermoplastic Vulcanized (TPV), having excellent electrical and mechanical properties, as well as good chemical resistance. TPV resists weathering, UV radiation, and ozone exposure. The TPV material also resists temperature effects up to 140°C.

All contacts, such as primary pins and sockets and secondary sockets, are made of copper dula nichrome plated with. The sockets are supplied with a bronze-type sleeve/spring to ensure adequate contact pressure.

## CONNECTIONS

The primary leads are 8.3 sq.mm size with a length of 60cm as per the requirement of FAA L-823, Style 2 Plug and Style 9 receptacle.

The secondary leads are 2.5 sq.mm size with a length of 120cm as per the requirement of FAA Style 8 Receptacle.



## ELECTRICAL PARAMETERS

- ✓ Rated power 10 - 300 W
- ✓ Rated current 6.6 A/6.6 A
- ✓ Rated Voltage 5000V/600V
- ✓ Power factor > 0,98
- ✓ L (leak) 10μH - 80 μH
- ✓ L (magn) 10mH - 50 mH
- ✓ Temperature range -25° C to +55° C

## ELECTRICAL INFORMATION

VAS Type with Earthing	VAS Type without Earthing	Rated power in watts	Power Range in watts	FAA Type	Rated Current in Amps	Load in Ω	Power Factor	Efficiency in %	Inductance Leakage in μH	Magnetic Leakage in mH	Short Circuited Current	Open Circuited Voltage
VAS 615E	VAS 615	10/15	10-15	L-830-16 L-831-16	6.6/6.6	0.34	> 0.98	> 70	< 15	< 10	< 6.70	< 5
VAS 625E	VAS 625	20/25	20-25	L-830-17 L-831-17	6.6/6.6	0.57	> 0.98	> 70	< 15	< 10	< 6.70	< 8
VAS 645E	VAS 645	30/45	25-60	L-830-1 L-831-1	6.6/6.6	1.15	> 0.98	> 80	< 30	< 20	< 6.70	< 12
VAS 665E	VAS 665	65	50-85	L-830-3 L-831-3	6.6/6.6	1.60	> 0.98	> 80	< 30	< 20	< 6.70	< 16
VAS 6100E	VAS 6100	100	80-125	L-830-4 L-831-4	6.6/6.6	2.24	> 0.98	> 85	< 30	< 20	< 6.70	< 25
VAS 6150E	VAS 6150	150	120-180	L-830-18 L-831-18	6.6/6.6	3.58	> 0.98	> 90	< 40	< 25	< 6.70	< 30

## DIMENSIONS

VAS Type with Earthing	VAS Type without Earthing	OD in mm	Length in mm	Height in mm	Weight in kgs
VAS 615E	VAS 615	100	133.5	60	2.2
VAS 625E	VAS 625	100	133.5	60	2.4
VAS 645E	VAS 645	115	148.5	70	2.8
VAS 665E	VAS 665	115	148.5	70	3.0
VAS 6100E	VAS 6100	125	158.5	70	3.5
VAS 6150E	VAS 6150	140	173.5	75	4.2

# INTEGRATED R&D, MANUFACTURING & TESTING INFRASTRUCTURE

End-to-end engineering, manufacturing and testing facility for advanced Airfield Ground Lighting (AGL), Signage and Airfield Systems.

## INNOVATE | MANUFACTURE | TEST | DELIVER

 <p><b>ENGINEERING &amp; DESIGN</b></p>	 <p><b>R&amp;D INNOVATION LAB</b> Product research, development and prototyping</p>	 <p><b>PCB DESIGN &amp; ELECTRONICS</b> Embedded electronics design and development</p>	 <p><b>CAD DESIGN &amp; 3D MODELING</b> Mechanical design, simulation and product validation</p>	<p><b>OUR CAPABILITIES</b></p> <ul style="list-style-type: none"> <li> <b>2,250+ sp.ft</b> State-of-the-art manufacturing facility</li> <li> <b>50+</b> Skilled engineers &amp; technicians</li> </ul>
 <p><b>MANUFACTURING &amp; ASSEMBLY</b></p>	 <p><b>PCB SOLDERING PROCESS</b> Precision soldering &amp; quality conformance</p>	 <p><b>COMPONENT ASSEMBLY</b> Skilled assembly &amp; integration of electronic components</p>	 <p><b>PRODUCTION LINE OPERATIONS</b> Streamlined production ensuring consistency &amp; quality</p>	<ul style="list-style-type: none"> <li> <b>End-to-End In-house capabilities</b> from design to dispatch</li> <li> <b>ISO 9001:2015</b> Quality management system</li> <li> <b>Airport Grade Systems</b> Built for reliability safety &amp; compliance</li> <li> <b>Make in India</b> Proudly designed &amp; manufactured in India</li> </ul>
 <p><b>TESTING &amp; VALIDATION</b></p>	 <p><b>LIGHT TESTING RACKS</b> LED burn-in, aging &amp; reliability performance testing</p>	 <p><b>ELECTRONIC TESTING</b> Functional &amp; performance testing of assemblies</p>	 <p><b>PRODUCT DISPLAY</b> Showcasing our complete range of high-quality airport lighting and airfield solutions</p>	<p><b>KEY HIGHLIGHTS</b></p> <ul style="list-style-type: none"> <li>✓ Advanced R&amp;D and Electronics Development</li> <li>✓ Precision Manufacturing &amp; Quality Assurance</li> <li>✓ Comprehensive Testing &amp; Quality Assurance</li> <li>✓ On-time Delivery &amp; Global Standard</li> </ul>

QUALITY | RELIABILITY | SAFETY | BUILT INTO EVERY SYSTEM

  
DESIGN & DEVELOPMENT

  
PROTOTYPE & VERIFICATION

  
TESTING & VERIFICATION

  
MANUFACTURING & ASSEMBLY

  
DEPLOYMENT & SUPPORT

