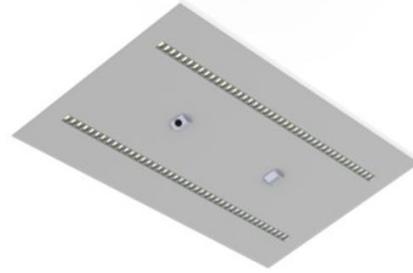**ᚴ JUGANU**

Smart Tulip

Smart LED Panel System

The **Tulip** family of panel fixtures for retail and office environments by Juganu is efficient, lightweight, and reliable.

They deliver high system efficacy of up to 140 LPW with a CRI above 80, providing consistent, high-quality lighting over time.

Optimized optics ensure even illumination that meets international standards for both retail and office spaces.

Tulip integrates high-resolution optical sensors and onboard edge AI, enabling real-time computer vision analytics directly from the fixture. All data is processed locally, and only anonymized insights are transmitted to the cloud, preserving privacy while powering smart applications. The system also supports seamless third-party integration through flexible APIs, unlocking a wide range of use cases. No PoE is required**,** offering simple installation and enhanced deployment flexibility.

CE

Features

- Dual high-resolution cameras supporting both computer vision analytics and video streaming

- Wireless connectivity - Powered by AC only (Ethernet Is not required)

- Integrated edge processor with a powerful GPU for efficient AI processing and minimal latency

- Wirelessly controlled and monitored for easy access and management

Benefits

- All-in-one solution, integrating multiple sensors within a single design

- Ensures privacy by processing AI locally inside the lamp, with only raw data sent to the cloud

- Serves as infrastructure for gathering both real-time insights and BI statistics

- Transforms any space into a digital smart environment

- Quick and easy installation

- High lumen output with excellent energy efficiency

ᚴ JUGANU

Smart Tulip

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Retail

GENERAL INFORMATION

Dimensions (L*W*H)	595 x 595 x 47.5 mm, 23.6 x 23.55x 1.87 in 595 x 1195 x 46 mm, 23.6 x 47.2 x 1.81 in
Weight	4 kg 8.8 lb 8 kg, 17.6 lb
Materials	Body: Aluminum, Steel, Polycarbonate, Silicon

OPERATING AND ELECTRICAL

Power Consumption	Up to 80W - Lighting Up to 25W – Smart Capabilities
Power Factor	up > 0.92, max current THD 15% at 220V
Operating Voltage	110 – 240 VAC
Maximum Voltage	264 VAC
Operating Frequency	47 – 63 Hz
Dimming	Wireless control
Operating Temperature	0°C to +40°C (32°F to +104°F)
Cooling	Passive Cooling
Ingress Protection	IP30

LIGHTING CHARACTERISTICS

Lumen Maintenance	TM21 based on LM80 L70 > 120,000 hours L90 > 60,000 hours
Correlated Color Temperature (CCT)	3000K - 5000K
Color Rendering Index (CRI)	>80

Smart Tulip

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Retail

EMBEDDED CAMERAS

Number of Cameras	2
Resolution	Sensor: Sony, Max Resolution: 12MP 4056(H) x 3040(V)
Field of View (FOV)	87° H, 104° D Additional lenses are optional and can be configured at the time of purchase

INTEGRATED SENSORS

Audio (Microphone)	Microphone for noise level (dB)
Environmental Sensor	Measuring : VOC, Pressure, RH, Temp

JNET 2 MULTI-LEVEL WIRELESS BACKHAUL

Wireless technology	802.11ax 2x2 , UNII 1&3
Max Aggregated EIRP	< 36dBm
Antenna Types	Omni 2X2

EDGE PROCESSING

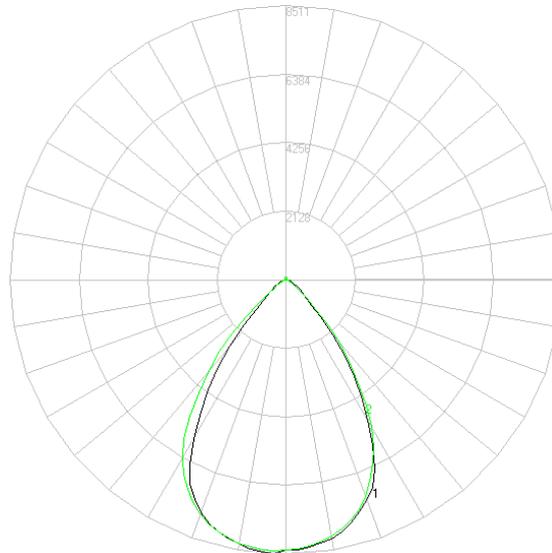|	
GPU	384 NVIDIA CUDA® cores and 48 Tensor cores
CPU	6-core NVIDIA Carmel Arm
Memory	16GByte Flash
Main AI Processor Performance	21 TOPS

Smart Tulip

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Retail

STANDARDS (additional local standards applicable)
The product is designed to meet the following standards

Group	Standard abbreviation	Description
EMC	IEC 62368-1 / IEC 61347-1 FCC Part 15 Subpart B	Emission
Radio	FCC Part 15 Subparts C & I ETSI EN 300 220 / EN 300 440	USA Europe
Mechanics and Environment	IEC 60529, ETSI EN 300 019-1-3 IEC 60068-2, IEC 60721-3-3	Protection rate Environmental
Safety	IEC 62368-1 IEC 61347-1	Safety of electronic equipment within the fields of Audio/Video, Information Technology and Communication Technology
	UL 62368-1 UL 1598	UL Standard for Safety for the North America market

Photometric Curves

Mounting (Specific installation KIT per mounting type)

o   Recessed for drywall ceiling
o   Recessed for acoustic ceiling
o   Suspended

Performance

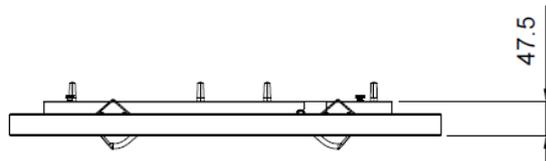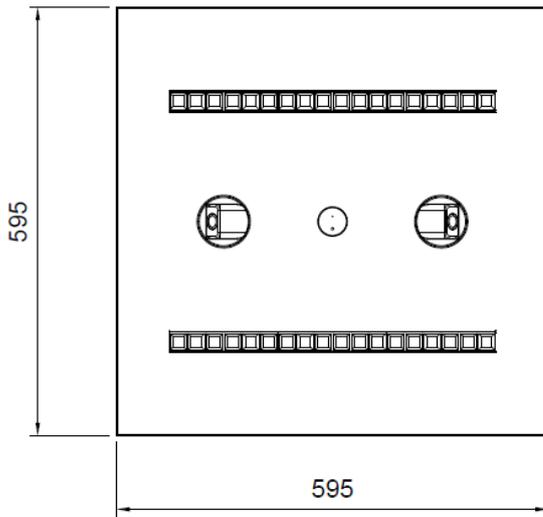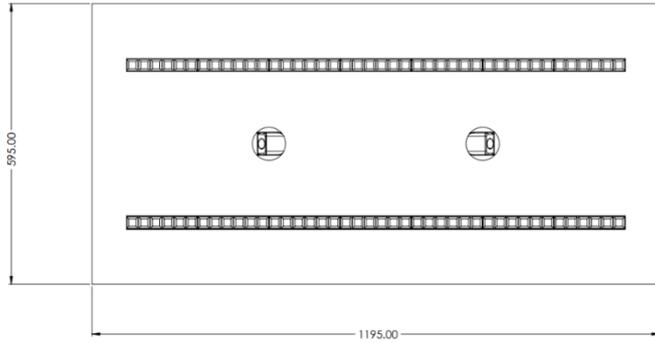| Power [W]	Typ. efficacy [LPW] at 4000K	Total lumens [LM]
80	140	11200

Note : For 600mm x 1200mm panel size

Packaging and Weight

Packaging Dimensions	Net Weight	Gross Weight
1260*636*185 mm	8 kg	9.1 Kg
49.6*25*7.28 in	17.6 lb	20 lb

Note : For 600mm x 1200mm panel size

Mechanical Dimensions

Ordering Information

Product	Family	Power	CCT	Panel Size	Lenses
PL	TULIP	80W	xx	xx	Dxx

Ordering Information

CCT	**30 -** 3000K	
	35 - 3500K	Default
	40 - 4000K	
Panel Size	**S60 -** 600mm x 600 mm	
	S120 - 60mm x 1200mm	
Lenses	**D01 –** H-87°, V-68°, D-104°	
	D02 - H-69°, V-54°, D-82°	
	D03 - H-52°, V-40°, D-63°	Default

Ordering Example

Order Code: JL-PL-TULIP-080W-30-S120-D03

Description

Led Panel 60x120mm with wireless dimming with 3000K and wide FOV cameras