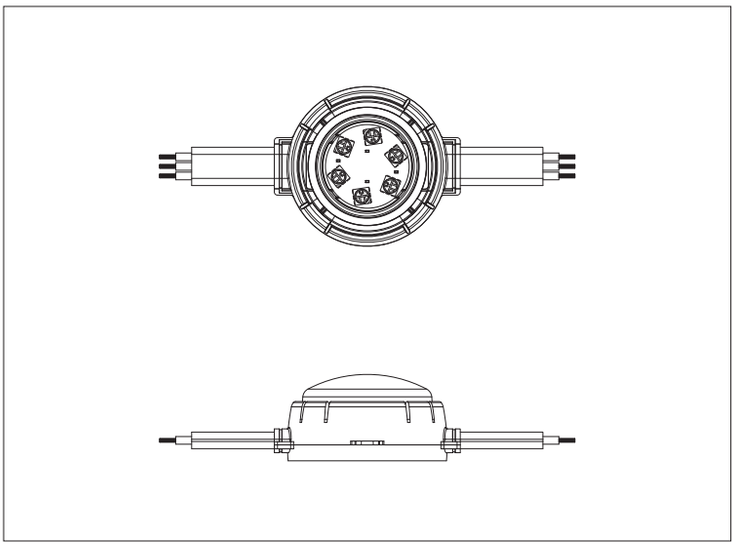
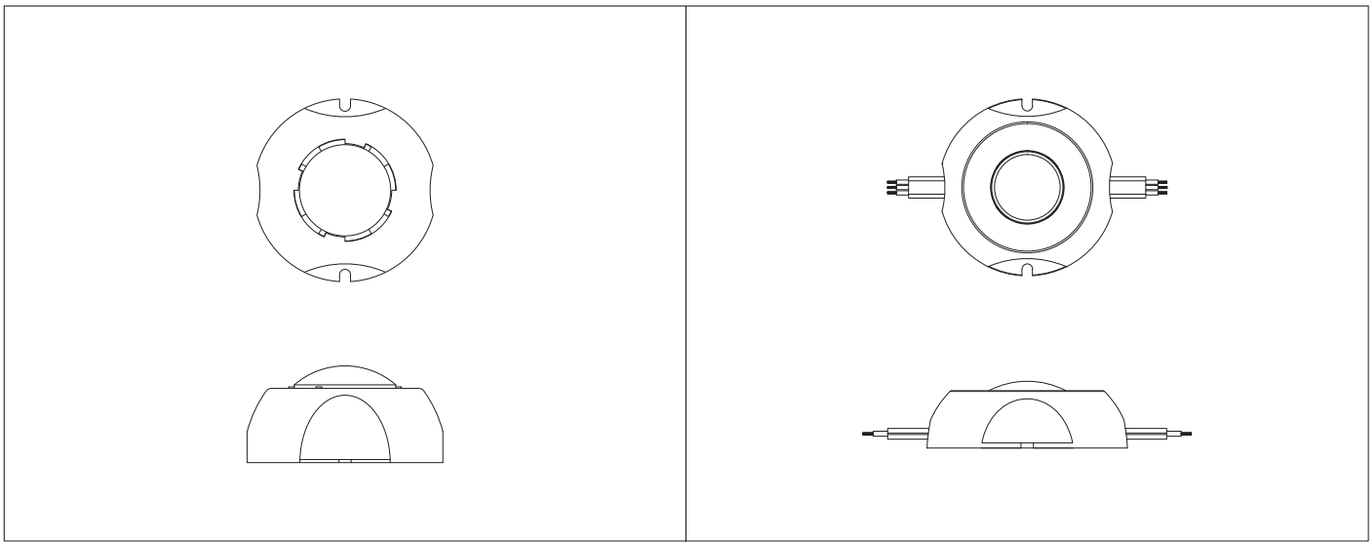


LED Cell

The LEDCell series is a Multi-LED curtain and spot luminaire series which can be produced in any form or measurement for organizations such as concerts,exhibitions,clubs,fairs or light shows. The pixel resolutions of these luminaires can be adjusted depending on the watching distance. Fascinating light shows and graphic animations can be displayed as well as other types of luminaires within this series which react to sound and transmit live feed. These can both be used as fixed or portable due to their flexible design.

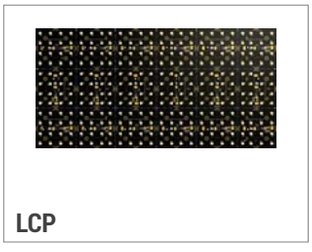
LED Cell Products



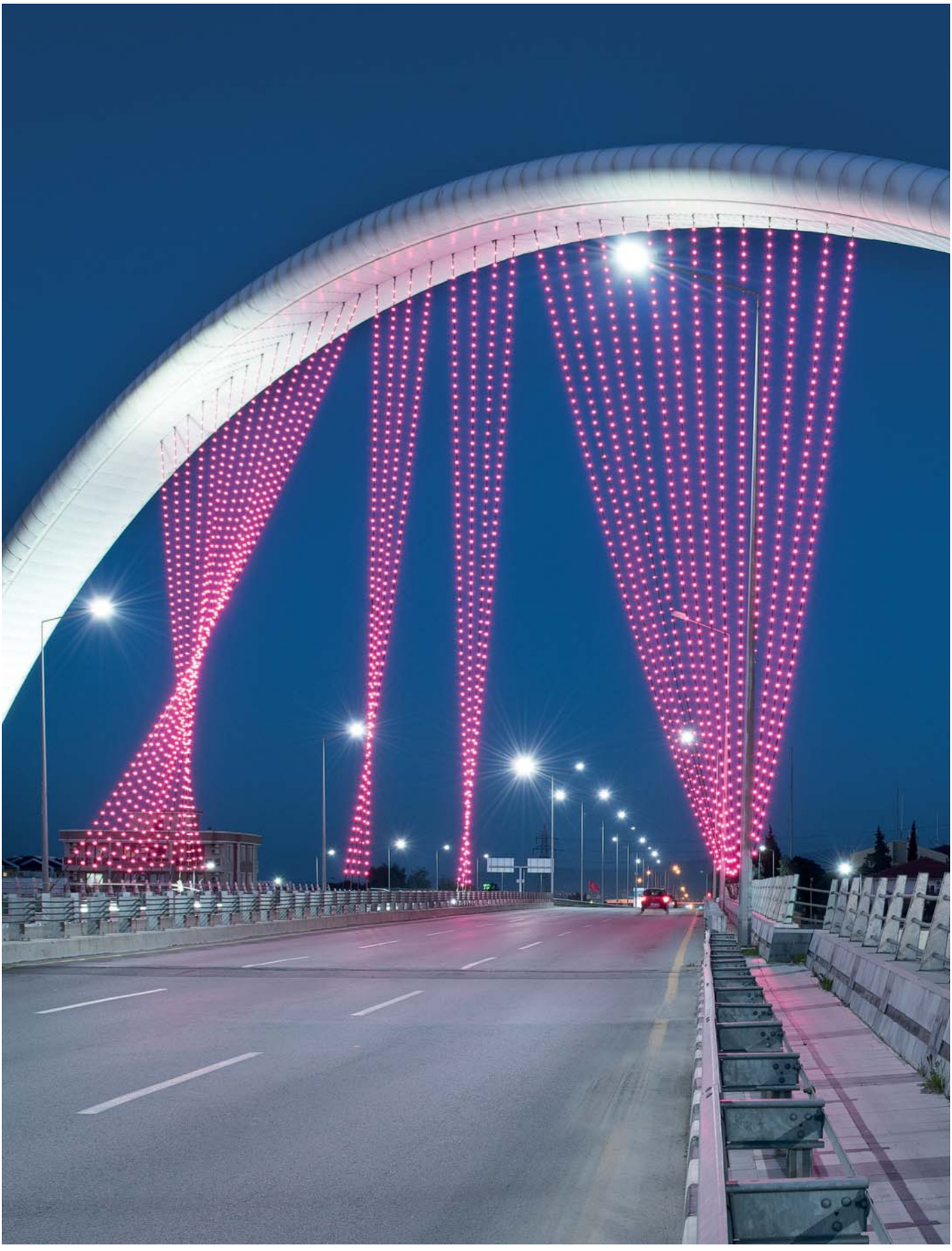
LEDCell - LED Cell Products

CED

CEP

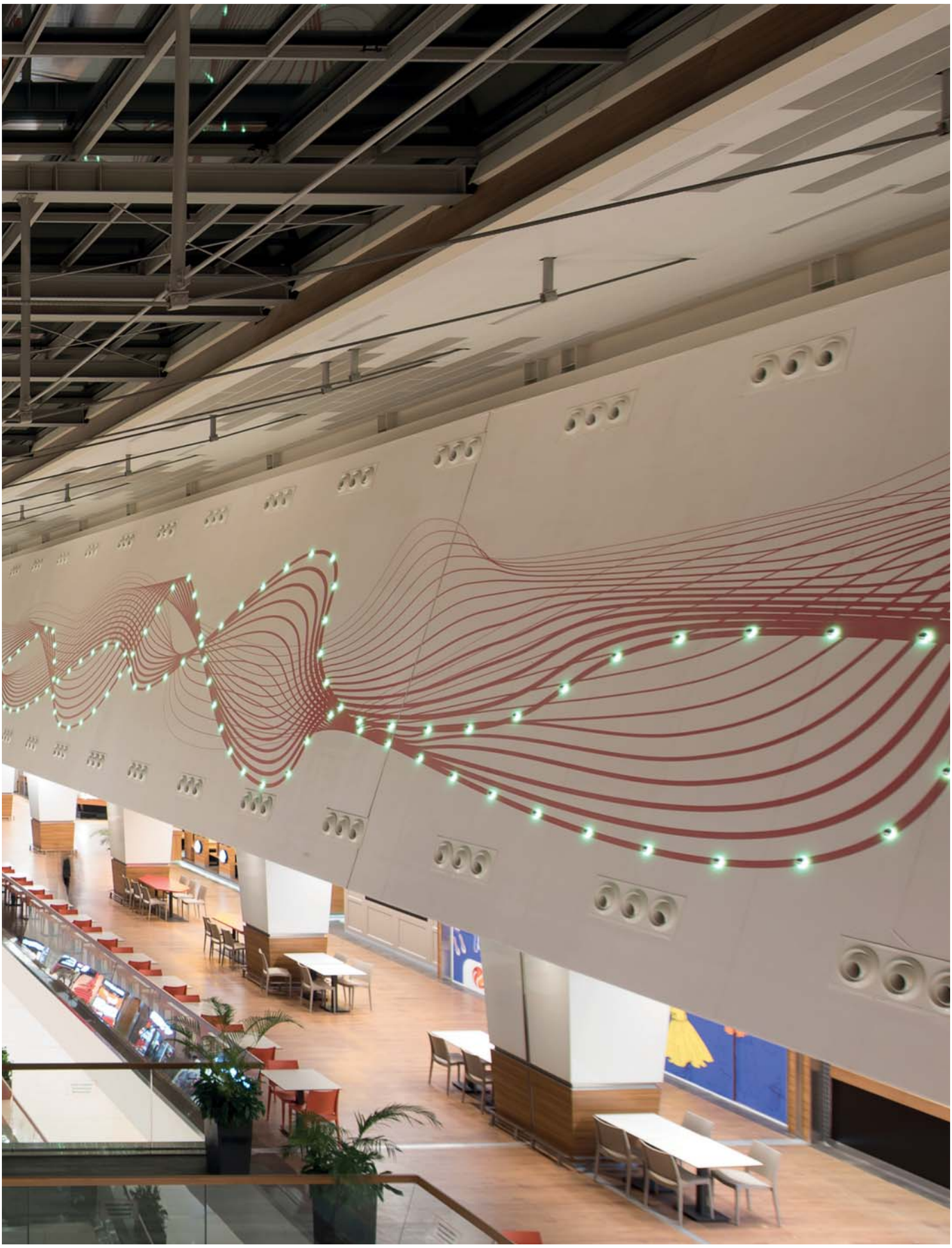


LCP

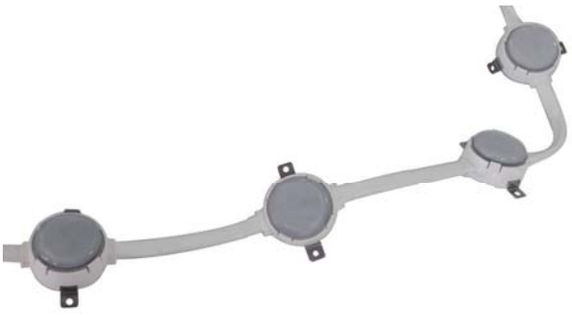


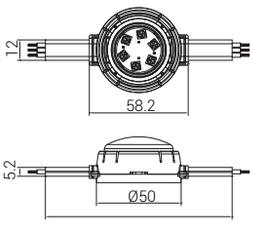
Alparslan Türkeş Bridge, Manisa

LED Cell



Atlaspark, İstanbul





In mm

	PCB & LED & Power	Color Light	Housing Color	Junction	Mounting	
CED	P	C	G	J	M	

P LED & POWER OPTIONS

Product Name	Light Color	Input Voltage (V)	Led Quantity (qty)	Power (W)	Luminous Flux (lm)	Diameter (Ø) (mm)	Product Weight (kg/m)
CED1	WW-NW-CW	24V DC	1	1	120	Ø50	0,09
CED6 DMX	WW-NW-CW	24V DC	6	2	170	Ø50	0,09
CED6 DMX	RGB	24V DC	6	2	-	Ø50	0,09

*Power and Lumen values provided are based off of “cold white (CW) LED”.

ELECTROMECHANICAL SPECIFICATIONS

- Plastic injection body
- Polycarbonate luminaire glass

LED Cell Croma Easy Dot

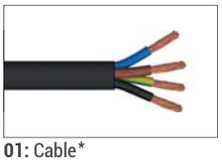
C LIGHT COLOR OPTIONS

WW: Warm White	3000K	**R:** Red	625nm
NW: Natural White	4000K	**G:** Green	525nm
CW: Cold White	6500K	**B:** Blue	465nm
RGB		**A:** Amber	590nm

G HOUSING COLOR OPTIONS

RAL 9005 | RAL 9016

J JUNCTION OPTIONS



01: Cable*

02: IP67 Socket**

*Cable option can be produced in a chain form at a desired length.
** Standard distance between two products with IP67 Socket is 50 cm.

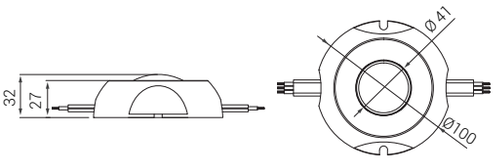
M MOUNTING OPTIONS

01: Surface mount with adhesive

14: Screw Mount

CONTROL SYSTEM OPTIONS

Color Type	RC	PWM	INV PWM	DMX	DALI	0-10V DC	TRIAC
WW-NW-CW	•	•			•	•	
R,G,B,A	•	•			•	•	
RGB							
RGBA/W							
RGB DMX				•			
WHITE DMX				•			



In mm

CEP P C G J

P PCB & LED & Power
C Color Light
G Housing Color
J Junction

P LED & POWER OPTIONS

Product Name	Light Color	Input Voltage (V)	Led Quantity (qty)	Power (W)	Luminous Flux (lm)	Diameter (Ø) (mm)	Product Weight (kg/m)
CEP DMX	WW-NW-CW	24V DC	6	2	150	100	0,2
CEP DMX	RGB	24V DC	6	2	-	100	0,2

*Power and Lumen values provided are based off of "cold white (CW) LED".

ELECTROMECHANICAL SPECIFICATIONS

- Plastic injection body
- Polycarbonate luminaire glass
- 3x1 flat cable

IP 66 | Ta -30° +50° | Ra>85 | 3-step MacAdam | IK 08

LED Cell Croma Easy Pixel

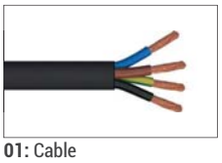
C LIGHT COLOR OPTIONS

WW: Warm White	3000K	**R:** Red	625nm
NW: Natural White	4000K	**G:** Green	525nm
CW: Cold White	6500K	**B:** Blue	465nm
RGB		**A:** Amber	590nm

G HOUSING COLOR OPTIONS

RAL 9005 | RAL 9016 | RAL 9007

J JUNCTION OPTIONS

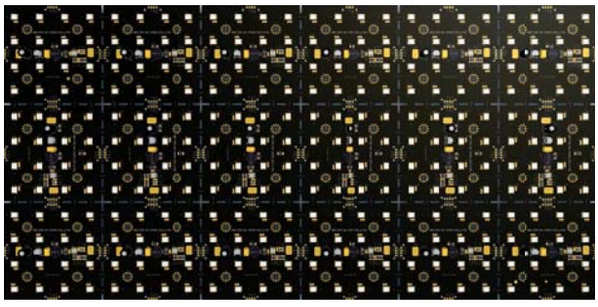


01: Cable

02: IP67 Socket

CONTROL SYSTEM OPTIONS

Color Type	RC	PWM	INV PWM	DMX	DALI	0-10V DC	TRIAC
WW-NW-CW	•	•			•	•	
R,G,B,A	•	•			•	•	
RGB	•						
RGBA/W							
RGB DMX				•			
WHITE DMX				•			



Product Name	Light Color	Input Voltage (V)	Power (W)	Led Distance (mm)	Luminous Flux (lm)	PCB Measurement (mm)	Product Weight (kg)
LEDCell Panel	RGB	5V DC	-	20	-	320x320	
LEDCell Panel	RGB	24V DC	-	24	-	286x575	
LEDCell 20	RGB	5V DC		50			
LEDCell 30	RGB	5V DC		33			

ELECTROMECHANICAL SPECIFICATIONS

- IC Controlled
- Min 8mm/pixel

C LIGHT COLOR OPTIONS*

WW: Warm White	3000K	**R:** Red	625nm	RGB	
NW: Natural White	4000K	**G:** Green	525nm	RGBW	
CW: Cold White	6500K	**B:** Blue	465nm	RGBA	
		A: Amber	590nm		

*Different colors are optional

IP44 IP65 Ta 0° +50° Ta -30° +50° IP66 Ra>85 3-step MacAdam

LED Cell Pixel

LEDCell Panel 5V:
- Used in indoors.
- Input voltage is 5V.
- Application and mounting options depending on the project.
- Led spacing is 2cm.
- Matrix PCB is manufactured in 320mm X 320mm dimensions.

LEDCell 20:
- Designed as 20 pixel per 1 meter.
- Input voltage is 5V.
- Led spacing is 5 cm.
- Can be divided by every LED.
- The profile, which can be utilised with this product, is deep housing profiles. LLI, LLW2, LLU profiles can be listed as an example.
- Outdoor or indoor options are available.
- Custom dimensions are available.

LEDCell Pixel Bar:
This bar is utilised through mounting on FR4 PCB strips with a width of 16 mm and length of 40 cm for indoor implementations at a resolution range of 30mm-70mm/pixel. Single side supply up to 5 meters can be applied by joining the strips. This structure can also be utilised with all LLS, LLK and LLU profiles. Through interconnecting these profiles, video, graphic and animation panels at desired dimensions are created. It can adapted to outdoor use through polymer coating.

LEDCell Pixel Tube:
These products can be utilised via mounting on FR4 PCB strips, with a width of 8 mm and length of 40cm for applications at resolution ranges of 30mm-70mm/pixel in order to establish a flexible structure at in- and outdoors. These strips, by being attached to each other, can be utilised with single-sided supply up to 4 meters. Video, graphic and animation panels can be formed, at desired dimensions, by placing this structure into transparent or diffused polycarbonate tubes, with an outer diameter of 10mm, and attaching strips, which can stretch up to 1-meter diameter. The silicon covers, utilised for the tube, accommodates the use of product for outdoor applications.

LEDCell Panel 24V:
- Used in indoors.
- Input voltage is 24V.
- Application and mounting options depending on the project.
- Led spacing is 2,4cm.
- 18 block matrix PCB can be divided into 18 separate pieces and each can be used by itself.
- There are 288 LEDs on 18 block matrix PCB and 16 LEDs in every block.
- The dimensions of the 18 block matrix are 286mm x 575 mm. The dimensions of a single block is 95mm x 95mm.

LEDCell 30:
- Designed as 30 pixel per 1 meter.
- Input voltage is 5V.
- Led spacing is 3, 33 cm.
- Can be divided by every LED.
- The profile, which can be utilised with this product, is deep housing profiles. LLI, LLW2, LLU profiles can be listed as an example for these profiles.
- Outdoor or indoor options available.
- Custom dimensions are available.

These products can be utilised via mounting on FR4 PCB strips, with a width of 8 mm and length of 40cm for applications at resolution ranges of 30mm-70mm/pixel in order to establish a flexible structure at in- and outdoors. These strips, by being attached to each other, can be utilised with single-sided supply up to 4 meters. Video, graphic and animation panels can be formed, at desired dimensions, by placing this structure into transparent or diffused polycarbonate tubes, with an outer diameter of 10mm, and attaching strips, which can stretch up to 1-meter diameter. The silicon covers, utilised for the tube, accommodates the use of product for outdoor applications.

LEDCell Pixel Chain:
It is consisted of pixels, formed with FR4 PCB with a length of 30mm and width of 16mm or 8mm at pixel spacing longer than 70mm. The resolution of these structures determines the length of the cable used between the pixels. The pixels with 16mm width of these structures are utilised with LLS, LLK and LLU profiles and with 8mm width, on the other hand, by being placed in transparent or diffused polycarbonate tubes, with an outer diameter of 10mm. Once again video, graphic and animation panels, at desired dimensions can be established by means of attaching these structures together.

SYSTEM SPECIFICATIONS

The LED Cell system is much more economical, in comparison with rapid, reasonable and equivalent systems. The product, which is created as a result of imposition of central processor within the LED product via the high integration technique, completely eliminates the overpriced, heavy and burdensome electronic congestion of previous generation RGB systems. This system offers an opportunity for design with its simple and elegant measurements. The array units, which are designed to be flexible in terms of the desired resolutions, can subside to resolutions, starting from 1cm pixel spacing, thus increasing the image quality. The Smart LED, within PLCC casing equipped with high quality RGB LED chips, can ensure the precise processing of all data with the 1.2 MHz processor, available inside the LED, and the transmission of data, unlinked with the LED, to other LEDs. The LED lifetime is secured by driving of LEDs with accurate current intensity via the constant current driver technique. The need for extra components is eliminated by means of the integrated processor and inter-processor LDO. The LED array structure, in conformity with the IP67 Protection Class and also the IP67 outer housing provide double protection against the adversity of weather conditions while working outdoors. The user can easily prepare shows and control the system with the provided software. It can operate on its own, without the need for a computer, by means of uploading the prepared shows to a SD card and loading on the controlling device. This product is a flexible solution for utilisation for animation and show purposes.

RESOLUTION

Highest resolution 8mm/pixel, lowest resolution 300mm/pixel.

DATA TRANSFER

- SD CARD
- Optional Video / VGA / LAN RJ45 / HDMI / WI-FI

LED

PLCC 5050 R, G, B high brightness LED chip + Integrated

ADDRESSING

- Automatic addressing and mapping function with internal CPU
- LED drive with inner constant current source
- 1.677.216 color options
- 256 Grey level detection
- 32 step brightness control
- Signal verification automatic
- Inner 1.2 MHz processor speed
- 15 MHz maximum data speed detection and rendition
- Restructuring of data signal with phase reversal lock and possibility to transfer 1000 LEDs at 1 MHz
- Impact and difficult conditions resistant physical structure with its SMD structure
- Does not require extra electronic component due to its completely integrated structure. Easily enlarged and minimized system structure.

ARRAY STRUCTURE

Compatible to operate outdoors within IP44 as standard and IP65 protection class as optional, can operate at -20 +55 C temperature and %90 relative humidity.

LED Cell Pixel

CONTROL SYSTEM

PC based, minimum 1Ghz processor, 256 Mb Ram, 1GB hard disk, VGA video card, Ethernet port and smart card printer.

CONTROL DEVICE

Each control device has the capacity to drive 2422 LEDs and enables the driving of 196.000 LED units in cascade connection through Ethernet. The animations and shows can be transmitted to the control device with the aid of a computer or installed SD memory units, if desired.

UTILITIES AND SPECIFICATIONS

Animation design and control is ensured via FIBERLI LED BUILD and FIBERLI LED STUDIO software.

- User-friendly, easily comprehensible menus.
- Built-in array maps and easily constructible mapping interfaces.
- Integrated with the programme, easy to use, direct programming of effects
- Text adding, wrapping menus
- Opportunity for handmade ready grid stage entrance
- Feasibility to include stages and effects in between, to the beginning and end.
- Easy image reception in-between to LED from video signal
- WMV, FLV, Jpeg, Mpeg, PNG, PSD sampling
- Utilised control devices can easily be identified to the system
- Software compatible with quickly preparing and executing shows
- Software compatible with Windows operating system