# ATOM SERIES

## TRANSPARENT GLASS LED DISPLAY

PLEDCO

PRISTINE IMAGERY

## PRODUCT
# DESIGN

| FEATURES | BENEFITS |
|---|---|
| Very high transparency | See through with transparency rates from 70% - 80% from just 5 meters viewing distance. |
| Modular design | Standard sized cabinets allow varieties of screen sizes setups |
| Easy installation | A snap locking system on each panel allows an easy and simple installation |
| Light weight and easy transportation | With only 14kg/m2 (including all structure and power supply), the ATOM Series outweigh an average panel by more than 50% |
| High brightness and energy efficiency | Even though the very high transparency rate of the ATOM Series, this LED Display system is still capable of producing 6000cd/m2 |
| Easy maintenance | Modula LED strips allow a very fast and simple maintenance |

## UNPARALLELED
# TRANSPARENCY
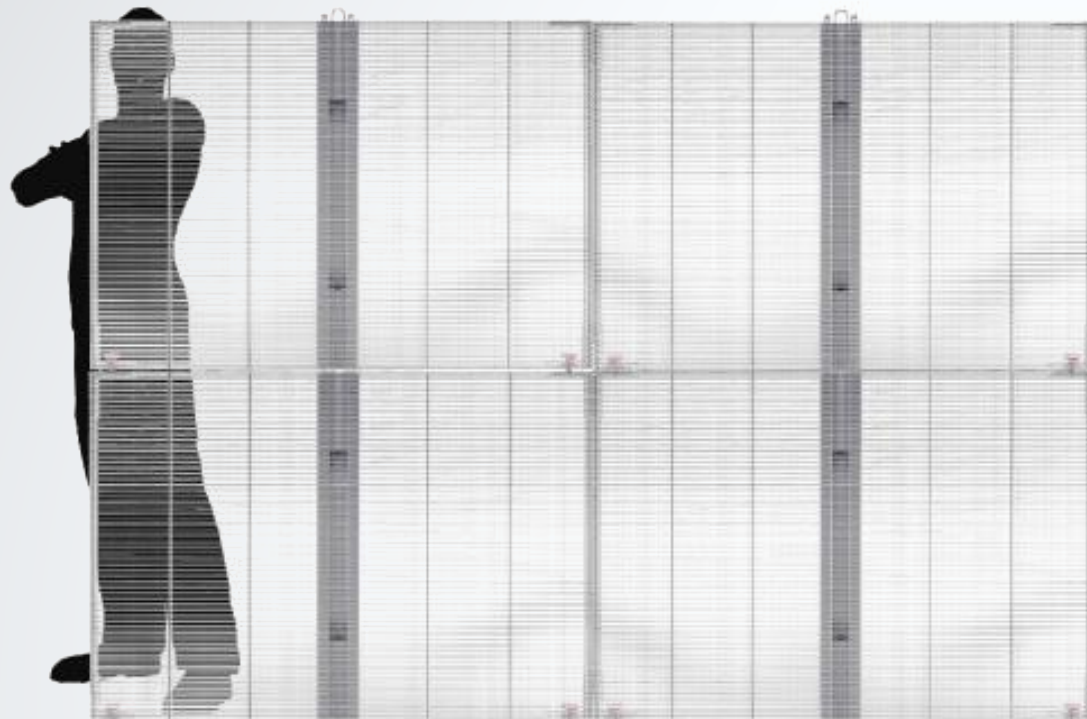




More than 80% transparency. Atom Series displays become undetectable when viewing from 5 meters and beyond.
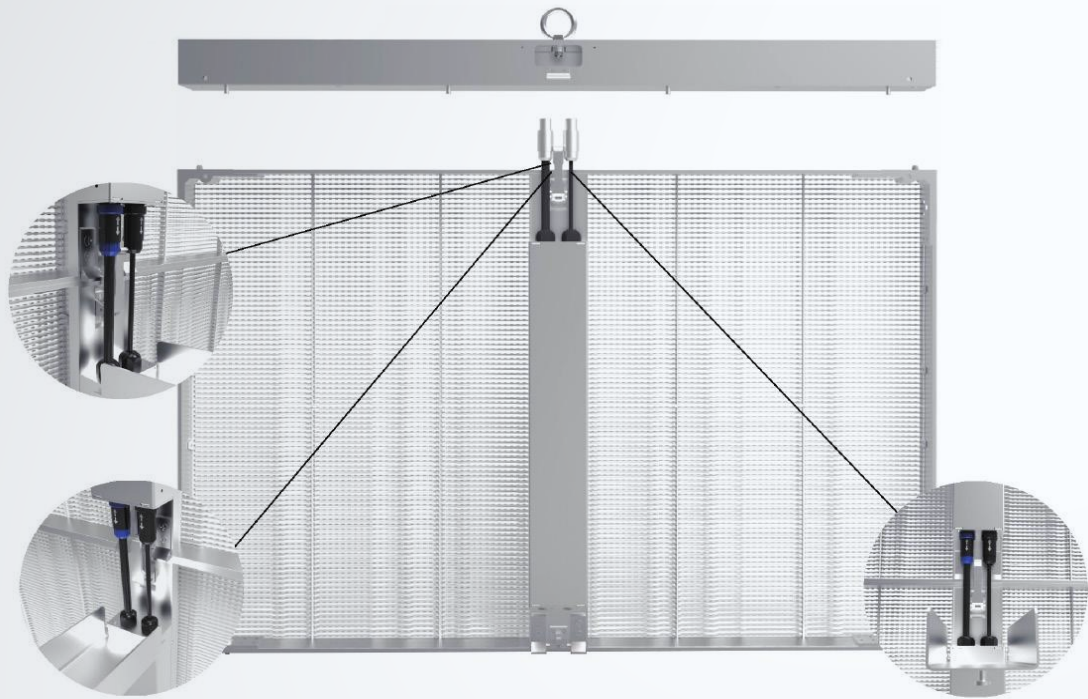
The displays' high resolution allows for incredible graphics and motion effects that combine with transparency in ways that give artists and designers new possibilities for their creative vision.
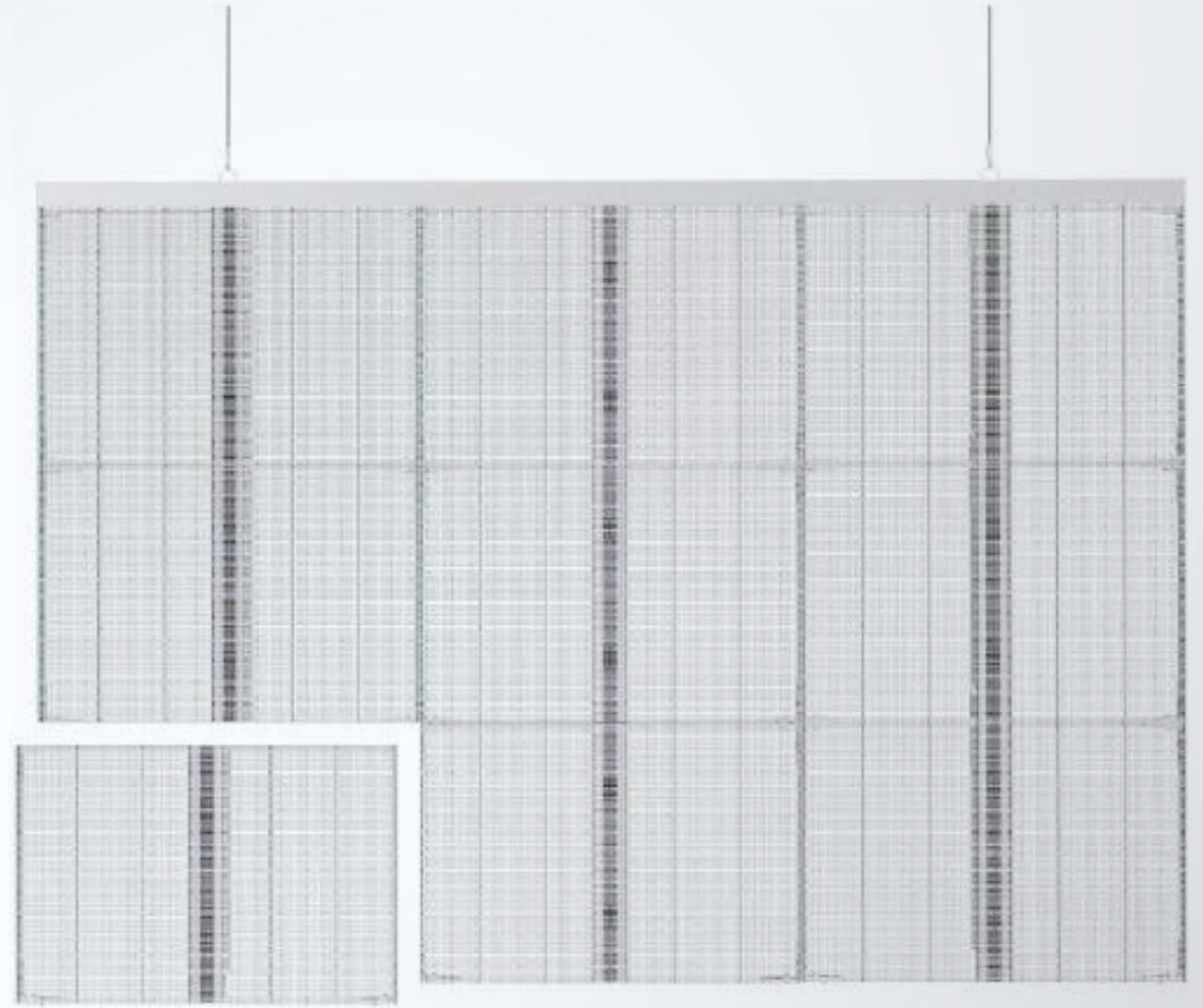
## CABINET
## FEATURES



### QUICK & EASY
### DISMANTLE



### QUICK & EASY
### INSTALLATION



The fast snap locking system allows an easy and fast installation, and the clever power and signal cable layout speeds up installation and disassembling even further.



| Unplug the power cable | Unplug the Data cable | Unlock the snap lock | Disassembly |

**PLEDCO HD DISPLAY**

Our calibration technology reaches all possible X & Y coordinates ensuring you HD broadcasting experience is crystal clear.

# 1

## COLOR
# ENHANCING

After calibrating with our Radiant PM-1400F Calibration System in a dark room, the wave length difference for each color will only be less than 0.01nm. Our patented control system allows users to select several different color spaces such as; 2k (REC709), 4K (REC2020) or create your own color space by using our user-friendly software.
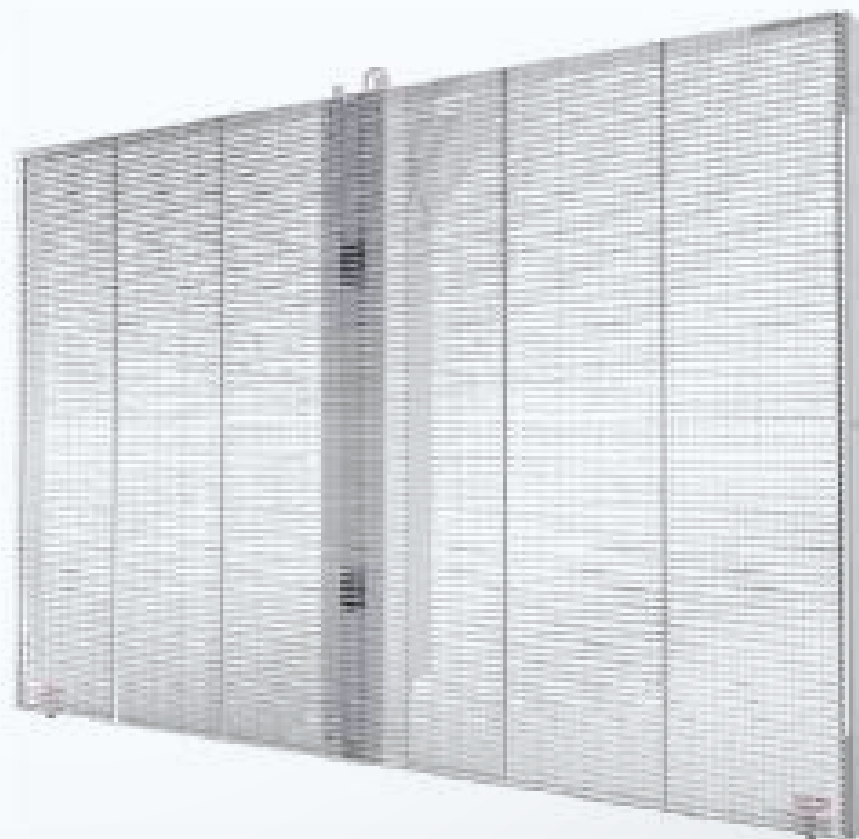
# 2

## COLOR COORDINATION
# PROCESS

The same batch of LED's with discrete distribution are all moved to PAL Mode Chroma Area through color coordinate calibration Technology.

Since each LED batch produced has different coordinates this requires precise color calibration, which in turn allows:

► Allows the LED display to show natural and vivid colors.

► Ensures that all LEDs have been color rendered consistently.

## SYSTEM
# CALIBRATION

All X & Y coordinates are kept in our client project database. When you order new tiles for an existing project we retrieve the original X & Y coordinates. This ensures during calibration all colors are matched properly. Typically, in video mode, no color differences are visible, however, if white has been set at 50% brightness, the user may see a slight difference in color.

# 3

## DIGITAL DATA
# REVISION

If a single pixel fails, the data will be read-out from the EEPROM and then re-wrote to the replacement chip. After this process the brightness value is calibrated again to ensure the uniformity of the entire system, thus providing easy and fast maintainability.

At the same time, the system records every displays' initial calibration data to avoid unevenly brightness caused by led attenuation. The updated screen brightness calibration data and recorded data, both ensure the uniformity of the display's brightness over a period of time.

YPO EDGE
Dubai 2016

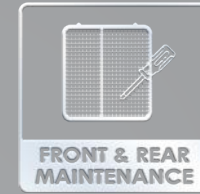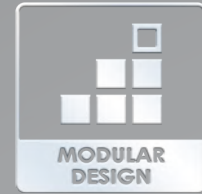**MPU9000 SPECIFICATIONS**

| Input | | | |
|---|---|---|---|
| Type | Channel | Connector | Details |
| DisplayPort | 1 | DisplayPort Standard | Supports DisplayPort 1.2. Max.3840×2160@30Hz |
| HDMI | 3 | HDMI Standard | Supports HDMI 1.4 Max.3840×2160@30Hz |
| DVI | 2 | DVI-I | Analog inputs not supported. DVI1 Supports dual-link Max.2560×1600@60Hz |
| SDI | 1 | BNC | Supports SMPTE 425M-Level A(3G-SDI), SMPTE 292M(HD-SDI), SMPTE 259M-C(SDI) |
| VGA | 1 | HD-15 | Max.1080P@60Hz |
| YPrPb | 1 | 3.5mm jack | Max.1080P@60Hz |
| Genlock | 1 | BNC | SD bi-level and HD tri-level sync, PAL, NTSC, 720p, 1080i/p, 576i/p, 480i/p |

| Output | | | |
|---|---|---|---|
| Type | Channel | Connector | Details |
| DisplayPort | 1 | DisplayPort Standard | Supports DisplayPort 1.2. Max.3840×2160@30Hz |
| HDMI | 1 | HDMI Standard | HDMI1.4.Suports 12bit deep color |
| DVI | 1 | DVI-I | Loop out from DVI2 input |
| SDI | 1 | BNC | Loop out from SDI input |
| Genlock | 1 | BNC | Loop out from Genlock Input |
| SPDIF | 1 | RCA | Supports standard S/PDIF for stereo LPCM or compressed audio up to 192 kHz |
| Headphone | 1 | 6.5mm audio jack | Stereo Audio Output |
| LED Datalink | 6 | Neutrik etherCON | 1Gbps/port |

| Others | |
|---|---|
| Control Methods | USB, Gigabit Ethernet, IR, HMI on the Font Panel |
| Power | Neutrik powerCON connector, 100-240 VAC, 50-60 Hz, Max.25W |
| Temperature | -10 ~ +50 °C |
| Mechanical | 472×375×90 mm |

| Optional | |
|---|---|
| | Fiber optical direct output, single mode or multi mode MPU9000 (FM or FS) |

- Integrated with SWITCH Monitor(2x2), Video Processor, Full-HD Media Payer and LED Display Controller

- Supports SD Card and mSATA SSD Mass Storage devices (up to 256GB for SSD and 200GB for SD)

- Available in fiber version with single mode or multi mode direct fiber output

- Supports DisplayPort 1.2, HDMI 1.4, dual-link DVI and 3G SDI Inputs

- Advanced Faroudja® video processing: MADi and DCDi

- Supports daisy chaining of monitors of up to four streams

- 6GB LED Display Data Link(optional fiber output)

- 6-axis color control independent of ACC

- 4K×2K screen resolution support

- Supports Gigabit Ethernet

- Built-in 6.5mm audio jack

- SPDIF Output by coaxial

- Supports Genlock

- Built-in Monitor

- 16bits Process

# PRODUCT FEATURES

**QUICK INSTALL** | **LOW POWER CONSUMPTION** | **THIN CABINET** | **MODULAR DESIGN** | **REAL-TIME MONITORING** | **HIGH BRIGHTNESS** | **FRONT & REAR MAINTENANCE** | **LIGHT-WEIGHT**

Custom designed by an industry leading Canadian engineer, our ATOM SERIES is equipped with automatic brightness technology to overcome any lighting conditions while delivering HD imagery.

# SPECIFICATIONS

| Model | P3.75-6.66 | P3.75-8 | P5-6.66 | P5-8 | P7.5-8 | P10 | P16 | P20 |
|---|---|---|---|---|---|---|---|---|
| Pixel Pitch | 3.75 | 3.75 | 5 | 5 | 7.5 | 10 | 16 | 20 |
| Scanning Mode | 1/8 | 1/8 | 1/6 | 1/6 | 1/4 | 1/3 | 1 | 1 |
| Pixel Density | 40,000 dots/m2 | 33,333 dots/m2 | 30,000 dots/m2 | 25,000 dots/m2 | 16,667 dots/m2 | 10,000 dots/m2 | 3,906 dots/m2 | 2,500 dots/m2 |
| Pixel Configuration | 1921 | 1921 | 3528 | 3528 | 3528 | 3528 | 3528 | 3528 |
| Module Resolution | 128 x 48 | 128 x 40 | 96 x 48 | 96 x 40 | 64 x 40 | 48 x 32 | 30x 20 | 20 x 16 |
| Module Size | 480 x 320 | | | | | | | |
| Cabinet Size | 960 x 640 | | | | | | | |
| Cabinet Resolution | 256 x 96 | 256 x 80 | 192 x 96 | 192 x 80 | 192 x 80 | 96 x 64 | 60 x 40 | 40 x 32 |
| Brightness | 5500 - 6000 nits | | | | | | | |
| Refresh Rate | >1920 Hz | | | | | | | |
| Transparency Rate | 72% | 75% | 72% | 75% | 75% | 80% | 83% | 86% |
| Weight (kg/m2) | 11 kg | 10.2 kg | 10 kg | 9.5 kg | 9 kg | 8 kg | 7.2 kg | 6.5 kg |
| Viewing Angle | 140* (H) x 140* (V) | | | | | | | |
| Power Consumption | 690/207 W/m2 | 670/201 W/m2 | 696/209 W/m2 | 670/203 W/m2 | 670/204 W/m2 | 650/195 W/m2 | 650/218 W/m2 | 650/218 W/m2 |
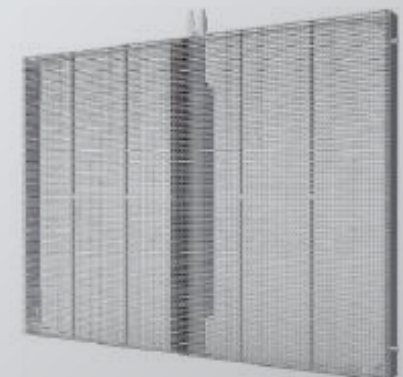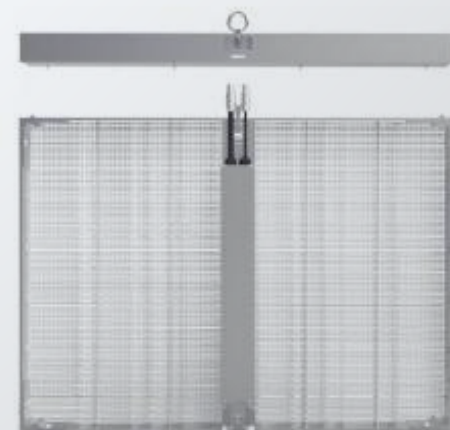
# CUSTOMER SERVICE

At PLEDCO, we strongly emphasize the importance of customer relationships, and their trust in our products. Our key to lasting relationships focuses on delivering world-class LED products, while promising exceptional customer service and reliability, ensuring our clients a relaxing experience. PLEDCO is recognized as an industry leading LED total solution provider, from initial inquiry to after sales, our heavily trained team will guide you step-by-step through the entire process of your LED project.

## Installation Support

Our skilled technicians can professionally install your LED Displays without disturbing your projects schedule. Mitigation and problem-solving are inevitable during the installation process, and PLEDCO's installation "Gurus" have the experience, know-how, and technical expertise to handle nearly any situation. We are able to provide you with all the required documents including; specification sheets, system diagrams, complete display and structure elevation drawings, and 3D rendering if required. As your dedicated total solution provider, we promise to be there step- by-step guiding you through your project, from initiation to closing.

## 24/7 Technical support via online or phone

Our phone and online live support systems enable us to provide 24/7 technical assistance. If you require urgent assistance our skilled technicians are always ready to help, regardless of difficulty. Technicians are required to pass intensive training and testing to ensure issues are dealt-with professionally and accurately, while emphasizing the importance of your project's

## Warranty & Maintenance

With over 20 years of combined professional experience, our internationally exposed engineers have specially designed and developed LED Display solutions to cope with harsh environments and withstand extreme temperatures. However, in the event of a problem, our highly experienced technical support team promises minimal display downtime by utilizing our bullet-proof troubleshooting expertise. Nearly all of Pledco's products include a 5-year warranty, with optional extensions available upon request.

## Parts Availability for the Next 15 Years

Our manufacturing facility produces all the parts used assemble our LED displays. More importantly, we own all the technology, molds and PCB layout designs that are used to develop these parts. This provides us with the reliability knowing exactly what materials are being used and ensures the quality of our products can easily be managed directly from the production level. One of the biggest after-sales issues a client could have is being able to receive replacement LEDs that have been recalibrated exactly the same as the display when first produced. PLEDCO is one of the few companies in the world who utilizes the international HD NTSC REC-709 calibration in LED display, thus making it possible for us to provide our clients the exact same LEDs to match their display by using Radiant's camera technology.