

**BUYER INFO:**

Attention: Carol Coffey  
Arlington International Racecourse  
2200 W. Euclid Avenue

Arlington Heights, IL 60005

carol.coffey@arlingtonpark.com

**SHIP TO:**

Attention: Carol Coffey  
Arlington International Racecourse  
2200 W. Euclid Avenue

Arlington Heights, IL 60005

carol.coffey@arlingtonpark.com

Quote #: 003789-01  
Date: 11/01/2016

Project Name:  
ARLINGTON\_20mm 20'x60' back to  
back

Quantity:	2
Unit Price:	
SubTotal:	
Delivery:	\$0.00
Sales Tax:	\$0.00

Total:

**Formetco Representative:**

Bradford, Jim  
P.O. Box 535730  
Atlanta, GA 30353-5730  
Direct: 678-951-1158  
Mobile: 770-335-9254  
Fax: 1-800-239-2394  
jim.b@formetco.com  
www.formetco.com

**CONFIGURATION**

Cabinet Size:	19'-11.25" H x 60'-10.75" W
Live Area:	19'-11.25" H x 60'-10.75" W
Mounting:	Upright I-Beam Attachment (Signs Back-to-Back)
Construction:	Aluminum Cabinets
Trim:	None
Average Operating Amps:	24.88 Amps
Connections Per Module:	1 Unified Power and Data Connection per Tile
Service Access:	Rear Service
Approximate Weight:	9,377 lbs
Communication:	1 Year Included (billed quarterly thereafter)

**PERFORMANCE GUARANTEE**

Parts Warranty:	10 Years
Labor Warranty:	3 Years
Brightness Warranty:	10 Years
On-Site Technician:	1 Technician - 1 Trip, 1 Day/Trip
24/7/365 Call Center:	Included for Life
Integrated Diagnostics:	Included for Life
Secondary Redundant PC:	None
Smartlink® Controller:	Included with 5 Years Wireless Service
Redundant Data:	Included

**IMAGE QUALITY**

Swappable Module Pixel Pitch:	20mm Physical Pixel Spacing (RGB)
Pixel Matrix:	304 H x 928 W
Single Color Bin LED Array:	Grade A LED's No Factory Calibration Required
Brightness:	7500 NITS Shipped (Up to 10,000 NITS capable)
Viewing Angles:	140° H & 60° V

**OPTIONAL FEATURES**

	Included	Optional
Web Based Control & Monitoring Software:	●	
Unlimited Software Training:	●	
Advertiser Proof of Performance Reports:	●	
Webcam with Mounting Pole:	20ft Pole Assembly	
Spare Parts Kit and Secure Storage Box:	●	
256-Step Photocell:	●	
LED Backlit Imprint:		●

**NOTATIONS**

Payment Terms: ~~50% Down~~, 50% 3 Days Prior to Shipping.

DELIVERY TO IL IS INCLUDED. \*ORDER CANCELLABLE WITHOUT PENALTY IF PERMIT IS DENIED. \*\*TERMS: \$25,000.00 DOWN, 40% AFTER PERMITS, BALANCE AT TIME OF SHIP.

By signing this Agreement, Buyer agrees to purchase the product(s) described above according to the Payment Terms stated above and subject to the attached Formetco's Terms & Conditions of Sale. Any purchase order or similar document issued by Buyer in connection with this Agreement shall bind Formetco only to the extent such document is consistent with this Agreement and does not contain additional or inconsistent terms or conditions. Quote valid for 30 days.

Name: \_\_\_\_\_ Title: \_\_\_\_\_ PO# \_\_\_\_\_ Date: \_\_\_\_\_  
Buyer's agent or representative



## Formetco Digital Operation Guidelines for **Arlington International Racecourse**

The Formetco Digital Billboard System offers features which enable Billboard Operators to comply with variable ordinance requirements. Below are the methodologies in which the Formetco software is able to provide billboard operators the ability to adapt to the specific requirements within their zoning market and operate within the specific guidelines that are established for **Arlington Heights, IL**.

Global Display Settings per face - Upon initial set up into the Formetco Content Management System, each display has a dwell time feature that is set according to the Billboard Operators requirements and local hold time regulations. This dwell time dictates the duration that each scheduled message is consistently displayed. This is a global administrative setting and is only editable by the Billboard Operators Administrative level users, who are categorized as the highest level users.

The screenshot shows a web-based interface for managing billboard displays. At the top, there are five tabs: 'Profile', 'ID', 'Communications', 'Display', and 'Service'. The 'Display' tab is currently selected. Below the tabs, there are several settings:

- Dwell Time (in Seconds):** A text input field containing the value '10'.
- Total Spots For This Display:** A dropdown menu showing the value '49'.
- Zoning Information:** A large black rectangular box, likely representing redacted information.
- Advertising Restrictions:** Another large black rectangular box, also likely redacted.

At the bottom of the interface, there is a status bar that reads: 'Items in light blue affect display operation'.

Valid art work file extension types for upload to the scheduling platform include:

JPEG, PNG, BMP, TIFF and RTD

These files types prevent the sign from displaying any content that may flash, twinkle, blink, fading, rolling, shading, dissolving or any type of animation.

Transitions between messages are instant and seamless and occur over the entire face of the sign.

Brightness – Illumination of the sign is closely monitored, each sign is preset at the factory for daytime and nighttime operating levels. A Konica-Minolta CS-100A is used to set the levels.



*Calibration Sticker*



*CS-100A in use at factory*



*Example: NIT Reading of 6,590*



*Sign under testing, using Full White*

*Signs are tested at FULL White. A factory set configuration table limits the upper and lower end brightness.*

(Source – Player PC Server.cfg file excerpt)



Each sign face has an onboard photocell that provides 255 brightness steps based on ambient light conditions at the face. Two independent safe guards are in place to monitor the proper brightness level of the sign. Upon loss of signal from the photocell, the sign automatically dims to the lower limit setting. If the control system for the face loses framing data from the player PC, the sign goes dark based on a configuration timer. This is typically set at 10 minutes.

Post installation, a technician will verify the ambient light conditions applicable to the local ordinance. An Extech light meter is used to verify the night time ambient conditions. Typical factory settings provide for less than a 0.3 foot candle measurement at distances appropriate for the signs square footage. Brightness levels can be remotely adjusted as needed. The brightness for every digital billboard is calibrated at 0.30 foot candles over ambient light as measured from 150 feet from the sign face.

In addition to the above mentioned software/firmware precautions that monitor the brightness settings, onboard diagnostics alert operators to system problems via email notification. A redundant player PC provides for continued proper operation of the sign in the event that a failure is detected with the primary player PC. The system will also be equipped with a remote controllable power control relay that enables operators to remotely shut all power down to the face.

- g. 1 - Sample of major sign materials including colors, textures and finishes being proposed on an 8.5" X 11" material board.

PDF OF SIGN MATERIAL INCLUDED: FTX DIGITAL BILLBOARD.PDF

## SAMPLE MATERIAL LIST\*

1. Petitioner Name: Arlington International Racecourse
2. Date: 12/1/16
3. Project: LED Billboard Arlington International
4. Location: Free standing

Steel Billboard on

Backstretch

**LED Sign:** RGB indicators with black aluminum frame

**Steel Structure:** Black steel pole and frame 95' height of sign

**Signage:** LED 20mm Physical Pixel spacing

- h. 1 - Completed application form (Page 5), including signatures and \$300 fee. (Check shall be made out to: The Village of Arlington Heights)

**SUBMITTED WITH APPLICATION 12/1/16**

- i. Notification to property owners/taxpayers of record within 100-feet, Section 30-804a (Page 8) no less than 7 days prior to the meeting. Affidavit (Page 11), list of property owners and receipts of certified mailings must be submitted to Staff 7 days prior to meeting.

**ALL SURROUNDING PROPERTY PINS HAVE BEEN IDENTIFIED. WE HAVE LETTER PREPARED AND WILL SEND OUT CERTIFIED LETTERS TO ALL OWNERS WHEN HEARING DATE HAS BEEN SCHEDULED.**

- j. Sign posting requirement, Section 30-804b (Pages 8 & 9), no less than 15 days prior to the meeting. Affidavit (Page 10) and photograph of sign installed at site must be submitted to Staff 15 days prior to meeting.

**ARLINGTON WILL INSTALL THE SIGNS ONCE THE HEARING DATE HAS BEEN ESTABLISHED.**

- k. Electronic (pdf) files of items a thru f.

**DIGITAL DOCUMENTS FOR ALL ITEMS LISTED IN APPLICATION CAN BE FOUND ON USB THAT WAS SUBMITTED WITH APPLICATION.**





The industry's most advanced and power efficient digital billboard.

**FORMETCO®**

POWERED BY **AdTech**

# Formetco's History in Outdoor Advertising Innovations

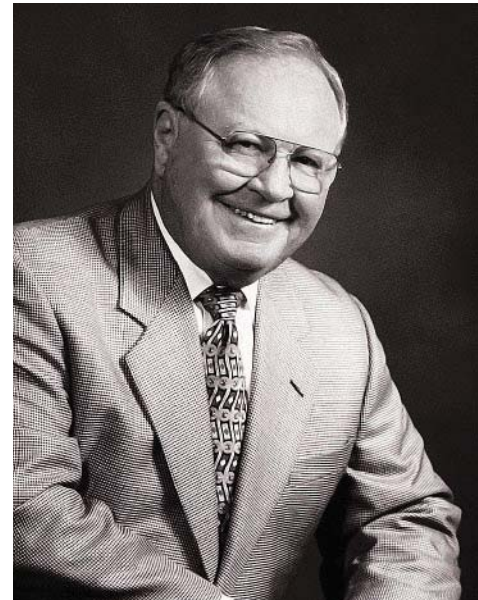
At Formetco, each aspect of developing, marketing and selling a product is connected and collaborative. Formetco's approach to innovation, "Innovation Intersection", connects employees with inventors, engineers, designers, suppliers, entrepreneurs and customers throughout the innovation process. To us, outdoor advertising goes beyond new product development; it's our history.

Formetco was founded in 1969 as a metal billboard poster panel supplier. By listening to the needs of the industry, Formetco's product line grew to include bulletin faces, safety equipment, posting supplies, scaffold, lighting, timers and nearly 1,500 other specialty outdoor advertising products. Formetco created a legacy of quality and innovation on every product that has been designed and built over the last 45 years.

In 1997 Ad-Tech was founded and rapidly became the world's leading supplier of Tri-Face signage. By 2002 Ad-Tech had captured nearly 85% of all US Sporting Facility Tri-Face business. Ad-Tech then partnered with Formetco to market their products to the outdoor advertising industry and quickly became the number one supplier of Tri-Face Billboards globally.

In 2006 Formetco purchased Ad-Tech and its Research and Development operation in Minnesota to focus on both companies' growing digital signage divisions. Formetco's engineering team has designed and engineered generations of LED modules and cabinets along with both the operating platform and scheduling system for all of our LED Message Signs and LED Digital Billboards.

The company now has 110 employees with offices in Atlanta and Minneapolis. Formetco has over 250,000 square feet of manufacturing facilities just north of Atlanta, Georgia along with our 24/7 365 days a year support team.



FOUNDER: LAWRENCE GARRETT

1975

Formetco expanded product lines to include a greater number of outdoor supplies and accessories.

1996

Transitioned from traditional hand painted billboard to high quality digital printed signs.

2005

Entered into LED digital sign market as one of the first LED digital suppliers to the Outdoor Industry.

1969

Founded as a metal fabrication company with the goal to service the outdoor advertising industry.

1989

Began offering hand painted signs with custom structures and became recognized for service and reliability.

2001

Ad-Tech developed the world's most reliable Tri-Face display.





FORMETCO'S CORPORATE OFFICE - DULUTH, GEORGIA

2010

Expanded LED product line to include LED Message Signs and began targeting sign shops.

2012

Began expanding sales to markets outside of the United States.

2015

Launched the industry's first fanless LED digital with a 10 year brightness warranty.

2006

Acquired Ad-Tech International and all patents to begin expanding focus on LED digital signage.

2013

Expanded LED product line to include portable screens, scoreboards and custom solutions.



# THE RESOLUTIONARY FTX SERIES DEPENDABLE MODULE

We wanted the impossible: deliver brighter pixels and reduce power consumption without compromising image quality.

We surpassed our own objectives by engineering the most strikingly dependable billboard module yet—with even greater life.

## Most Energy Efficient LEDs Available

More energy-efficient LEDs reduce overall power consumption while maintaining our high standard of display quality.

## Umbrellaed Louvers

Louvers positioned directly above the LED diodes deflect sunlight and rain from contaminating and interfering with the image generated by the FTX module.

## Unified Power and Data Cable

Power and data are brought together to a bi-directional single junction point, reducing potential connection failures by 50% over designs that require additional cables.

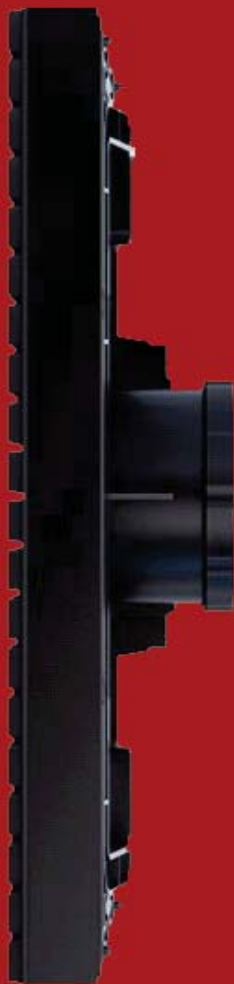
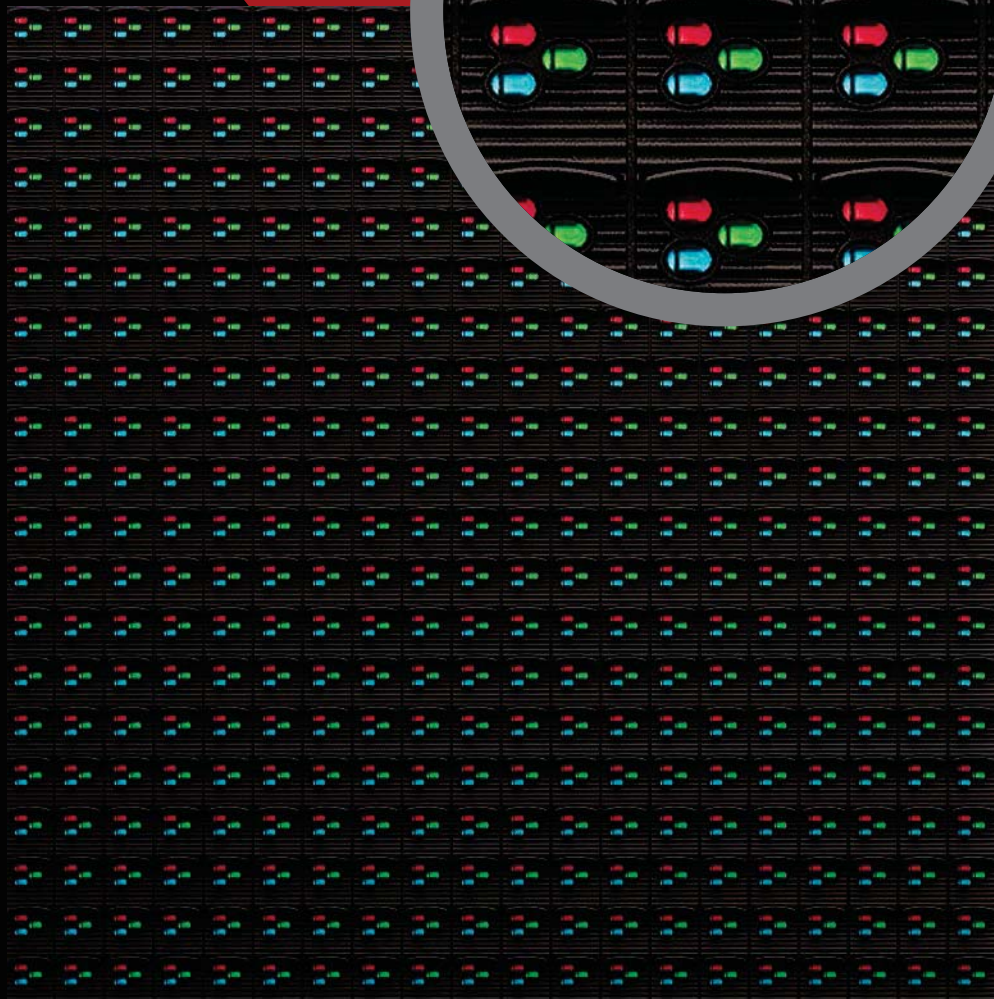
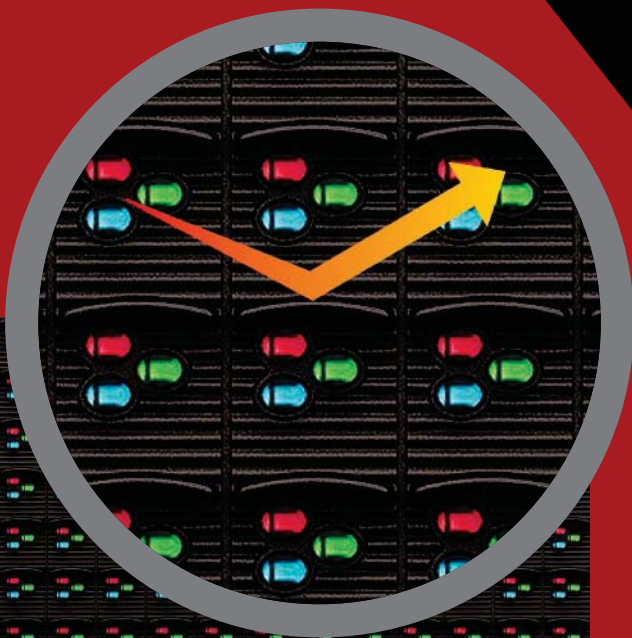
## Screw Seal Cap

Designed to neutralize corrosion, moisture, and contamination issues. Our Screw Seal Cap locks the unified power and data cable in place preventing infiltration of dirt, water, and other damaging substances which could create a product failure.

## Accessibility in Mind

The FTX module is designed with operations in mind with simple quick change front and rear access.





# THE MODULE DESIGNED TO ELIMINATE FAILURES

The FTX module offers the highest level of protection against Mother Nature's harshest elements. Environmental cooling eliminates the need for fans.

IP67

Rated for total protection against dust and temporary submersion. Fully encapsulated with a sealed cap for maximum protection and dependability.

30 Years

Formetco has identified the market need for a 30-year digital billboard. Often a message sign owner's lease is much longer than the useful life of the traditional billboards. Replacing a sign can be costly or entirely impossible after zoning changes. Formetco's FTX system offers a cost effective means for LED module replacement, with a common LED module size from 20mm to 10mm pixel pitch. This allows you to transition from a 20mm to a 16mm pitch.

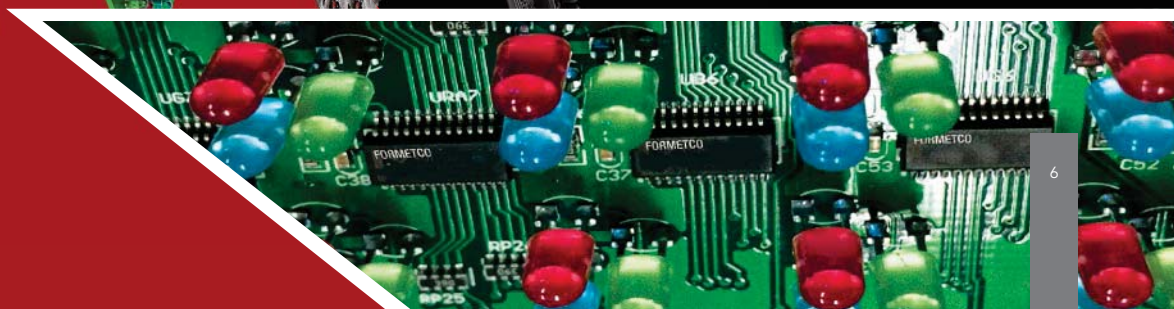
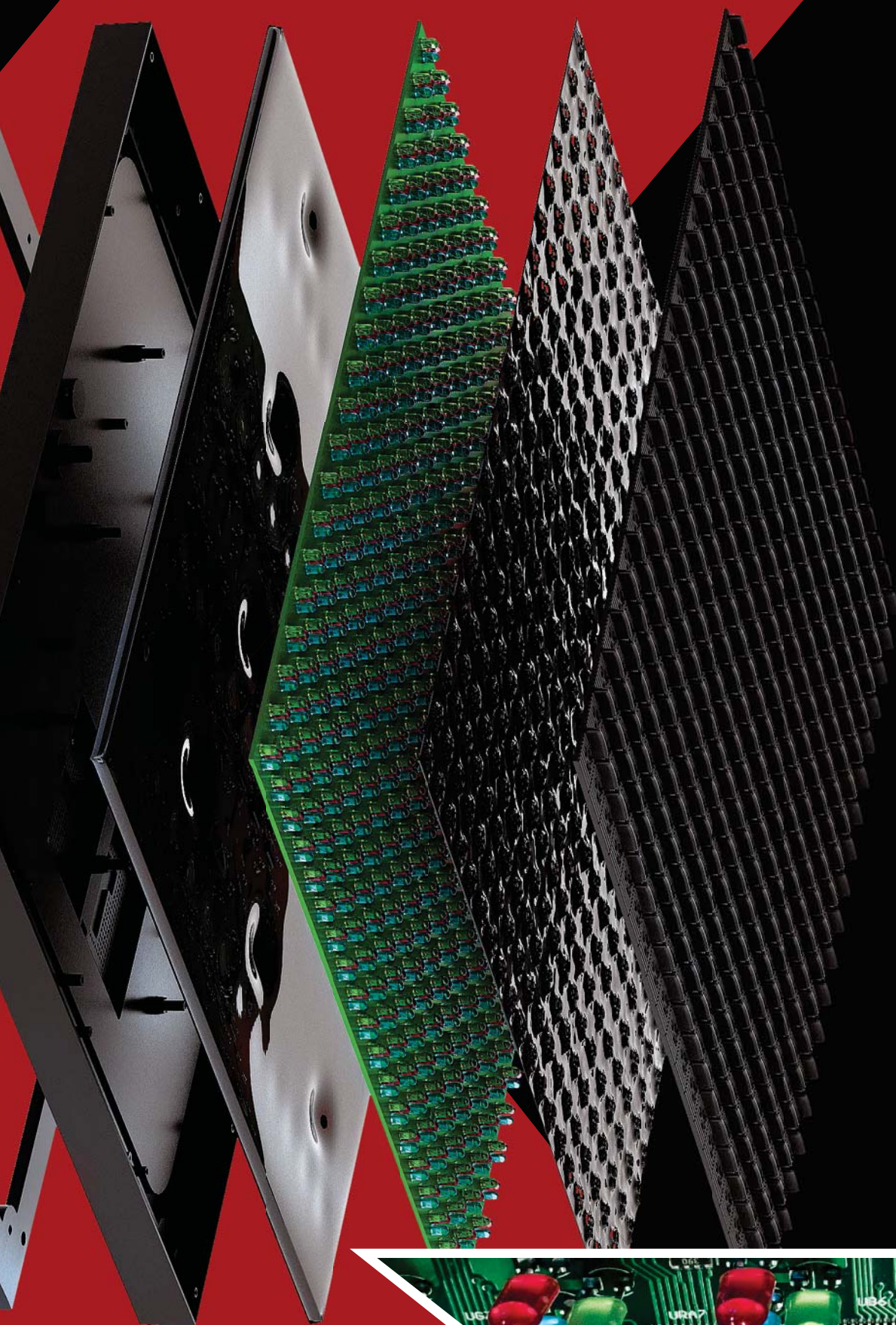
IP67

Dust tight - totally protected against dust, complete protection against human contact.

Protected against the effects of temporary submersion in water. Test requires 30 minutes at 1 meter depth.









# DRAMATIC COLOR DEPTH, CONTRAST AND IMAGE CLARITY

Natural shades of colors – just the way you want them. Hard-to-reproduce reds, aqua blues, emerald greens and truer whites that are displayed beautifully.

True

100% true single bin LEDs provide unmatched factory direct color uniformity.

Zero

Zero factory calibration required due to the utilization of true single-bin LEDs.

16-bit

16-bit drivers used to accurately deliver higher color depth.

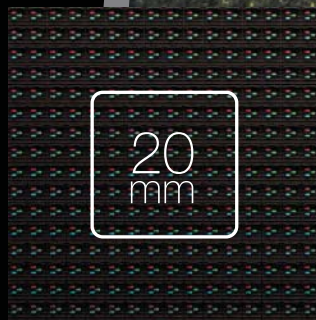
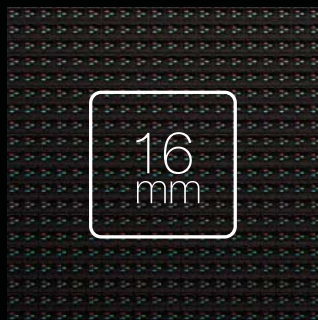
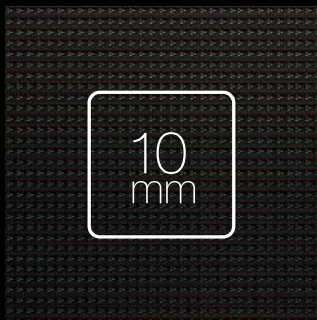
Pitch

Pitch availability in 10mm, 16mm, and 20mm pixels.

Calibration

Calibration of each module aligning it with surrounding modules is swift and remarkably accurate.

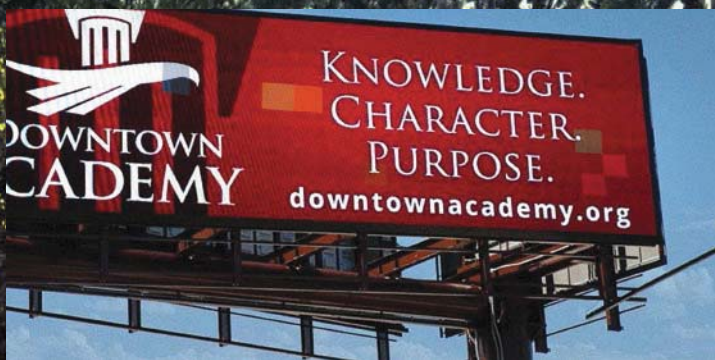
FTX Module Available Pixel Pitches



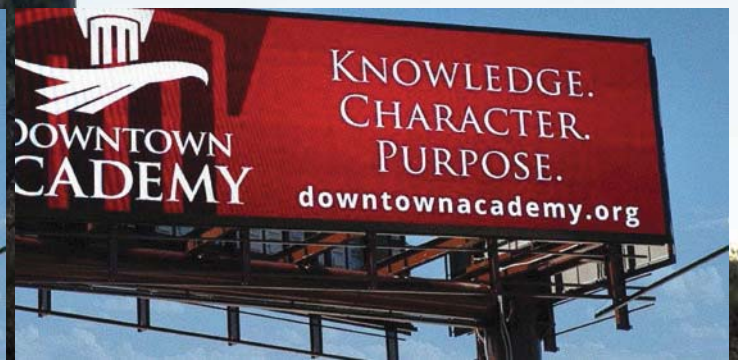




FTX Remote Calibration



Uncalibrated



Calibrated





**FORMETCO**

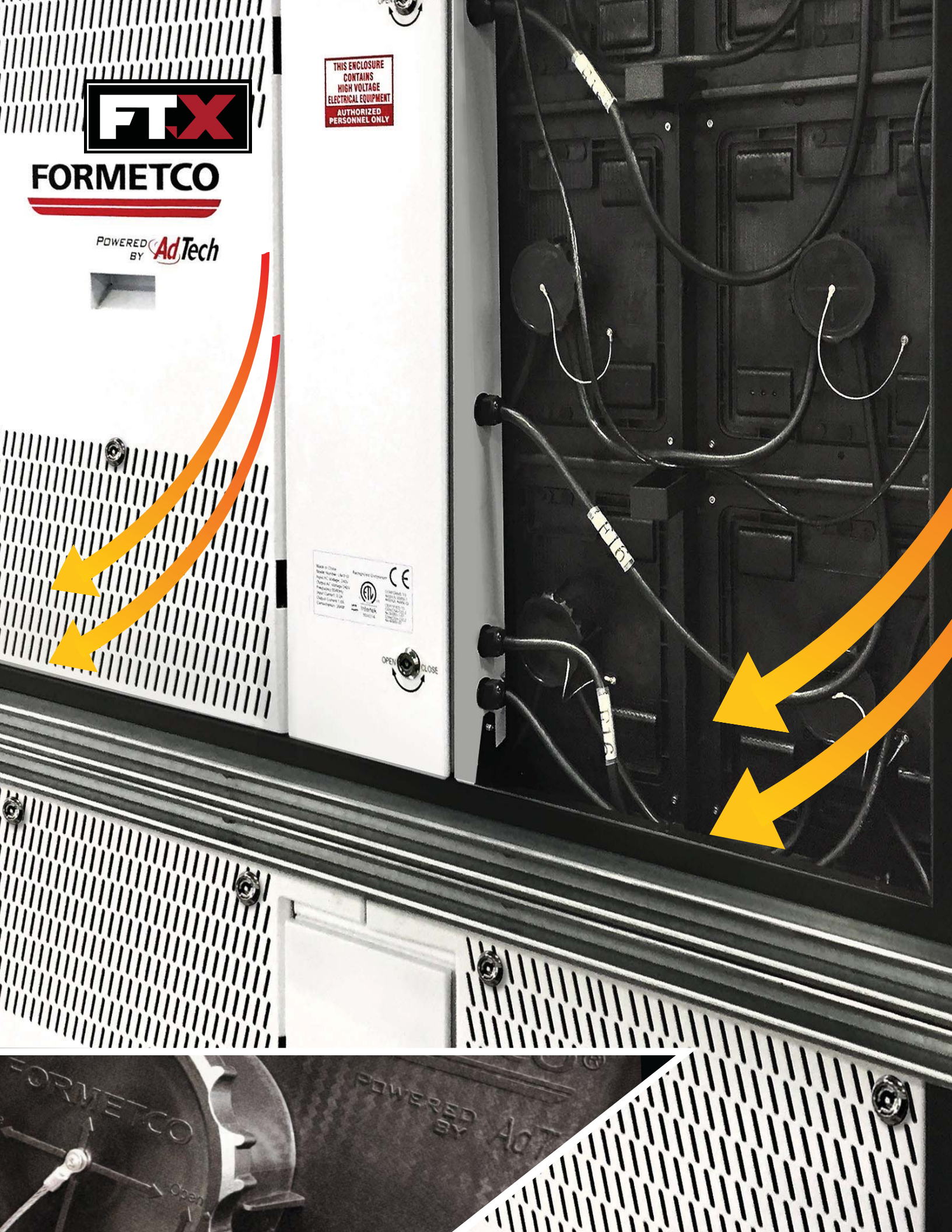
POWERED BY **AdTech**

THIS ENCLOSURE  
CONTAINS  
HIGH VOLTAGE  
ELECTRICAL EQUIPMENT  
AUTHORIZED  
PERSONNEL ONLY

Made in China  
Model Number: LMT-10  
Input AC Voltage: 240V  
Output AC Voltage: 240V  
Power: 1000W  
Input Current: 4.2A  
Output Current: 4.2A  
Compliance: CE, RoHS

CE  
RoHS

OPEN CLOSE







# ENGINEERING MADE IT THINNER. INGENUITY MADE IT SIMPLER.

The FTX is engineered to provide the longest useful life, simplest service access and lowest power consumption resulting in the lowest cost of ownership of an LED digital billboard. The FTX is housed in a remarkably thin 5.9" cabinet.

5.9" Ultra-slim cabinet design designed for future upgrades.

5x Power supplies are rated for 5 times longer life than traditional LED billboard power supplies.

7.75 lbs Every square foot of the FTX equates to an impressively light weight.

100% Environmentally cooled modules extend life expectancy and reduce power consumption.

Dual Front and rear access for simple service and installation.

Upright Mounting No spreader bar or horizontal stringers required. Clamps directly to the uprights. The modular cabinets require smaller cranes, can be installed in high wind, and allow easy offloading. Two 14'x48' bulletins can be shipped on a single flatbed.



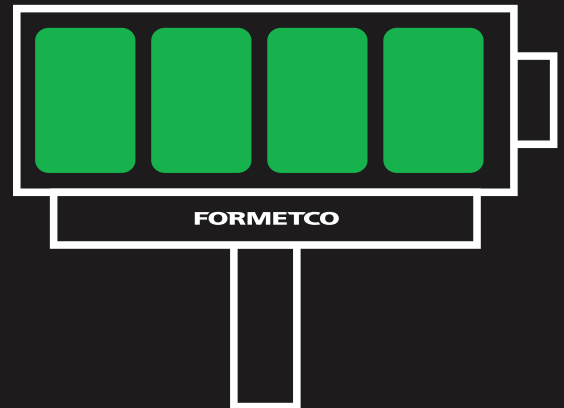
**Advertising Content**  
Design affects power cost – White is produced by turning on the red, green and blue LEDs. Total power is directly affected by the colors used in the advertising content.



**LED Screen Brightness**  
Like any other light source, there is a direct relationship between brightness and power consumption. The brighter the LED screen, the more power the unit uses.



**Efficiency of the Power Supply System**  
Power supply efficiency is measured by the ratio of the incoming AC current to the converted DC current needed to power the LED. The FTX uses a very efficient power supply system that reduces heat, reduces power lost and improves system life and reliability.



The most energy efficient  
billboard design.





### LED Efficiency

LED efficiency is measured by the ratio of light output to power input to the LED. The more light the LED produces while simultaneously consuming less power, the more efficient the LED. The FTX uses highly efficient LEDs that produce less heat, operate cooler, and last longer.



### Thermal Management

This is how heat is dissipated to keep the LED screen operating within an optimal temperature range. Formetco's innovative design eliminates the need for high consumption cooling fans which can use up to 20% of the total power to the Digital Billboard.



### Dimming to Ambient Light Levels

A photocell automatically adjusts the brightness of Formetco's LED Digital Billboard based upon the ambient light level at the LED Digital Billboard face.

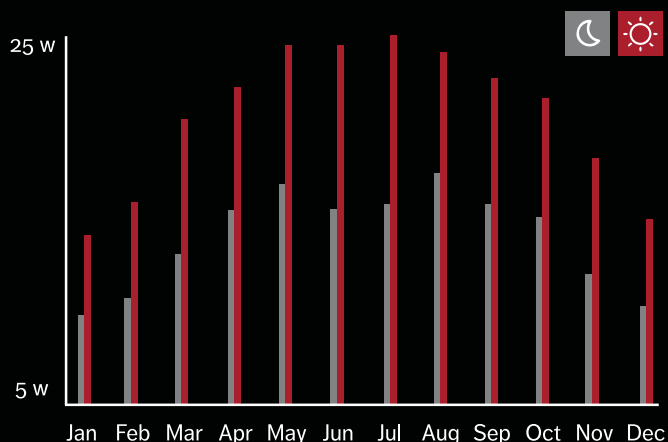
# THE FTX ACHIEVES THE LOWEST POWER CONSUMPTION OF ANY DIGITAL BILLBOARD

The FTX sets a new precedent for digital billboard energy consumption, by utilizing the most energy efficient components across the board.

### Estimated Monthly Electrical Cost:\*

Size:	FTX:	Industry Average:	10-Year Savings:
14' x 48'	\$ 217	\$ 293	\$ 9,120
10'6" x 36'	\$ 123	\$ 167	\$ 5,280
Poster	\$ 73	\$ 99	\$ 3,120

### Estimated Electrical Consumption:\*



# FORMETCO'S DIGITAL PRODUCT ASSURANCE

The FTX is backed up by more than just premium engineering, it also is supported with the ultimate peace of mind. We build on that by backing it up with Formetco's performance assurance.

Industry's Premiere 10 Year Brightness Warranty



BACKED BY FORMETCO'S  
**PERFORMANCE ASSURANCE**

We want to ensure that you have the same quality for the life of your LED billboard. We can gradually increase the NIT output of the LEDs to the maximum 10,000 capability, which maintains a consistent brightness level verifiable with an NIT gun.

Personal Peace-of-Mind Coverage

5 Year Standard parts warranty coverage.

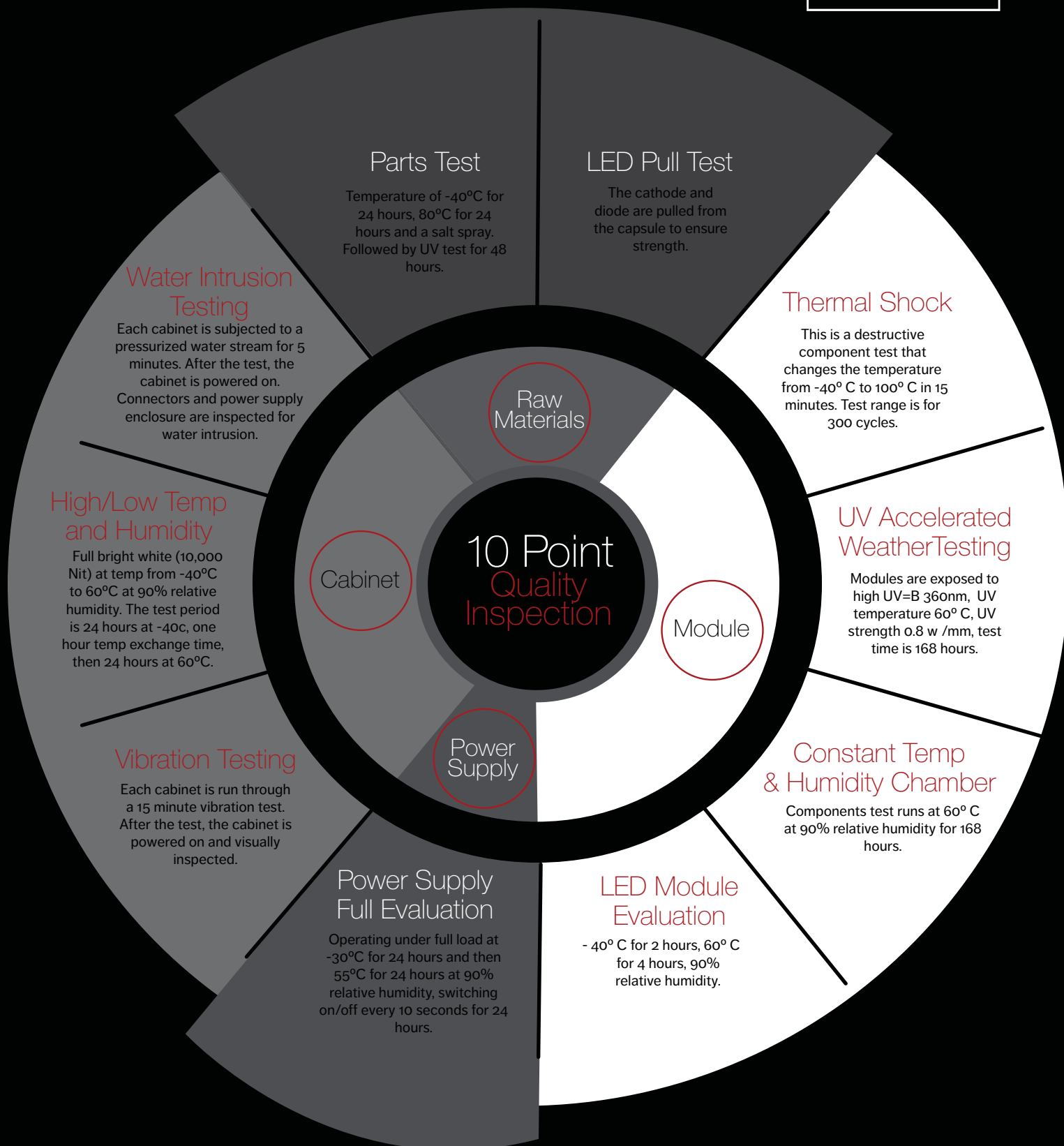
1 Year Standard on-site labor coverage with a Formetco trained technician.

365 Days Year round field ready technical support, including weekends and holiday coverage.

24 Hour Trained call center to get you the support you need.

10 Years Genuine Formetco FTX parts availability 10 years from the date of last model shipped.

Multiple Additional parts and labor warranties available upon request.









# Continuous Diagnostics and Monitoring



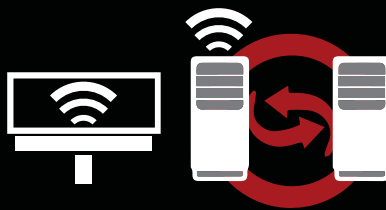
## Intelligent Safeguards

Without

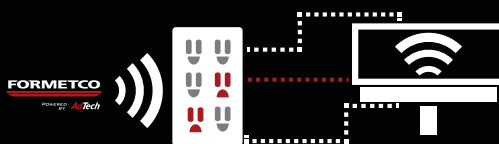


**Redundant Signal Data** - Using bi-directional signal cables the FTX assures your digital billboard will retain maximum readability in the event of a signal loss.

With



**Secondary Stand-By PC** - In the event of a PC failure, the secondary PC immediately connects to the Formetco server to download the latest schedule and sign content. At around 60 seconds the display is back up and running with current schedule, including real time data files. A diagnostic alert is generated informing you the secondary PC has taken over and the sign is functioning normally.



**The CPS 100** - An intelligent power switch designed by Formetco. Every FTX Digital Billboard has a CPS100 installed. The unit has outlets that are uniquely programmed based on their function. The PC sends data to the CPS100 periodically as a keep-alive signal. If the signal is not received, the CPS100 power cycles the unit that has not responded.



**SmartLink® Integration** - Designed to remotely control and monitor display power, the SmartLink provides a bidirectional communication path to Formetco's digital billboards. Its remote shutdown and startup feature is useful during inclement weather, such as a hurricane, or to comply with local ordinances and it saves outdoor operators money by eliminating service visits to restore lost communications offering a faster ROI for outdoor companies.

# The Industry Xperts

## Formetco's Digital Campus

Formetco engineers and builds all of our LED digital product lines from our Digital Campus. Along with our Digital Monitoring Center, service team and mission control all of your digital sign projects are managed by trained professionals.



It is not uncommon for our customers to bring their customers to tour our facility, to learn more about the benefits of Digital Outdoor. We are located just 20 minutes north of Atlanta, Georgia making it a convenient trip for most.

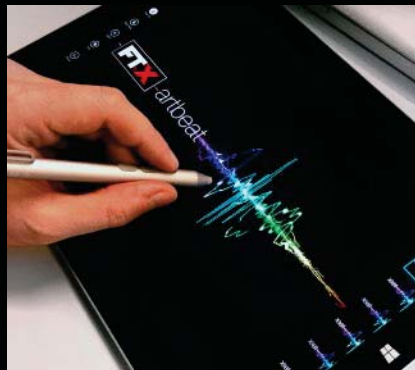
We offer on-site training and support directly from our facility or remotely via a webinar.

## Financing Options

Typically, financing an LED digital billboard is a non-traditional loan, and often complicated or misunderstood by traditional lenders. Formetco offers exclusive financing options. We understand the LED digital billboard industry, and offer a wide range of customized leasing or financing options.  
[www.formetco.com/financing](http://www.formetco.com/financing).

## Formetco's Pro-Services

In addition to a great looking LED screen, we offer assistance to ensure your content is on-time and looks great. Our pro-services packages are custom tailored for various sized organizations. A team of highly skilled professionals offer out-of-the-box concepts and reduces your organization's overhead.



## Permitting & Zoning Support

Determining if your location is eligible for a digital billboard is the first step in the process. If you need permit guidance, Formetco has relationships with permit experts in your area that can make the process painless. Your Formetco representative can help you with a library of industry support documents, studies, and strategies to help you through the process. We regularly attend zoning meetings at billboard locations at night to explain and measure brightness, to show either for zoning code development or code compliance the effect of the light generated from a digital billboard. Formetco representatives can support your zoning meetings with light studies of your location, safety studies and Emergency Alert Information such as Amber Alerts and Critical Weather Alerts.

## Ground Leasing Support

When you have questions such as "What are common practices," and "What is the best approach," your Formetco sales representative has the answers for you.

## Site Survey

You have put a lot of work into getting your permit and lease, therefore, make sure that you are putting up the digital billboard that best fits your location. There are many factors in determining what you put up. Your Formetco representative can do a site visit to help you determine structure height, display size, display resolution, and angle of read.

## Industry Resources

When it comes time to construct your digital display, just sit back and relax. Formetco has worked with the industry's top fabricators and installers for nearly half a century. We can connect you with billboard attorneys, installers and fabricators. If you need someone to sell the space, Formetco can introduce you to the best independent sales agents in your area.

## Project Management

Coordinate project from order to power up of display. Coordinate efforts from engineers to fabricators to installers.

## Ad Sales Training & Support

- Customized Ride Sheets
- Sample Sales Contracts
- OAAA Posting Calendar
- Creative Guidelines
- Customized Sales Presentations
- Rate and Occupancy Sheets
- In person sales training

## Digital Recycling Program

We are there with you every step of the way. From selecting the right product to responsibly disposing of older digital billboards.







## Formetco XD™ Mobile Companion App

Formetco XD connects you with digital outdoor like never before. View training videos of your Formetco digital billboards. Browse a library of digital billboard artwork. Monitor your digital billboard's status remotely. Design and share ride comps and access a library of additional resources and tools designed to bring a personal experience to digital outdoor. [www.formetco.com/xd](http://www.formetco.com/xd)







Connect With Us:

**Sales and Customer Service:**

Toll Free:	(800) 367-6382
Northeastern USA:	(678) 951-1158
Southeastern & North Central USA:	(678) 951-1118
Midwestern USA:	(678) 951-1156
Western USA:	(770) 476-7000
Puerto Rico:	(678) 951-1118
Outside the USA:	+001-770-476-7000

**Technical Support and Service:**

24 Hour Service Line:	(800) 204-4386
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**Email:**

[sales@formetco.com](mailto:sales@formetco.com)  
[service@formetco.com](mailto:service@formetco.com)

**Web:**

[www.formetco.com/FTX](http://www.formetco.com/FTX)

**Corporate Address:**

Formetco Incorporated  
2963 Pleasant Hill Road  
Duluth, GA 30096 USA

**Social Networks:**



**FORMETCO®**

POWERED  
BY **AdTech**

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