

TF-20

All conditions, outdoor 20mm LED tile



Key features

- 7,200 nits brightness
- 4,000:1 contrast ratio
- 16-bit color processing
- System Color Signature
- 100,000-hour lifetime
- Field-replaceable shaders
- Tilted LED configuration
- PFC, RoHS and EMC
- Wide operating temp.



Superior visual performance in all outdoor conditions

With TF-20, Barco has done it again—a superior LED tile that exceeds industry expectations in all essential categories, featuring:

- Revolutionary LED innovation
- World-class image processing
- Environmental responsibility
- Countless applications

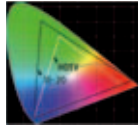
An industry leader in high-tech electronics for 75 years, Barco maintains its commitment to the LED market by investing 10% of revenue annually back into R&D, delivering advanced features and robust solutions.

BARCO

Visibly yours

Revolutionary LED innovation

Four revolutionary LED advancements give TF-20 a significant advantage over its competitors. Each of these features alone means you're dealing with a world-class product. The combination of them catapults TF-20 into a class of its own.



16-bit processing generates 281 trillion colors for true color in all ambient conditions. Extra grayscale processing delivers stunning detail in high or low NIT settings.



7,200 nits brightness (measured perpendicular to the display) makes TF-20 ideal in any outdoor setting. Superior components ensure the screen stays brighter longer, providing 100,000 hours of continuous use.



4,000:1 contrast tempers brightness into sharp, focused images and easily readable text. "Light trap" shaders protect LEDs from harm and are field-replaceable if damaged.

Tilted LED configuration directs 26% more light downward for more efficient use of available brightness, resulting in more targeted light beneath the screen and improved vertical viewing angles.



Typical vertical viewing angle



TF-20 tilted LED configuration

World-class image processing

Barco's world-renowned image processing produces sharp, brilliant images unmatched by competitors. System Color Signature monitors LED color signature, temperature thresholds and overall runtime, while component selection and layout minimizes heat distribution and operating temperature—a holistic approach to visual performance.



DX-700



D320

DX-700 and D320 digitizers are compatible with all resolutions and aspect ratios, require no external frame rate conversion and accept both analog and digital inputs.

True Color Reproduction ensures accurate color rendering and self-adjusting image uniformity during the lifetime of the tile.



True Motion Reproduction delivers smooth, flicker-free video by enhancing image signals, minimizing the "smearing" effect inherent in large image magnification.

Environmental responsibility

When it comes to the environment, TF-20 meets or exceeds the latest international regulations. Green products contain safe components and produce less power, creating strong community support and sustainable markets.



Power Factor Correction

Found only in high-end LED tiles, PFC reduces mains harmonics, mitigates electrical impact on power networks and conserves energy.



Restriction of Hazardous Substances

Meets international RoHS standards, meaning all product components contain no lead, mercury, cadmium, Cr6, PBB or PBDE.

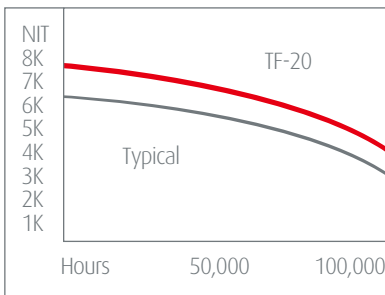


Electromagnetic Compatibility

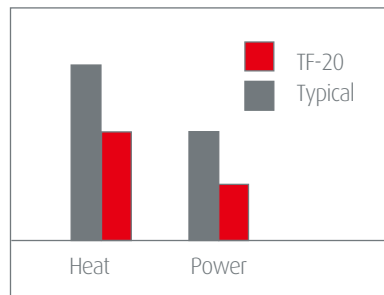
Operates in a self-contained field, unaffected by electrical devices and causing no harm to other devices like cell phones or medical equipment.

Low power consumption, maximum ROI

Efficient components last longer, produce less heat and require no HVAC, resulting in considerably less power consumption—significantly reducing cost.



Efficient components



Less heat, low power

Countless applications

With half-sizes available for curved or creative displays, TF-20 is perfect for use in countless outdoor applications, including sports stadiums, branding, outdoor advertising and architectural integration. By selecting TF-20 for your outdoor LED installation, you are acquiring what is considered the most reliable and cost-effective 20mm-range LED tile available in today's market.

Sports



Wembley Stadium, London

Out-of-Home Media



Mega Park, Mallorca

Architectural integration



Crown Fountain, Chicago

TF-20 specifications

	TF-20 (full)	TF-20 (half)
Pixel pitch	20mm	
Typical brightness (calibrated)	7,200 nits ¹	
LED configuration	1R, 1G, 1B	
Pixel density	2,304/tile (48x48)	1,152/tile (48x24)
Viewing angle (horizontal)	120° (min. 50% brightness)	
Viewing angle (vertical)	-15° (from above)/+45° (from below)	
Contrast ratio	4,000:1	
Power consumption/m ²		
· max	400 watts	
· average	120 watts	
Color processing	16-bit/color	
Colors	281 trillion	
Refresh rate	800 Hz	
Temperature		
· operating	-35° C to 50° C (-31° F to 122° F)	
· storage	-35° C to 50° C (-31° F to 122° F)	
Humidity		
· operating	10 to 99%	
· storage	10 to 99%	
Weight/tile	54 kg (119 lbs)	40 kg (88 lbs)
Lifetime	100,000 hours	
Dimensions (HxMxD)	960 mm x 960 mm x 250 mm	960 mm x 480 mm x 250 mm
Serviceability	Front/back access ²	
Ruggedness		
· front	IP65	
· back	IP54	
Reference number		
· front access	R9004816	R9004814
· back access	R9004817	R9004815
Certification	UL/ETL, CE, FCC Class A, RoHS, CCC, CETL	

¹ Perpendicular to the display

² Front or back, to be specified at order

Dimensions



Ref. No.: R599305 - April 2009

While the information and data given are typical for the equipment described, product specifications are subject to change without notice. The latest version of this product sheet can be found at www.barco.com.

Reference products: SLite. Tilt image simulated

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