



RACEGUIDE

2024 FIA WEC



LONE STAR LE MANS

Round 6, 2024 FIA World Endurance Championship (FIA WEC)

TEXAS, USA



7th RUNNING



FRIDAY

30
AUGUST

Free Practice 1

12:40pm • (90 minutes)

Free Practice 2

5:10pm • (90 minutes)

SATURDAY

31
AUGUST

Free Practice 3

11:00am • (60 minutes)

Hypercar Qualifying
3:40pm • (12 minutes)

Hyperpole
4:00pm • (10 minutes)

SUNDAY

1
SEPTEMBER



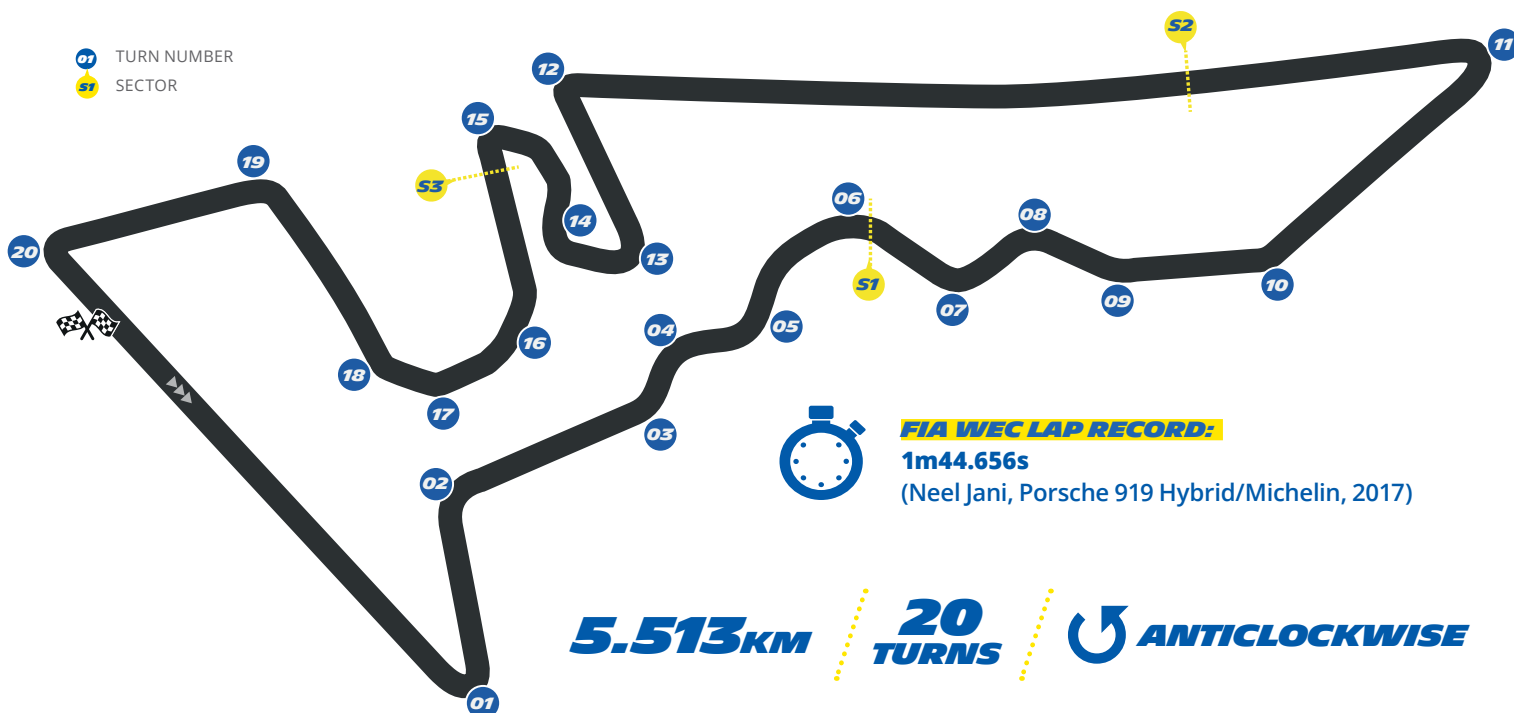
1:00pm
Start

Local time • SOURCE : fiawec.com - information subject to change



THE CIRCUIT

CIRCUIT OF THE AMERICAS (CoTA)



- » SITUATED IN THE OUTER SUBURBS OF AUSTIN, TEXAS
- » ALTITUDE DIFFERENCE: 41 METERS
- » STEEP CLIMB FROM THE PITS STRAIGHT TO TURN 1
- » A 1.2-KILOMETER STRAIGHT
- » FIRST USED BY F1 IN 2012
- » FIRST VISITED BY THE FIA WEC IN 2013
- » RECENTLY RESURFACED, BUT STILL BUMPY

THE 2024 LONE STAR LE MANS

The FIA WEC's first visit to Austin since February 2020

Entry stars 18 Hypercars fielded by 8 manufacturers, all Michelin partners

6-hour race

91ST ROUND OF THE FIA WEC WORLD ENDURANCE CHAMPIONSHIP



THE 2020 RACE



» **Winners:**

Senna/Menezes/Nato
(Rebellion R13-Gibson/Michelin),
189 laps

» **Pole-position:**

Senna/Menezes/Nato (Rebellion
R13-Gibson/Michelin), 1m47.530s

» **Fastest race lap:**

Norman Nato (Rebellion R13-Gibson/
Michelin), 1m49.503s

» **Top speed:** Gustavo Menezes
(Rebellion R13-Gibson/Michelin),
300kph

» Last FIA WEC fixture
to be held before the
Covid19 pandemic

» Victory for Michelin in
all four classes (LMP1,
LMP2, LMGTE Pro,
LMGTE Am)

» Michelin tires
successfully double-
stinted around the
highly demanding
American track



MICHELIN'S LONE STAR LE MANS WINNING RECORD

2013 Kristensen/Duval/McNish
(Audi R18 e-tron quattro/Michelin)

2014 Fässler/Lotterer/Tréluyer
(Audi R18 e-tron quattro/Michelin)

2015 Bernhard/Webber/Hartley
(Porsche 919 Hybrid/Michelin)

2016 Bernhard/Webber/Hartley
(Porsche 919 Hybrid/Michelin)

2017 Bernhard/Bamber/Hartley
(Porsche 919 Hybrid/Michelin)

2020 Senna/Menezes/Nato
(Rebellion R13-Gibson/Michelin)



MICHELIN STATISTIC

Brazil's recent 6 Hours
of Sao Paulo saw Sébastien
Buemi claim a record-breaking
25th FIA WEC victory, while
Toyota Gazoo Racing
team-mate Kamui Kobayashi
clocked his 40th FIA WEC
pole-position and fastest race
lap. Both scores were reached
on Michelin tires.



PIERRE ALVES

(Manager, Endurance Racing Programs, Michelin Motorsport)



The FIA WEC is back at Austin for the first time since 2020. That was before the Hypercar era and the appearance of the Pilot Sport range we designed specifically for these cars. The Circuit of The Americas is notoriously hard on tires and hot weather is to be expected at this time of the year. We're ready for the challenge, though, with our medium [yellow] and [red] compounds. Since our test at CoTA last month, the track has been partially resurfaced to eliminate the bumps that are one of its features. This fresh asphalt will certainly increase grip levels, so lap times will be much faster. And that, in turn, will lead

// THE CIRCUIT OF THE AMERICAS IS NOTORIOUSLY HARD ON TIRES //

to higher thermal constraints for our tires. We consider it to be the biggest energy-generating circuit of the calendar, with a first sector that begins with heavy braking for Turn 1 on a gradient of more than 10 percent over 200 meters. Next comes a sequence of nine fast corners followed by another long straight and more hard braking.

In contrast, the last sector is reasonably slow, including a triple right-hander where our tires' mechanical grip will play a key role. The three free practice sessions will be essential to establish the operational windows and longevity of our two compounds options and help the teams define their race strategies.



MICHELIN'S FIA WEC RECORD

90
WINS

WITH 6 DIFFERENT MANUFACTURERS

including Toyota (46 wins) and Porsche (18)

WITH 43 DIFFERENT DRIVERS

including Buemi (25 wins), Hartley (22) and Conway (18)

11

MANUFACTURERS'
WORLD TITLES

11

DRIVERS'
TITLES



THE MICHELIN PILOT SPORT

HYPERCAR RANGE



SLICKS

Medium (yellow):
medium compound / dry conditions / the most versatile option



Hard (red): hard compound / dry conditions / high track temperatures / big constraints



RAIN TIRES

Wet (blue): soft compound / wet conditions / versatile

SLICK ALLOCATIONS

Free Practice	12 tires
Hyperpole	4 tires (medium)
Qualifying + Race	18 tires

SIZES: FRONT: 29/71-18 • REAR: 34/71-18

Width (cm) / Exterior Diameter (cm) – Interior Diameter (inches)

The MICHELIN Pilot Sports raced by today's sophisticated Hypercar prototypes were developed on simulators in the space of just months but proved competitive and reliable from the outset. Michelin has since continued to work on its reliable, high-performance range of endurance racing tires in response to the demand for superior longevity inline with Michelin's "Everything Sustainable" plan.

The regulations for the 2024 FIA World Endurance Championship restrict the number of different slick specifications to just two (three for Le Mans), plus a single type of rain tire. Tire warming systems are no longer authorized.

These two parameters have led Michelin Motorsport's engineers to work on the compounds of its slicks to make them even more versatile and enhance their warm-up performance.

Meanwhile, the single type of rain tire needs cover a broad spectrum conditions, from damp and drying, to heavy rain. The resulting solution combines a new tread pattern with greater versatility.

All of the Hypercar prototypes (LMH/LMDh) race on MICHELIN Pilot Sports (front: 29/71-18, rear 34/71-18).

TECHNICAL REQUIREMENTS

Minimum FRONT Stabilized Relative Pressure	1,8b = 26,1psi
Minimum REAR Stabilized Relative Pressure	1,8b = 26,1psi
Maximum FRONT camber at static ride height*	-3,0°
Minimum FRONT camber at static ride height*	-1,0°
Minimum REAR camber at static ride height*	-2,7°
Maximum REAR camber at static ride height*	-1,0°

(*) For example, if the minimum static camber angle is -3°, competitors may run at -2.5° but not at -3.5°



HYPERCAR**MICHELIN PARTNERS**

18 HYPERCAR PROTOTYPES REPRESENTING 8 MANUFACTURERS

#2 CADILLAC RACING

Cadillac V-Series.R (LMDh)



E. BAMBER
 A. LYNN

#99 PROTON COMPETITION

Porsche 963 (LMDh)



H. TINCKNELL
 N. JANI
 J. ANDLAUER

#5 PORSCHE PENSKE MOTORSPORT

Porsche 963 (LMDh)



M. CAMPBELL
 M. CHRISTENSEN
 F. MAKOWIECKI

#6 PORSCHE PENSKE MOTORSPORT

Porsche 963 (LMDh)



K. ESTRE
 A. LOTTERER
 L. VANTHOOR

#7 TOYOTA GAZOO RACING

Toyota GR010 Hybrid (LMH)



M. CONWAY
 K. KOBAYASHI
 N. DE VRIES

#8 TOYOTA GAZOO RACING

Toyota GR010 Hybrid (LMH)



S. BUEMI
 B. HARTLEY
 R. HIRAKAWA

#12 HERTZ TEAM JOTA

Porsche 963 (LMDh)



W. STEVENS
 C. LLOTT
 N. NATO

#38 HERTZ TEAM JOTA

Porsche 963 (LMDh)



J. BUTTON
 P. HANSON
 O. RASMUSSEN

#15 BMW M TEAM WRT

BMW M Hybrid V8 (LMDh)*



D. VANTHOOR
 R. MARCIELLO
 M. WITTMANN

#20 BMW M TEAM WRT

BMW M Hybrid V8 (LMDh)*



S. VAN DER LINDE
 R. FRIJNS
 R. RAST

#35 ALPINE ENDURANCE TEAM

Alpine A424 (LMDh)*



P.-L. CHATIN
 C. MILESI
 F. HABSURG

#36 ALPINE ENDURANCE TEAM

Alpine A424 (LMDh)*



N. LAPIERRE
 M. SCHUMACHER
 M. VAXIVIERE

* Débuts en catégorie Hypercar en FIA WEC en 2024



HYPERCAR MICHELIN PARTNERS

18 HYPERCAR PROTOTYPES REPRESENTING 8 MANUFACTURERS

#50 FERRARI AF CORSE

Ferrari 499P (LMH)



A. FUOCO
 M. MOLINA
 N. NIELSEN

#51 FERRARI AF CORSE

Ferrari 499P (LMH)



A. PIER GUIDI
 J. CALADO
 A. GIOVINAZZI

#63 LAMBORGHINI IRON LINX

Lamborghini SC63 (LMDh)*



M. BORTOLOTTI
 E. MORTARA
 D. KVYAT

#83 AF CORSE

Ferrari 499P (LMH)



R. KUBICA
 R. SHWARTZMAN
 Y. YE

#93 PEUGEOT TOTALENERGIES

Peugeot 9X8 (LMH)



M. JENSEN
 N. MÜLLER
 J-É. VERGNE

#94 PEUGEOT TOTALENERGIES

Peugeot 9X8 (LMH)



P. DI RESTA
 L. DUVAL
 S. VANDOORNE

* Débuts en catégorie Hypercar en FIA WEC en 2024

THE MICHELIN-EQUIPPED HYPERCAR PROTOTYPES









VOITURE	POWER UNIT	POWER	TRANSMISSION
TOYOTA GRO10 HYBRID (LMH)	3.5-liter V6 bi-turbo + Toyota Hybrid System (front wheels)	500kW + 200kW	four-wheel drive, seven-speed Xtrac sequential gearbox
PEUGEOT 9X8 (LMH)	2.5-liter V6 bi-turbo + Peugeot MGU (front wheels)	500kW + 200kW	four-wheel drive, seven-speed Sadev sequential gearbox
FERRARI 499P (LMH)	3-liter V6 bi-turbo + hybrid system (front wheels)	500kW + 200kW	four-wheel drive, seven-speed Xtrac sequential gearbox
PORSCHE 963 (LMDh)	4.6-liter V8 bi-turbo + Bosch MGU (rear wheels)	500kW + 50kW	two-wheel drive, seven-speed Xtrac sequential gearbox
CADILLAC V-SERIES.R (LMDh)	5.5-liter V8 + Bosch MGU (rear wheels)	500kW + 50kW	two-wheel drive, seven-speed Xtrac sequential gearbox
ALPINE A424 (LMDh)	3.4-liter V6 turbo + Bosch MGU (rear wheels)	500kW + 50kW	two-wheel drive, seven-speed Xtrac sequential gearbox
BMW M Hybrid V8 (LMDh)	4-liter V8 bi-turbo + Bosch MGU (rear wheels)	477kW + 50kW	two-wheel drive, seven-speed Xtrac sequential gearbox
LAMBORGHINI SC63 (LMDh)	3.8-liter V8 bi-turbo + Bosch MGU (rear wheels)	500kW + 50kW	two-wheel drive, seven-speed Xtrac sequential gearbox



HYPERCAR STANDINGS

FIA WORLD ENDURANCE HYPERCAR CHAMPIONSHIP

MANUFACTURERS			R1 2/03	R2 21/04	R3 11/05	R4 15-16/06	R5 14/07	R6 1/09	R7 15/09	R8 2/11	TOTAL
1 st	PORSCHE		39	18	26	25	18				126
2 nd	TOYOTA		23	25	12	36	26				122
3 rd	FERRARI		18	13	18	50	10				109

DRIVERS			R1 2/03	R2 21/04	R3 11/05	R4 15-16/06	R5 14/07	R6 1/09	R7 15/09	R8 2/11	TOTAL
1 st	ANDRÉ LOTTERER		38	18	18	25	18				117
1 st	KÉVIN ESTRE		38	18	18	25	18				117
1 st	LAURENS VANTHOOR		38	18	18	25	18				117
2 nd	ANTONIO FUOCO		12	13	15	50	8				98
2 nd	MIGUEL MOLINA		12	13	15	50	8				98
2 nd	NICKLAS NIELSEN		12	13	15	50	8				98
3 rd	KAMUI KOBAYASHI		15	25	6	36	13				95
3 rd	NYCK DE VRIES		15	25	6	36	13				95

ENDURANCE RACING: AN INNOVATION ACCELERATOR FOR MICHELIN

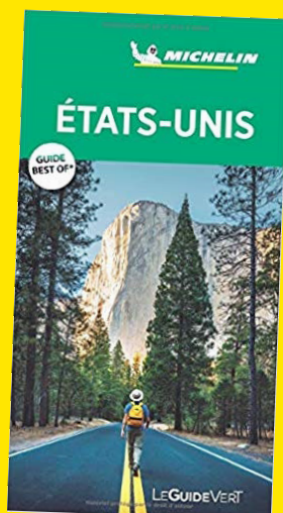
Michelin sees motorsport in general, and endurance racing and the Le Mans 24 Hours in particular, as a means to accelerate innovation. The proportion of renewable or recycled raw materials that go into MICHELIN Pilot Sport endurance-racing rain tires stands at 45 percent.

In 2021, Michelin presented a demonstration tire containing 46 percent recycled or renewable raw materials for the MissionH24 hydrogen fuel-cell racing prototype.

Since last season, the wet rain tires raced by endurance racing's Hypercar prototypes incorporate 45 percent renewable or recycled raw materials.

Motorsport is one of the driving forces behind Groupe Michelin's "Everything Sustainable" plan for 2050.





MICHELIN GREEN GUIDE

Discover the cities, landscapes, must-do itineraries and attractions of the United States with Michelin's USA Green Guide collection.



AUSTIN AND CIRCUIT OF THE AMERICAS TRIVIA



- » Circuit of The Americas is situated in Elroy, close to the Texan capital Austin
- » CoTA has hosted Formula 1 and MotoGP™ action since 2012 and 2013 respectively
- » In 2019, the circuit held an IndyCar race for the first time
- » The 76-meter tower at Turn 17 was designed by Miro Rivera Architects
- » Austin is sometimes referred to as Silicon Hills due to the presence of businesses like Dell, Apple, HP, IBM, etc.
- » The University of Texas campus has more than 50,000 students
- » Austin is one of the USA's sunniest cities (around 300 days per year)
- » The Texas State Capitol (94m tall/400 rooms) is bigger and taller than that of Washington DC

MICHELIN MOTORSPORT AND CIRCUIT OF THE AMERICAS

- » With Audi, Michelin won the first endurance race to be held at CoTA, in 2013 (Kristensen/McNish/Duval)
- » Three Michelin wins in a row with Porsche in 2015, 2016 and 2017
- » Michelin has won the MotoGP™ round at CoTA eight times, including four with Marc Marquez
- » Michelin has also won at CoTA in IMSA's North American endurance racing series



- » Michelin and its partners undertook Pilot Sport development testing at CoTA late-July



WHAT'S NEW IN 2024

CLASSES

Only two classes: Hypercar and LMGT3

The Hypercar class covers LMH (hybrid and non-hybrid) and LMDh (hybrid) prototypes

LMH prototypes: Toyota GR010 Hybrid, Peugeot 9X8, Ferrari 499P, Isotta Fraschini Tipo6-C

LMDh prototypes : Porsche 963, Cadillac V-Series.R, Alpine A424, BMW M V8 Hybrid, Lamborghini SC63

VENUES

2 new venues:

Lusail (Qatar), Imola (Italy)

2 returning venues:

Sao Paulo (Brazil), COTA (USA)

QUALIFYING

New format,

with two sessions per class: Qualifying (12 minutes), followed by a Hyperpole shootout, featuring the 10 fastest cars from Qualifying (10 minutes)

2024 CALENDAR

R1	QATAR 1812 KM	March 2
	(Qatar, Lusail)	
R2	6 HOURS OF IMOLA	April 21
	(Italy)	
R3	6 HOURS OF SPA-FRANCORCHAMPS	May 11
	(Belgium)	
R4	LE MANS 24 HOURS	June 15-16
	(France)	
R5	6 HOURS OF SAO PAULO	July 14
	(Brazil)	
R6	LONE STAR LE MANS	September 1
	(Texas, USA)	
R7	6 HOURS OF FUJI	September 15
	(Japan)	
R8	8 HOURS OF BAHRAIN	November 2
	(Sakhir)	

FIA WEC TIRE REGULATIONS

SPECIFICATIONS

Number of specifications for dry-weather tires			Number of specifications for wet-weather tires
Le Mans 24 Hours	Other races	Total over the season	
3	2	3	1

Two slick specifications for the season for all cars, to be registered 48 hours before the Prologue Test. For individual races, two of the three specifications to be nominated 48 hours at the latest prior to the start of scrutineering (three specifications for Le Mans).

ALLOCATIONS

Free Practice	Hyperpole*	Qualifying + Race		
		6-hour races	8-hour races	10-hour races*
12	4	18	26	32

(*) Or of 1812km.

(**) Only the softest tire proposed by the tire manufacturer for this competition will be used for Hyperpole.

- The tire manufacturer must establish identical technical requirements (pressure and camber) for all the Competitors. The non-respect of these requirements by the Competitors may be penalized by the Panel of the Stewards.
- For 29/34 tires: a random draw will be made per Competition and tires will be reattributed randomly to each Competitor by the Technical Delegates. These tires must be used in the "Qualifying + Race" allocation. The details will be defined by the WEC Committee.
- For 31/31 tires: a mechanism of collection and reintroduction of the tires will be defined by the WEC Committee.
- The WEC Committee will be able to modify the random attribution mechanism and the tire collection and reintroduction mechanism at any moment during the season.
- To go from the pit lane to the starting grid before the start of the race, the tires used can be either dry-weather tires or wet-weather tires and will not be counted in the allocation.

HYPERPOLE

Michelin to select the compound for use in the Hyperpole sessions

The choice of compound for this session will be specified by Michelin, with all 10 cars contesting the shootout on the same type of tire. The four covers employed will be supplied in addition to the competitor's basic allocation but they may not be used for the race itself. Instead, the Hyperpole tires will be retrieved at the end of the session and will be made available to Michelin's partners for private testing at a later date.

RAIN TIRES

The number of wet-weather tires usable during a Competition is not limited. During practices and the race, wet-weather tires can only be used once the track has been declared wet by the Clerk of the Course / Race Director.

Any chemical and/or mechanical treatment of the tires is prohibited, except for the removal of debris collected on the track.

The tread and profile of the tires must not be modified or recut.

Any process that involves a direct or indirect attempt at modifying the temperature of a tire (compared to the ambient temperature) is forbidden.

Use of storage tents in designated areas is permitted only if they are always ventilated with ambient air and accessible.

Infringement of the tire allowance: Stop & Go of 2 minutes per tire.

Infringement of the tire heating rules: Stop & Go of 3 minutes during the race.

Four mechanics and two tire guns allowed for wheel changes during pit stops. Wheel changes are only allowed when the car is not being refueled.

Only one tire technician is allowed to measure tire temperatures and pressures.

Tire changes may only be carried out on the starting grid up to the five-minute board, in front of the garage or inside the garage if significant work is being undertaken on the car, on the track in the case of a suspension of the race.

Each tire must be identified by RFID and barcode. All references must be declared to the Technical Delegate at least 48 hours before the start of the Competition.



***OUR VICTORIES,
YOUR GAIN!***



From left to right: the MICHELIN Pilot Sport Endurance (for the World Championship's Hypercars), MICHELIN Pilot Sport⁴ S and MICHELIN Pilot Sport[®]

MICHELIN PILOT SPORT

The MICHELIN Pilot Sport is unbeaten in the FIA World Endurance Championship since 2012. Benefit from the grip and precision delivered by the MICHELIN Pilot Sport range of road tires!

#PerformanceMadeToLast #WeRaceForChange



MICHELIN