

HD



TEMESA
Smart Mobility





YOUR RELIABLE BUSINESS PARTNER.

THE FUTURE OF TRANSPORTATION IS IN OUR HANDS

**“Throughout our
journey since 1968,
we have always
depended on our
'raison d'être,' moving
forward with an
innovative and
enterprising spirit.”**

With more than 50 years of experience, we constantly seek to go above and beyond existing offerings and deliver an innovative understanding in how we do transportation. Today, at our 137-acre plant, we produce 4,000 buses and midibuses and 6,000 light-duty trucks - a total of 10,000 vehicles per year - on a single-shift basis. In 66 countries around the globe, our products continue to stand out as representatives of the transformation we initiated.

Armed with the “Smart Mobility” vision, we are proud to lead the way in digitizing mass transit operations. Each year we allocate approximately 5% of our turnover to R&D to design next-gen mobility solutions for tomorrow, based on our wide range of products that cover all segments of bus transportation, and proceed with substantial pace towards a better future based on our Smart Mobility vision to shape the future.

**WE DERIVE OUR
STRENGTH FROM
TECHNOLOGY**



TEMSA'S BUSINESS PERSPECTIVE: TEMSA TECH

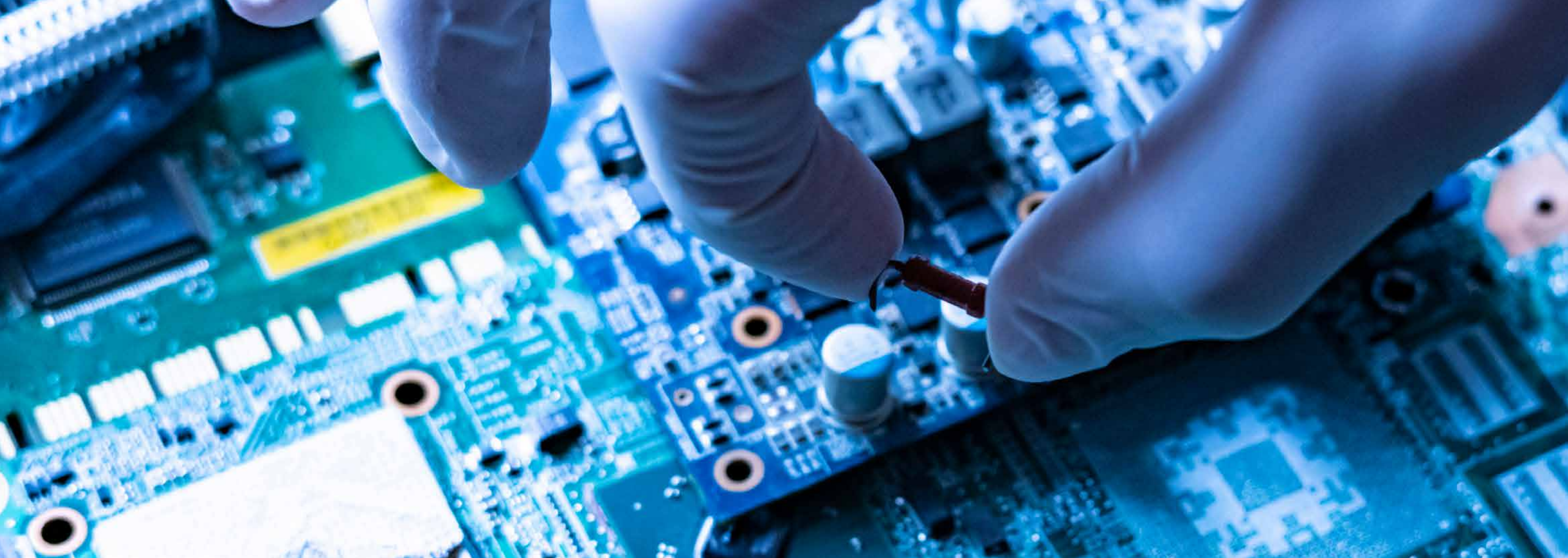
“We are determined to develop smart and sustainable mobility solutions in line with future trends, in order to offer pleasant journeys to passengers.

The importance we place on R&D allows us to offer a wide variety of high-tech products to our customers.

Our mission is to become a “tech firm” in addition to being a transportation firm.

Our brand’s guiding vision is to never settle for what is available and to always seek more; to never give up on production, improvement, development, and experimentation, all the while contributing to humanity and the world.

For we are well aware that those who do not settle for less are the ones that lead.



EXPERIENCE ROBUSTNESS AND COMFORT IN THE HD.

The HD is built to last and will never let you down on long-distance journeys.

Its robust and long-lasting design is unlike anything you've ever experienced.

The HD is ready and waiting to take your business to the next level.





HD 13

LUXURIOUS JOURNEY IN EVERY RESPECT.

What makes long-distance journeys enjoyable? Comfort? Luxury? A more spacious interior? The HD offers all of this and more. Its spacious interior, extended legroom and customizable seating layout transforms your journeys into a unique experience.

With its comfortable seats and powerful air conditioning, the HD makes every journey a joy while also ensuring driver comfort thanks to its user-friendly features. Its ergonomic cockpit area and advanced safety systems ensure that the driver stays safe and comfortable.



WHERE GOOD LOOKS AND POWER MEET DYNAMISM.

The HD features special uninterrupted chrome lines that highlight the vehicle's spacious interior in a contemporary and aesthetic way.

The chrome contrasts beautifully with the darkened wide windows to elevate each passenger's space. Aesthetically designed headlights combined with rear wings highlight the HD's dynamic and powerful looks.



Spacious luggage compartment



Rear mask highlighting the characteristic wings



LED illuminated steps



Modern and aesthetic LED headlights.



THE COCKPIT: OFFERING AN UNRIVALLED DRIVING EXPERIENCE

Enter the cockpit – the place where all great journeys begin. With its ergonomic features and components, the HD is designed to offer a comfortable and easy driving experience.

The driver's seat is adjustable for comfort and functionality, and

features armrests, back support and a weight-sensitive pneumatic suspension system. The seat can easily be moved forwards, backwards, up and down to achieve the optimal driving position.

The HD offers a driving experience unlike no other. In addition to

advanced braking systems, it also features ACC (Adaptive Cruise Control), which automatically adjusts the vehicle speed and maintains a safe tracking distance, enhancing both safety and the driving experience.



ENJOY OUTSTANDING COMFORT

Are you looking for a coach that's adaptable to meet your requirements? You can customize the HD to ensure optimum levels of comfort.

The HD has a customizable seating layout and comes with 2+2 and 2+1 seating configurations. You can also create multi-purpose spaces to transport items such as bicycles,

ski sets and wheelchairs, for your passengers' convenience.

The comfortable, wide and supported seats are available in textile, leather or a combination of both materials depending on your preferences, to help maximize your travel experience.

The ergonomic and wide parcel racks are easily accessible by all passengers

and come in two variations, with either lids or plastic stripes.

Just tell us what you want and the HD team will do the rest for you.



MAXIMUM EFFICIENCY, MAXIMUM PERFORMANCE

The HD works harder for your business, and lasts longer.

The emission values of its E6 DAF engine are Euro 6-compliant. The engine is environmentally friendly while providing low fuel consumption. The 10.8-litre engine produces 2,100 Nm @ 900-1,125 rpm and delivers 300 kW (408 hp) of power for a maximized driving experience. Or for an even higher performance

and enhanced driving experience, there is the option of a 330 kW (449 hp) engine with a 10.8-litre cylinder volume and 2,300 Nm of torque at 900-1,125 rpm.

This six-cylinder engine is remarkably efficient. Thanks to its ultra-modern and diligently tested technology, the engine meets Euro 6 emission requirements, and provides outstanding fuel efficiency. It also

offers high traction levels at low engine rev figures and at a wide range of speeds.

The emphasis is on better fuel efficiency and a pleasurable driving experience.

The HD is an ideal choice for people who are looking for a coach that's both budget and environmentally-friendly.



THE HD INCORPORATES ADVANCED SAFETY SYSTEMS

The most comfortable journeys begin with a safe driving experience. The HD incorporates a number of safety systems to provide the highest level of support.

The Anti-Lock Braking System (ABS) enables the driver to hit the brakes suddenly without losing control. It prevents the brakes from locking and reduces the stopping distance. By doing so, it improves handling and

enables a safer driving experience even when sudden emergency braking is needed.

Anti-Slip Regulation (ASR) is developed to prevent loss of traction on the wheels. The ASR system helps the driver to prevent skidding, thereby allowing the coach to start moving even in difficult driving conditions. It also enhances driving

safety on slippery surfaces, and prevents excessive wear of the tyres.

The Electronic Braking System (EBS) provides an optimized level of control when braking. It is integrated into an electronic system combining the brake controls, ABS and ASR to produce superior results over shorter braking distances and lower levels of disc wear.

The Electronic Stability System (ESP) helps to protect your coach in challenging road conditions. It manages the engine's operating system, and provides a different level of traction on each wheel. Combined with different braking power for individual wheels, this provides the optimum level of traction with the road and prevents loss of control in the event of sudden steering interventions and sharp cornering.

The Advanced Emergency Braking System (AEBS) offers automatic braking capability in the event of danger. It automatically intervenes in response to sudden developments which pose a risk of a crash, and helps prevent or reduce the impact of potential crashes.

The Lane Departure Warning System (LDWS) warns the driver with an audible and vibrating alert when the coach moves out of its lane. This system helps drivers to stay in lane and alerts them if the coach veers dangerously.




THE HD OFFERS YOU A RANGE OF OPTIONS

The HD is available with various lengths and seating capacities.




12 m

Maximum seating capacity **55** +1+1 



13 m

Maximum seating capacity **63** +1+1 



TECHNICAL SPECIFICATIONS

	HD12	HD13
DIMENSIONS AND WEIGHTS		
Length	12.276 mm	13.076 mm
Width	2.550 mm	2.550 mm
Height (incl. air conditioner)	3.644 mm	3.644 mm
Floor-To-Ceiling Height	2.000 mm	2.000 mm
Wheelbase	6.100 mm	6.900 mm
Front Overhang	2.766 mm	2.766 mm
Rear Overhang	3.410 mm	3.410 mm
Turning Diameter.....	21.600 mm	21.600 mm
Approach Angle.....	8°	8°
Seating Capacity	55+1+1	63+1+1
Total Luggage Volume	9m ³	11m ³
ENGINE		
Model 1.....	E6 DAF MX11-330 kW	E6 DAF MX11-330 kW
Type 1.....	Diesel, 4-Stroke Engine, Water Cooled, Direct Injection	Diesel, 4-Stroke Engine, Water Cooled, Direct Injection
Maximum Power 1.....	330 kW/449 HP @1600 rpm	330 kW/449 HP @1600 rpm
Maximum Torque 1.....	2300 Nm @900-1125 rpm	2300 Nm @900-1125 rpm
Model 2.....	E6 DAF MX11-300 kW	E6 DAF MX11-300 kW
Type 2.....	Diesel, 4-Stroke Engine, Water Cooled, Direct Injection	Diesel, 4-Stroke Engine, Water Cooled, Direct Injection
Maximum Power 2.....	300 kW/408 hp @1600 rpm	300 kW/408 hp @1600 rpm
Maximum Torque 2.....	2100 Nm @900-1125 rpm	2100 Nm @900-1125 rpm
Number of Cylinders and Layout.....	6 Cylinder in-line engine	6 Cylinder in-line engine
Bore/Stroke.....	123 x 152 mm	123 x 152 mm
Volume.....	10.800 cc	10.800 cc
TRANSMISSION		
Model (Standard).....	ZF	ZF
Type.....	Manual	Manual
Number of Gears.....	6 + 1	6+1
Model (Optional).....	ZF	ZF
Type.....	Automatic	Automatic
Number of Gears.....	12+1	12+1
AXLES		
Front Axle Type.....	Independent	Independent
Front Axle Capacity.....	7.500 kg	7.500 kg
Rear Axle Type.....	Rigid	Rigid
Rear Axle Capacity.....	11.500 kg	11.500 kg
Differential Ratio.....	2.71	2.71
RIMS & TIRES		
Rim.....	22.5 x 9	22.5 x 9
Tire.....	295/80 R22.5 Radial, Tubeless	295/80 R22.5 Radial, Tubeless
FUEL & AD BLUE TANK		
Fuel Capacity	540 L	540 L
Ad Blue Tank Capacity.....	50 L	50 L
ELECTRICAL SYSTEM		
System Voltage.....	24 V	24 V
Battery.....	2 x 12 V 225 Ah	2 x 12 V 225 Ah



	HD12	HD13	HD12	HD13
STEERING WHEEL				
Hydraulic Steering	Standard	Standard	Standard	Standard
Steering Wheel Tilt and Telescopic.....	Standard	Standard	Standard	Standard
BRAKES				
Service Brake.....	Standard	Standard	Standard	Standard
Parking Brake	Standard	Standard	Standard	Standard
Engine Brake	Standard	Standard	Standard	Standard
Exhaust Valve Break.....	Standard	Standard	Standard	Standard
ABS (Anti-Lock Braking System).....	Standard	Standard	Standard	Standard
ASR (Anti-Slip Regulation)	Standard	Standard	Standard	Standard
EBS (Electronic Braking System).....	Standard	Standard	Standard	Standard
AEBS (Advanced Emergency Braking System).....	Standard	Standard	Standard	Standard
INTERIOR				
Parcel Rack.....	Standard	Standard	Standard	Standard
Multimedia System.....	Standard	Standard	Standard	Standard
Curtain.....	Standard	Standard	Standard	Standard
Assistant Seat.....	Standard	Standard	Standard	Standard
Reclining Passenger Seats.....	Standard	Standard	Standard	Standard
Service Tray for Passenger Seats.....	Standard	Standard	Standard	Standard
Seat Pocket Fabric Plane Type.....	Optional	Optional	Standard	Standard
USB Charger.....	Optional	Optional	Standard	Standard
Kitchen Unit.....	Optional	Optional	Standard	Standard
WC	Optional	Optional	Standard	Standard
Sleeping Compartment.....	Optional	Optional	Standard	Standard
EXTERIOR AND BODY				
Body Lifting.....	Standard	Standard	Standard	Standard
Body Kneeling.....	Standard	Standard	Standard	Standard
Rim Cover.....	Standard	Standard	Standard	Standard
Opaque White Exterior Colour.....	Standard	Standard	Standard	Standard
Metallic Exterior Colour.....	Optional	Optional	Standard	Standard
Opaque Exterior Colour.....	Optional	Optional	Standard	Standard
Skibox.....	Optional	Optional	Standard	Standard
DRIVER'S AREA				
Electrical Controlled Double Glazed Driver Window.....	Standard	Standard	Standard	Standard
Alcoholometer.....	Optional	Optional	Standard	Standard
Front Microphone.....	Standard	Standard	Standard	Standard
Sunvisor	Standard	Standard	Standard	Standard
Electrical Sunvisor.....	Standard	Standard	Standard	Standard
3 Point Safety Belt for Driver Seat.....	Standard	Standard	Standard	Standard
Right Armrest for Driver Seat.....	Optional	Optional	Standard	Standard
Left Armrest for Driver Seat.....	Optional	Optional	Standard	Standard
Heater for Driver Seat.....	Optional	Optional	Standard	Standard
Interior Mirror for Driver	Standard	Standard	Standard	Standard
SECURITY				
ESP (Electronic Stability Programme)	Standard	Standard	Standard	Standard
LDWS (Lane Departure Warning System).....	Standard	Standard	Standard	Standard
ACC (Adaptive Cruise Control).....	Standard	Standard	Standard	Standard
Safety Hammers.....	Standard	Standard	Standard	Standard
Fire Warning System for Engine Room	Standard	Standard	Standard	Standard
Low Voltage Warning	Standard	Standard	Standard	Standard
Circuit Separator on Battery	Standard	Standard	Standard	Standard
Fire Extinguisher	Standard	Standard	Standard	Standard
Engine Room Lid Open Warning.....	Standard	Standard	Standard	Standard
2. Door Passenger Step Sensor	Optional	Optional	Standard	Standard
Tire Pressure Display.....	Optional	Optional	Standard	Standard
WINDOWS AND CLIMATIZATION				
Double Glazed Windows.....	Standard	Standard	Standard	Standard
Air Conditioner.....	Standard	Standard	Standard	Standard
Defroster.....	Optional	Optional	Standard	Standard
Convactor.....	Standard	Standard	Standard	Standard
Preheater.....	Standard	Standard	Standard	Standard
Timer For Preheater.....	Standard	Standard	Standard	Standard
ELECTRONIC EQUIPMENTS				
Monitor.....	Standard	Standard	Standard	Standard
Reverse Gear Buzzer	Standard	Standard	Standard	Standard
Rear Parking Sensor.....	Optional	Optional	Standard	Standard
Rear View Camera.....	Optional	Optional	Standard	Standard
Heated Windshield.....	Optional	Optional	Standard	Standard
Bottle Cooler in Dashboard.....	Standard	Standard	Standard	Standard
Destination Plates.....	Optional	Optional	Standard	Standard
SchoolBus Sign	Optional	Optional	Standard	Standard
Tachograph	Standard	Standard	Standard	Standard
OTHER EQUIPMENTS				
Spare Tire.....	Standard	Standard	Standard	Standard
First Aid Kit.....	Standard	Standard	Standard	Standard
Fog Lights	Standard	Standard	Standard	Standard
Xenon Headlight.....	Optional	Optional	Standard	Standard
Halogen Headlight	Standard	Standard	Standard	Standard
Electrical Horn	Standard	Standard	Standard	Standard
Air Horn.....	Optional	Optional	Standard	Standard
Day Running Light DRL (LED)	Standard	Standard	Standard	Standard
Ticket Machine Preparation	Optional	Optional	Standard	Standard
Rear Trailer Hook	Optional	Optional	Standard	Standard
Handicapped Lift/Ramp	Optional	Optional	Standard	Standard

TOGETHER

TEMSA continues to partner with
you anytime and anywhere...

**FOR THE
ROAD AHEAD**



RAPID SERVICE APPOINTMENTS TO SAVE TIME

You won't have to waste time that should be dedicated to work, as your vehicle is designed to offer maximum performance to generate valuable income. Make your appointment before visiting TEMSA's Authorised Service Centres and save valuable time.



ALWAYS BRAND NEW, WITH WARRANTY COVERAGE AND REGULAR MAINTENANCE

Let us take care of your vehicle with the help of advanced technology and the highly qualified service technicians while you enjoy the vehicle's performance and warranty coverage.



UNINTERRUPTED SERVICE WITH GENUINE PARTS

Our logistics services provide you the high-quality parts you need, anywhere around the globe. We provide you a wide range of genuine parts at 2 Temsa Spare Parts logistic centres in Germany and USA with main warehouse in Turkey where we can deliver the right parts at the right price and right time. TEMSA Spare Parts team serves 32 different countries. Wherever you may be, the spare parts you need will be brought to you quickly.



QUALITY IS OUR PRIORITY

Quality and availability are crucial for us. TEMSA Spare Parts teams diligently apply quality control, classification and inventory management processes for 87,000 spare part items.

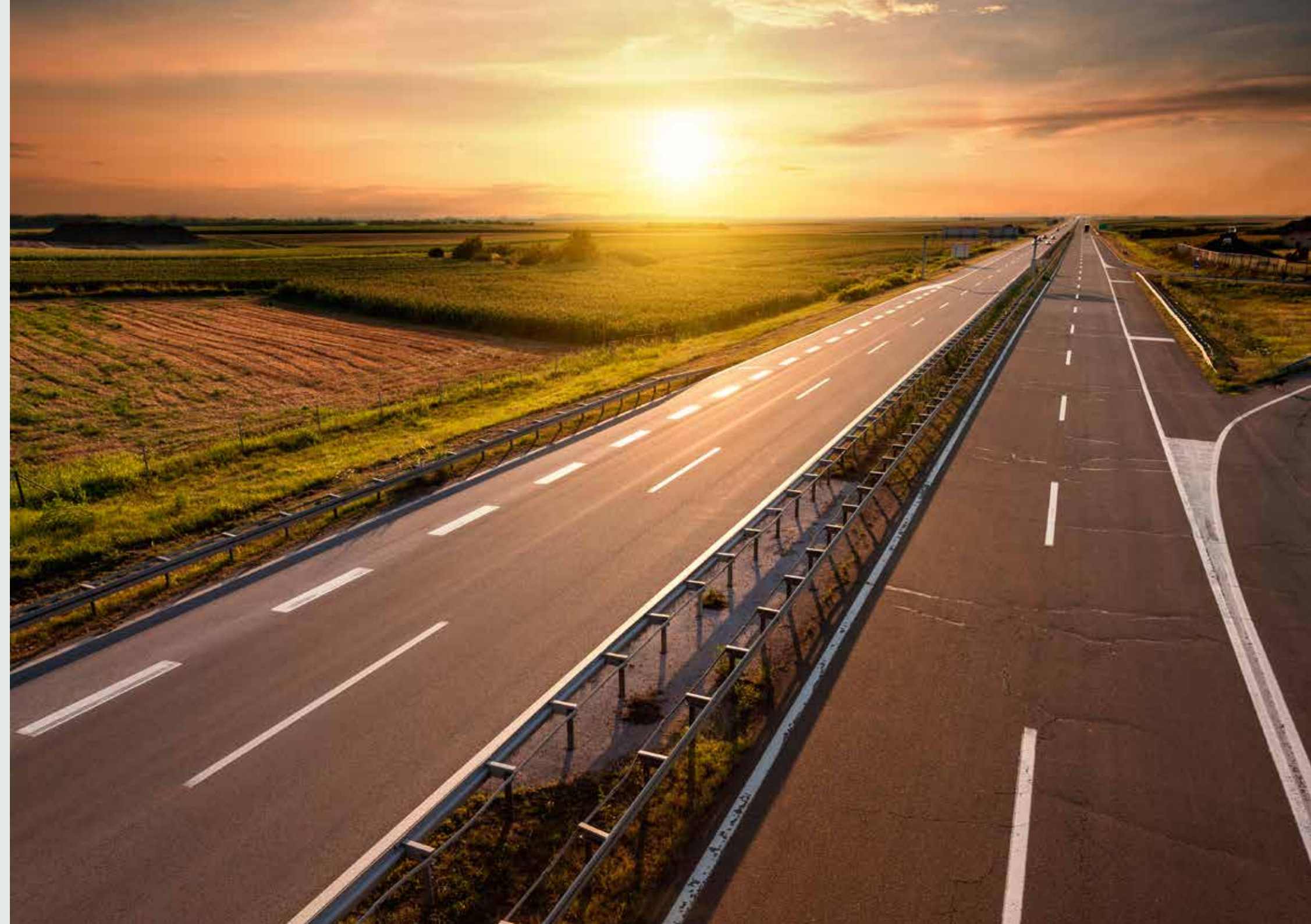


WE ARE THERE FOR YOU UNDER ANY CIRCUMSTANCES

With Temsa's European Road Assistance Service,
we are there for you, anywhere, anytime.

Our professional assistance team accessible 7/24 is
ready to deliver quick and efficient solutions.

+31 546 543 295







TEMSA
Smart Mobility

temsa.com

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