# TEKNOFEST AEROSPACE AND TECHNOLOGY FESTIVAL

# ROBOTAXI-FULL SCALE AUTONOMOUS VEHICLE COMPETITION

(AUTONOMOUS-READY VEHICLE CATEGORY)

INFORMATION DOCUMENT REGARDING THE READY VEHICLE TO BE USED IN THE

COMPETITION

(TRAGGER T-CAR)

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#### TRAGGER T-Car

#### Technical Data

Engine	7.4 KW Schaubmuller	
Torque / Nm (Max)	125 NM	
Operating Voltage / V	48 Volt	
Battery	Trojan T145 Plus	
Seating Capacity	2,4,6,8	
Max Vehicle Speed Km/h	24	
Chasis	6000 Series High Strength Aircraft Grade Aluminum	

## Suspension System

Front Suspension	Independent Telescopic Shock Absorber		
Rear Suspension	Helical Spring Fixed Axle / Telescopic Shock Absorber		
Tires	10" Duro		

# Brake System

Parking Brake	Mechanical/Foot Pedal	
Service Brake	Hydraulic/Drum	

### Vehicle Parts and Models

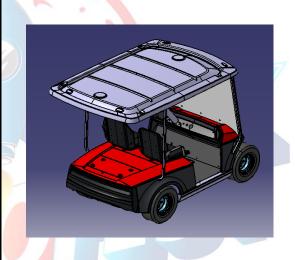
Oriental Engine	BLVM640N-GFS_ORIENTAL		
Magnetic Coupling	ABK 04 3.1 DIZAYN		
Linear Actuator	MD24A050-0100CNO2NNSD		
Encoder	8.F5888.5B2F.2123		
Lidar	Velodyne Puch Hi-Res 16		
IMU	https://www.sbg-systems.com/products/ellipse-micro-series/		
Camera	Zed2 Stereo		
Autonomous Controller	Nvidia Xavier <a href="https://www.nvidia.com/tr-tr/autonomous-machines/embedded-systems/jetson-agx-xavier/">https://www.nvidia.com/tr-tr/autonomous-machines/embedded-systems/jetson-agx-xavier/</a>		
Vehicle Controller	Automotive Vehicle Control Unit 3 x Canbus 1 x GPS 1 X RS485 1x GSM Module		

#### 3D View of the Vehicle









Click on the link to access the 3D version of the vehicle with .stp extension. https://drive.google.com/file/d/11E0k1sBN4IkD5FqHDNPMHyFWNMIJlbre/view?usp=sharing

#### Dimensions of the Vehicle

Wheelbase	2400	Total Height (Without Canopy)	1240
Total Length	2385	Total Height (With Canopy)	1950
Total Length (With back seat)	2825	Loading Floor Clearance	680
Front Length	290	Total Width (Without Canopy)	1330
Back Length	595	Rear Track Width	1115
Additional Inverted Two-Seat Size	1035	Front Track Width	1030
Chassis Ground Clearance (Without Canopy)	185		