

# FORD PUMA RALLY1 HYBRID

## TECHNICAL SPECIFICATION

### POWERTRAIN:

#### INTERNAL COMBUSTION ENGINE (ICE):

Ford EcoBoost 1600cc direct injection engine developed by M-Sport and Ford. Four cylinders, 16 valves. Bore 83.0mm. Stroke 73.9mm. Cosworth electronic engine management system, with custom software. Garrett turbocharger with 36mm inlet restrictor and Air-Air intercooler. Catalytic converter.

#### HYBRID POWER UNIT (HPU):

FIA-Mandated Hybrid Power Unit, with internal Battery and Motor Generator Unit (MGU). Active energy Regeneration and Boost. Max Instantaneous Boost Output 100 kW. Max Regen Input 30kW. Max Boost Energy per Acceleration 250kJ (set by FIA, stage length and surface dependent).

### POWER:

ICE only: 380 bhp

ICE + HPU: >500 bhp

### TORQUE:

ICE only: 420Nm

ICE + HPU: >500Nm

### TRANSMISSION:

Four-wheel drive with mechanical limited-slip front and rear differentials. Five-speed sequential transmission, manually operated gearchange, developed together with Sadev. Spool centre differential. 50-50 Torque Split. Double-plate sintered clutch.

### SUSPENSION:

Front and rear: MacPherson struts with Reiger 3-way adjustable dampers. Fully adjustable fabricated steel links with machined aluminium uprights. Front and rear adjustable anti-roll bars.

### BRAKES:

Gravel (front and rear): 300mm Brembo ventilated discs with Brembo four-piston air-cooled monoblock calipers.

Asphalt (front and rear): 370mm/355mm Brembo ventilated discs with Brembo four-piston air-cooled monoblock calipers.

Hydraulic handbrake with rear-drive disconnect. Adjustable front/rear bias.

### STEERING:

Power-assisted high-ratio (12:1) rack and pinion. 1.5 turns lock-to-lock.

### WHEELS:

Gravel/Snow: 7in x 15in magnesium wheels with Pirelli 650mm tyres.

Asphalt: 8in x 18in magnesium wheels with Pirelli 650mm tyres.

### BODYSHELL:

Full Spaceframe Chassis, designed and manufactured in-house. Integrated cockpit safety structure, featuring two roll-over hoops in T45 steel. Composite body panels (where regulations permit). Fully CFD Developed Aerodynamic package.

### ELECTRONICS:

Full Cosworth chassis and engine data acquisition for on-event diagnostics and performance development. Fanatec Steering Wheel control panel.



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**FUEL SYSTEM:**

FIA Specification to bespoke design, manufactured by ATL. Located centrally with 63 litre capacity.

**INTERIOR:**

Twin dash displays for driver and co-driver. Sparco seats and belts. Composite door cards with FIA impact safety foam.

**WEIGHTS AND DIMENSIONS:**

Minimum Wheelbase: 2600mm. Maximum Width: 1875mm. Minimum Complete Car Weight (without crew): 1260kg.



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