PRODUCT SPECIFICATIONS FOR FM538 GF/FM538 LL

ENGINE

Engine Model	Cat C7.1
Net Power - ISO 9249	128.5 kW
Engine Power - ISO 14396	129.4 kW
Net Power - ISO 9249 (DIN)	175 hp (metric)
Engine Power - ISO 14396 (DIN)	176 hp (metric)
Bore	105 mm
Stroke	135 mm
Displacement	7 r/min
Biodiesel Capability	B20[1]
Emissions	Meets U.S. EPA Tier 4 Final, EU Stage V emission standards.
Note (1)	Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system, and alternator with engine speed at 1,800 rpm. Advertised power is tested per the specified standard in effect at time of manufacture.

Note (2)	[1]Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels** up to: 20% biodiesel FAME (fatty acid methyl ester)* or 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels. Refer to guidelines for successful application. Please consult your Cat dealer or Caterpillar Machine Fluids Recommendations (SEBU6250) for details. *Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).** Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

DRIVE

Maximum Travel Speed	4.9 km/h
Maximum Drawbar Pull	246 kN

HYDRAULIC SYSTEM

Main System - Maximum Flow	468 l/min
Maximum Pressure - Equipment	35000 kPa
Maximum Pressure - Equipment - Lift Mode	38000 kPa
Maximum Pressure - Travel	35000 kPa
Maximum Pressure - Swing	30000 kPa

SWING MECHANISM

Swing Speed	11 r/min
Maximum Swing Torque	98 kN·m

WEIGHTS

General Forestry	30000 kg
Log Loader (U/U)	31590 kg

SERVICE REFILL CAPACITIES

Fuel Tank	990 l
Cooling System	17.5 l
Engine Oil	25 l
Swing Drive	11.5 l
Final Drive - Each	4.5 l
Hydraulic System - Including Tank	262 l
Hydraulic Tank	143 l
DEF Tank	41 l

DIMENSIONS

Note (1)	General Forestry
Shipping Height - Tilted Cab	3400 mm
Handrail Height	3270 mm
Length: General Forestry - Boom Stretched Out	11920 mm
Length: Log Loader - Boom Stretched Out	15120 mm
Tail Swing Radius	3130 mm
Counterweight Clearance	1300 mm
Ground Clearance	755 mm
Track Length	4670 mm
Track Length to Center of Rollers	4020 mm

Track Gauge	2790 mm
Transport Width	3490 mm

WORKING RANGES

Max Reach at Stick Nose at Ground Level - General Forestry Road Builder	9820 mm
Max Reach at Grapple Mount on Heel at Ground Level - Log Loader Under/Under	10960 mm

AIR CONDITIONING SYSTEM

Note (1)	The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 2.1 (22" Riser CAB)/2.2 (48"/72" Riser CAB) kg of refrigerant, which as a CO2 equivalent of 3.003/3.146 metric tonnes.

FM538 GF/FM538 LL STANDARD EQUIPMENT

CAB

ROPS Forestry cab with polycarbonate windows
4-point harness seat belt
Heated and cooled seat with air-adjustable suspension
Integrated joysticks
Tilt-up left-side console (side-entry cab only)
High-resolution touchscreen monitor
Bluetooth integrated radio (including USB, aux port and microphone)
12V DC outlets
Keyless push-to-start engine control
Automatic bi-level air conditioner
LED dome and floor lights
Windshield wiper and washer
Behind seat storage
Retractable sunshade

CAT TECHNOLOGIES

VisionLink
Remote Services Capability

ELECTRICAL SYSTEM

Maintenance-free 1000 CCA batteries (x4)
Centralized electrical disconnect switch
LED chassis, boom, and cab lights

115-amp alternator
24-volt electric starting
Pre-start monitoring system
Tool control software
Secondary engine shut off switch

ENGINE

Electric fuel priming pump
Three selectable modes: Power, Smart, Eco
Automatic engine speed control
Automatic engine idle shutdown
Up to 4600m (15,092 ft) altitude capability
48° C (118° F) high-ambient cooling capacity
-32° C (-25° F) cold start capability
Hydraulic reverse fan
Two-stage fuel filter system
Double element air filter with integrated pre-cleaner

HYDRAULIC SYSTEM

Boom and stick regeneration circuits
Boom and stick drift reduction valve
Electronic main control valve
Automatic hydraulic oil warm up
Automatic swing parking brake
High performance hydraulic return filter
Automatic two speed travel
Bio hydraulic oil capability
High torque swing drive
Swing cushion valve
Tool control software

SAFETY AND SECURITY

Caterpillar One Key security system
Lockable service doors
Lockable external tool/storage box
Lockable fuel cap and hydraulic tank
Lockable disconnect switch
Right-hand rail and hand hold
Service platforms with anti-skid plate and countersunk bolts
Signaling/warning horn
Travel alarm
Swing alarm
Ground-level secondary engine shutoff switch
Reaview camera
Right-hand sideview camera

SERVICE AND MAINTENANCE

Integrated vehicle health management system
Side-entry service platform
Grouped location for engine oil and fuel filters
Ground level dipstick for engine oil
Scheduled Oil Sampling (S·O·S) ports

UNDERCARRIAGE AND STRUCTURES

High Wide undercarriage
203 mm (8") pitch Cat grease lubricated track chain with PPR3 positive pin retention
Catwalks
Tie down points
Counterweight fuel tank
Heavy-duty track rollers and frames
Heavy-duty travel motor guards
Heavy-duty bottom guards
Track guiding guards
High drawbar final drives
Heavy-duty recoil springs
Heavy-duty hydraulic swivel
Heavy-duty hydraulic swivel guard

FM538 GF/FM538 LL OPTIONAL EQUIPMENT

BOOMS AND STICKS

5.7 m (18'7") Reach boom - General Forestry
5.9 m (19'6") Straight boom - Log Loader
2.9 m (9'6") Thumb-ready stick
3.7 m (12'2") Drop Nose stick
3.5 m (11'6") under/under stick
3.8 m (12'6") over/under stick
3.8 m (12'6") power clam stick
B1 family bucket linkage

CAB

Rear entry
Side entry
165 mm (6.5") fixed riser
1219 mm (48") tilting riser
CB radio mounts
Cat Stick Steer
Auxiliary relay

ELECTRICAL SYSTEM

Premium lighting - General Forestry - 6 additional LED lights
Premium lighting - Log Loader - 10 additional LED lights

ENGINE

Cold start package with block heaters and ether assist

HYDRAULIC SYSTEM

Medium pressure circuit

SAFETY AND SECURITY

Easy lock cab tilting system
Cab riser light
Inspection lighting
Swing alarm
Right-hand sideview camera
Inspection lighting

UNDERCARRIAGE AND STRUCTURES

900 mm (36") triple grouser Tri Link shoes
800 mm (31") triple grouser shoes
700 mm (28") double grouser shoes
600 mm (24") double and single grouser shoes