



The C7.1 ACERT™ Industrial Power Unit is a complete power package containing a radiator, flywheel, alternator and alternator wiring, completely pre-assembled for fast, straightforward installation in a number of OEM, customer and packager applications. These fuel efficient units are ready-made for irrigation, industrial, mining and other pump applications.

Specifications

Power Rating		
Minimum Rating	116 bkW	156 BHP
Maximum Rating	205 bkW	275 BHP
Rated Speed	116-205 bkW/156-275 bhp @	2200 rpm, 129 bkW/173 bhp @ 2500 rpm

Emission Standards	
Emissions	China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent. Designed to meet China Stage III emission
	standards.

General	
Engine Configuration	Inline 6, 4-Stroke-Cycle Diesel
Bore	105 mm (4.1 in)
Stroke	135 mm (5.3 in)
Displacement	7.01 L (427.7 in³)
Aspiration	Turbocharged Aftercooled (TA)
Compression Ratio	16.8:1
Combustion System	Direct Injection
Rotation from Flywheel End	Counterclockwise

Power Unit Dimensions - Approximate	
Height	1140 mm (44.8)
Length	1728 mm (68 in)
Weight - Net Dry - Standard Configuration Without Oil, Cooling, Clutch, Compressor, A/C	788 kg (1737 lbs)
Width	788 mm (31 in)



Benefits and Features

Reliable, Quiet and Durable Power

World-class manufacturing capability and processes coupled with proven core engine designs assure reliability, quiet operation, and many hours of productive life.

Fuel Efficiency

Fuel consumption optimized to match operating cycles of a wide range of equipment and applications while maintaining low operating costs.

Broad Application Range

Industry leading range of factory configurable ratings and options for agricultural, material handling, construction, mining, aircraft ground support, and other industrial applications.

Package Size

Exceptional power density enables standardization across numerous applications. Multiple installation options minimize total package size. Ideal for equipment with narrow engine compartments.

World-class Product Support Offered Through Global Cat Dealer Network

- Scheduled maintenance, including SOSSM sample
- Customer Support Agreements (CSA)
- Caterpillar Extended Service Coverage (ESC)
- Superior dealer service network
- Extended dealer service network through the Cat Industrial Service Distributor (ISD) program

Standard Equipment

Air Inlet

· Standard air cleaners

Control System

- Full electronic control system, all connectors and wiring looms waterproof and designed to withstand harsh offhighway environments
- Flexible and configurable software features and well-supported SAE J1939 CAN bus enables highly integrated machines

Cooling System

- Top tank temperature 108° C (226° F) as standard to minimize cooling pack size
- 50:50 water glycol mix
- Cooling system designed for operation in 48 C (118 F) ambient.

Flywheels and Flywheel Housing

Wide choice of drivetrain interfaces, including SAE No. 1, SAE No. 2, and SAE No. 3 configurations

Fuel System

- · Electronic high pressure common rail
- ACERT Technology
- Innovative filter design to ensure maximum protection of the engine

Lube System

Wide choice of sumps for different applications

Cat® C7.1 ACERT™ Industrial Power Unit

Industrial



Power Take Off

• SAE A or SAE B flanges on left-hand side. Right-hand side twin PTO also available. Engine power can also be taken from the front of the engine on some applications.

General

• Paint: Caterpillar yellow

The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, ADEM, EUI, S•O•S, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.