

PANTHER T8



Engine

| | | |
|-------------------------------------|-------------|---------------|
| Model | Cat® | C7.1 ACERT™ |
| Net Power | 168 kW | 225 hp |
| Torque @1,400 RPM | 1,092 N · m | 805 lb. · ft. |
| U.S. EPA Tier 4 Final EU Stage IV | | |

Weights

| | | |
|------------------------|-----------------------|------------|
| Shipping Weight | 8,680 kg | 19,096 lb. |
| Payload | 7,257 kg | 16,000 lb. |
| Ground Pressure Loaded | 288 g/cm ² | 4.09 psi |

**PipeLine
Machinery**



Your Global Partner for Pipeline Solutions

Low ground pressure carrier solution - **PANTHER T8**



PipeLine Machinery International (PLM) presents a custom equipment carrier solution - the PANTHER T8 by PRINOTH. As the latest innovation in a low ground pressure crawler, the PANTHER T8 operates in off-road and various weather conditions offering exceptional performance and versatility in pipeline, mining, construction, oil and gas as well as electric utility sectors.

The PANTHER T8 combines the proven capabilities of the Cat® C7.1 ACERT™ engine model with the industry expertise in off-road vehicles by PRINOTH. Built with a widened chassis to accept virtually all implements without any modifications, PLM makes the PANTHER T8 available in four configurations; flat bed with crane, a tilting flat bed, a dump box, and a Vanguard welding package with the Weld Deck. The CPW125-4 Series 2 Weld Deck provides continuous powered welding and an engineered Vanguard hydraulic slewing canopy. From construction to right-of-way maintenance, in the middle of nowhere or within city limits, the PANTHER T8 has the toughness, tenacity and reliability you need in a crawler.

PLM presents the PANTHER T8

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▲ Low ground pressure

The PANTHER T8 has a ground pressure of 4.09 psi fully loaded making difficult types of terrain accessible. Travel easily over soft terrain reducing possible damage to the environment. Stop, work, and restart anywhere in sand, swamps, mud and snow.

▲ Torque

The PANTHER T8 offers increased torque with a strong pull ratio. This feature allows for more speed when climbing hills, turning in harsh conditions, and travel on muddy terrain.

▲ Suspension

An automatic track tensioning system offers ideal tension while working at all times. Large wheels allow for more contact with the track, better travel over obstacles, more stability, longer track life and prevent freezing of the undercarriage in harsh winter temperatures. The wheel hubs are oil bath type to reduce maintenance.

▲ Traction

The PANTHER T8 keeps more of the carrier in contact with the ground with a unique tread pattern. The numerous blocks provide bite while the angular cuts and “zig zag” tread provide side hill grip. The endless rubber track allows for driving over pavement without causing any damage. Wear indicators are provided to monitor track wear and ensure sufficient tread height for safe use.

▲ Performance

The PANTHER T8 has the highest payload in its class at 16,000 lb. (7,257 kg). Working an eight hour day is no problem for this carrier on one tank of fuel, maximum speed and loaded in good conditions. The PANTHER T8 will work up to 51°C (124 °F) and loaded without overheating. Hydraulic and pump drive system allows for an auxiliary power take-off.

Cab Features ▶

The cab is designed for operator safety and comfort with top lights for visibility, a brush guard, system diagnostic capability and two-person cab option. The two-person cab eliminates the need for a secondary vehicle to transport your helper while being safer and more comfortable.



Microcontroller Technology ▶

The drive controls appear in a color display allowing advanced interfacing capabilities.

The color display allows the user to:

- Consult gauges and general information
- Consult engine fault codes
- Consult transmission fault codes
- Consult output readings of vehicle sensors for diagnostic
- Configure vehicle parameters (Engine RPM settings for implements, etc.)
- Select language/units



Steering Wheel ▶

A steering wheel control allows for a safe grip while moving through rough terrain and maintaining optimal precision and control. The steering components are ergonomic, telescopic and tiltable.





▲ ENGINE

| | | |
|-----------------------|--------------------------------------|-----------------------|
| Make | Caterpillar® | |
| Model | C7.1® ACERT™ | |
| Type | Turbo diesel, electronic fuel system | |
| Emission Standard | EPA Tier 4 Final and EU Stage IV | |
| Clean Emission Module | DOC, DPF and SCR | |
| Regeneration | Passive, no performance lost | |
| Number of Cylinders | 6 cylinders in line | |
| Displacement | 7.01 L | 427.7 in ³ |
| Horsepower @ 2200 RPM | 168 kW | 225 HP |
| Torque @1400 RPM | 1,092 N·m | 805 lb·ft |
| Fuel Tank Capacity* | 245 L | 64 US gal |
| DEF Tank Capacity | 27 L | 7.1 US gal |

* Additional fuel tank added for Vanguard welding package application

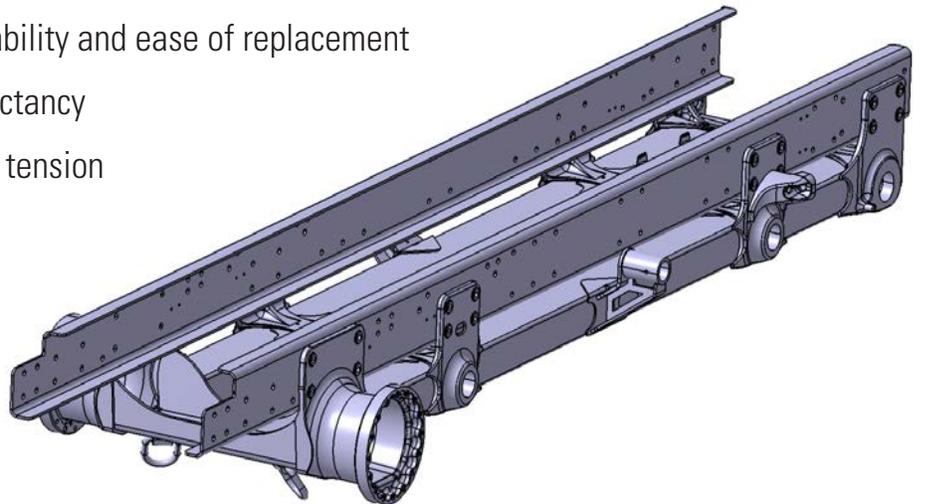


UNIQUE UNDERCARRIAGE SYSTEM

A walking beam suspension, producing increased suspension travel, easily adapts to uneven terrain while providing a safe and comfortable ride.

This style of undercarriage also provides:

- ▶ Rubber track stability and ease of replacement
- ▶ Longer life expectancy
- ▶ Automatic track tension



CHASSIS

The PANTHER T8 chassis is based on a truck chassis concept with the top section made from two "C" channels spaced apart by 34 inches. This patent-pending design simplifies implement installation. Front and rear frame extension options are also available.

Hydraulics ▶

A dedicated pump drive on the PANTHER T8 allows for a custom hydraulic installation with various sizes of flanges and shaft adapters available to permit the use of a wide range of pumps. The pump shaft rotation speed ratio is 1:1 with the diesel engine allowing more flexibility for the hydraulic pump selection and making it possible to use the same pumps that are normally used on trucks.



▼ Maintenance

The patent pending split wheel design in combination with the multi-segment sprocket makes track removal and installation easier than other designs. This feature also makes it easy to install the track without struggling to get the track guiding lugs over the outer wheels.

Standard equipment includes a lockable fuel cap, pressurized hydrostatic oil tank, D-ring for transportation (4x), back-up alarm, electric horn, front skid plate, operating and maintenance, manual and a spare parts catalog (on USB flash drive).

A full line of parts for the PANTHER T8 and T12 carriers are available through the PipeLine Machinery purpose-built parts department.

Contact us today: parts@plmcat.com / +1-713-580-8417



PANTHER T8 CONFIGURATIONS



The pipeline construction industry requires specialized equipment to facilitate the building of pipeline infrastructures that are both operational and safe. That is where the PANTHER T8 off-road carrier vehicle comes in. With its low ground pressure and all-weather capability, it makes tracks into hard-to-reach jobsites all year round with all the implements necessary for site preparation. From building access roads to pipeline installation, the PANTHER T8 gets it done. Quickly, safely, economically.

► DUMP BOX

You have a load of materials that have to get to the job-site and you do not have time to worry about potential complications. No problem. With a maximum payload of 16,000 lb. (7,260 kg), the PANTHER T8 has a dump box that will work for you. And with its low ground pressure and relentless reliability, the PANTHER T8 gets your cargo to where it is going.

Application : Move earth, gravel, rocks and mats

Capacity of 5.75 cubic yards / 4.4 cubic meters and 13,000 lb. (5,896 kg)

▼ TILTING FLAT BED

This configuration has the same technology as the dump box. Designed for jobs like sand blasting, rigs, handling mats, hauling generators, pumps, fuel tanks and job supplies.

Tilting flat bed application
pictured on PANTHER T12





► CRANE

The PANTHER T8 is at home on the ground, but it can also take to the sky. Once its low ground pressure and wide track get you to your site, the PANTHER T8 offers you a maximum payload of 16,000 lb. (7,260 kg) and can be outfitted with a knuckle-boom, telescopic crane with maximum reach of up to 25 ft. (7.3 m) and a radius of 370 degrees. The PANTHER T8 carrier's innovative crane-chassis interlock feature makes this uplifting experience safe for the operator and those within the vicinity of the carrier.

Application : support unit, coating unit, pipe testing unit and transport fuel.
 Knuckle boom crane comes with wireless remote control and battery charger.

| | | |
|-------------|----------------|---------------------|
| Atlas Crane | Model 42.3 | |
| Capacity | 995 kg @ 3.5 m | 2,190 lbs @ 11.5 ft |
| | 408 kg @ 7.3 m | 900 lbs @ 25 ft |

► FLAT BED

When you have a large deck area it can only mean one thing: you can put a large flat bed on top of it. A heavy-duty platform enables the PANTHER T8 to carry a multitude of different materials and supplies, safely and securely. This application comes with optional removable aluminum side panels and a hinged tailgate that are 17.5 in. (44.45 cm) in height. So load up the flat bed, drop the PANTHER T8 in gear and let its low ground pressure take you and your payload to where the action is. PANTHER T8: it carries the load.



Weld Deck Continuous Powered Welding

Utilizing substantial research with industry leaders and technicians, Vanguard Equipment, Inc. developed the CPW 125-4 Series 2 welding package and has adapted the unit to the PANTHER T8 for on-site pipeline welding. The T8 welding package is designed as a Tack-Rig, and can be configured for either full automatic or manual stick welding. Unique features include:

- ▶ The power generation is independent of the carrier allowing the unit to be moved without shutting down the power which results in a faster cycle time for welding a joint of pipe.
- ▶ A closely governed genset results in tighter frequency control creating higher quality welds and fewer weld repairs.
- ▶ The cycling time of line-up clamps is much quicker with the CPW 125-4 Series 2 welding package. The air compressor delivers the air at both a higher volume [64.1-90 cfm (1815 liters/min.-2548.5 liters/min.)] and pressure [250 psi (17.2 bar)] depending which option is chosen. The fact that there is no down time for the compressor while moving the unit adds to its ability to replenish the air much faster than other designs.
- ▶ The CPW-125-4 Series 2 unit is ergonomically designed and safety engineered to CSA/UL/SAE and European Certification (CE)*

*A CE certified air tank is required with CE units.

An Outstanding Choice for Productivity and Versatility



▶ **Fuel Efficiency**

A direct-coupled diesel engine provides zero mechanical loss to the AC generator resulting in excellent fuel efficiency (20 to 44 gallons per shift, depending on welding operation).

▶ **Cooling System**

A heavy-duty, three-piece radiator is mounted on isolators for tough construction jobs and long life.

▶ **Dual Frequency**

The CPW-125-4 Series 2 comes standard with 50/60 dual frequency operation for easy conversion between 50 and 60 cycle applications. For maximum versatility, optional quick-connect front receptacle panels are available to suit any plug standard throughout the world.

▶ **Air System**

Improved high-pressure air system offers continuous operation, delivering 50% more air over previous industry standard. ASME or ASME/CE certified air tanks are available.

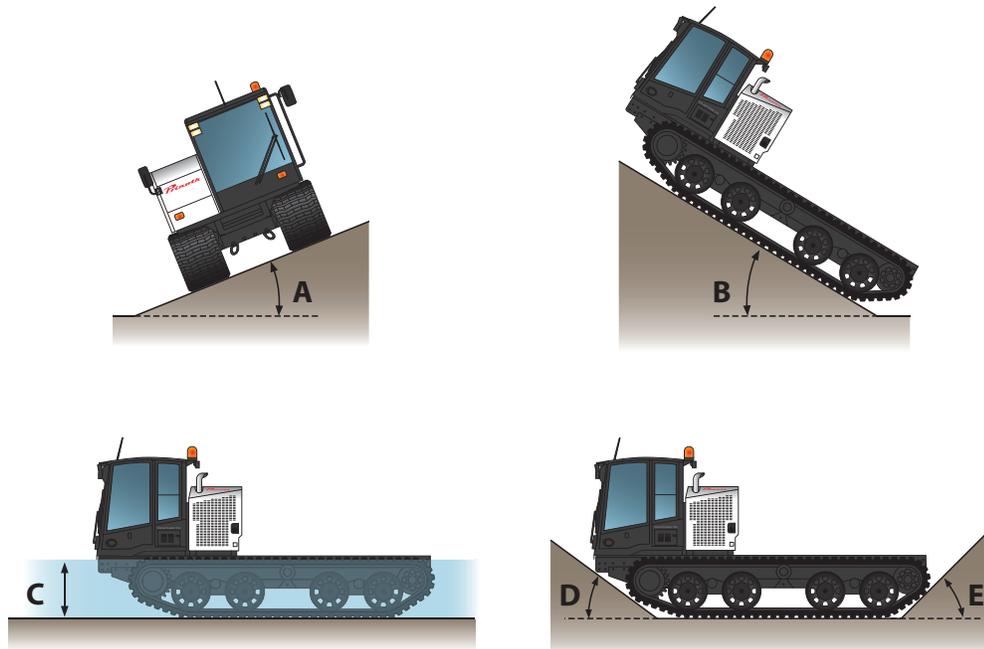
▶ **Engineered Hydraulic Slewing Canopy**

A front-mounted, fully hydraulic slewing canopy is available from Vanguard Equipment, Inc. A self-locking hydraulic slewing ring removes any manual effort to rotate and lock the canopy into position. The engineered design with fully integrated hydraulic components and European Certification (CE), fully address the relevant safety aspects.

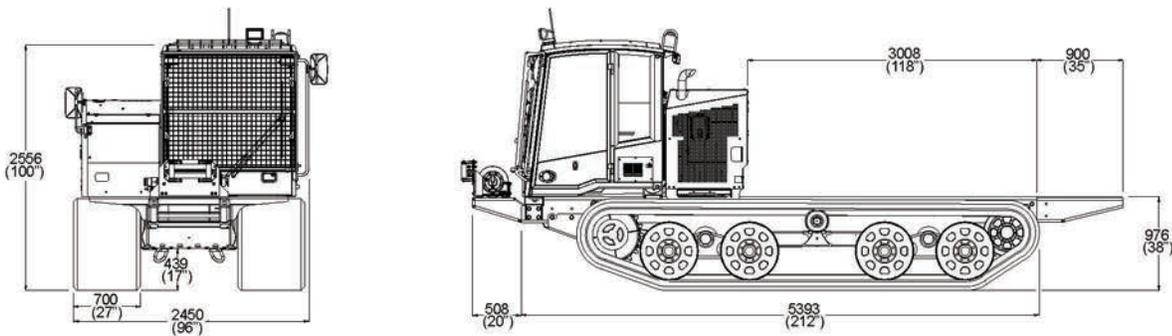
Job-site safety is a key concern for pipeline contractors and the PANTHER T8 has been designed with features to protect people in and around the carrier.

- A Roll Over Protection Structure (ROPS) that is built within the cab frame for operator protection.
- A Falling Object Protective Structure (FOPS) - optional.
- Proprietary micro controller power management system makes it easy to drive without distraction.
- Automatic brakes = safety on hills.
- Interlock system = safety and stability for utility applications.
- Steering wheel driving system with zero degree turning radius.

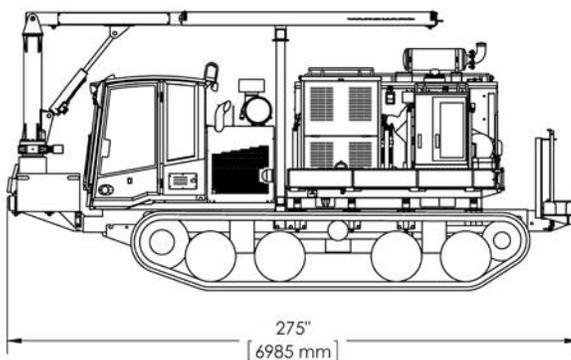
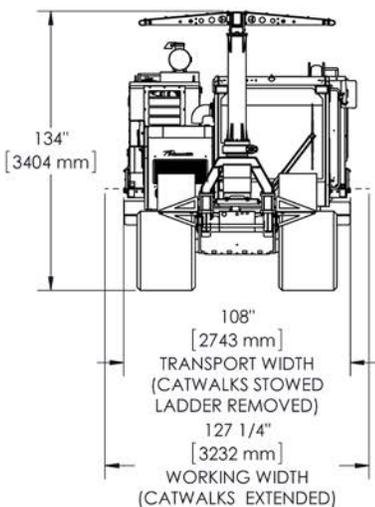
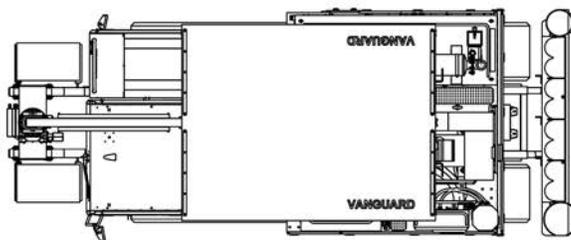
The PANTHER T8 is CE certified, meaning that the carrier conforms with legal and technical directives of the European Union (EU).



| | T8 | T12 |
|----------------------|-------------------|-------------------|
| A. Sidehill | 40% (22 deg) | |
| B. Uphill / Downhill | 60% (31 deg) | |
| C. Fording Depth | 1,000 mm (39 in.) | 1,300 mm (51 in.) |
| D. Approach Angle | 30 deg | 43 deg |
| E. Departure Angle | 45 deg | |



The PANTHER T8 does not exceed standard road transportation width and can be hauled to any job site. Oversea transportation was also considered during the product design phase of this carrier and as a result was built to be 96 in. (2,451 mm) wide. The PANTHER T8 base vehicle can be shipped inside a high cube container with the track removed, instead of using an expensive flat rack.



TRANSPORT DIMENSIONS

PANTHER T8 SPECIFICATIONS

▼ DIMENSIONS

| | | |
|--|----------|------------|
| Overall length (basic vehicle) | 5,394 mm | 212.6 in. |
| Overall length without extension and with dump box | 5,670 mm | 223.5 in. |
| Overall width (without mirrors) | 2,451 mm | 96 in. |
| Overall height | 2,556 mm | 101 in. |
| Overall clearance | 439 mm | 17.3 in. |
| Shipping weight | 8,680 kg | 19,096 lb. |

▼ PERFORMANCE

| | | |
|--|-----------------------|------------|
| Payload | 7,257 kg | 16,000 lb. |
| Maximum speed unloaded | 10 km/h | 6.2 mph |
| Fording depth | 1,000 mm | 39 in. |
| Turning radius | 0 m | 0 in. |
| Ground pressure @ 150 mm (6 in. penetration) | | |
| Basic vehicle | 156 g/cm ² | 2.22 psi |
| Loaded vehicle | 288 g/cm ² | 4.09 psi |
| Maximum gradeability uphill/downhill | 60% | 31.0 deg |
| Sidehill | 40% | 21.8 deg |

▼ CONTROLS

| | |
|----------------|---|
| Type | Microprocessor with color display |
| Inputs | Steering wheel, progress, forward, neutral, reverse lever and speed pedal |
| Outputs | Independent control of each track |
| Other features | Anti-stall, SAE J1939 communication and diagnostics, auto-calibration |

▼ ELECTRICAL SYSTEM

| | |
|---------------------|---------------|
| Voltage | 12V |
| Alternator capacity | 150 A |
| Battery capacity | 2 x 1,150 CCA |

▼ UNDERCARRIAGE

| | |
|-----------------|-------------------|
| Suspension type | Tandem suspension |
| Wheel quantity | 16 |
| Wheel type | Solid casting |
| Wheel diameter | 610 mm 24 in. |

▼ TRACKS

| | |
|-----------|-----------------------------|
| Type | Metal embedded rubber track |
| Width | 700 mm 27.6 in. |
| Tensioner | Automated track tensioning |

▼ PROVISION FOR EXTRA HYDRAULIC PUMP

| | |
|----------------------------------|---|
| Available flange and shaft types | SAE C 14t / 12-24 DP SAE B 13t - 15t / 16-32 DP SAE 9t-11t / 16-32 DP |
| Direction of rotation | CCW (when looking at pump shaft) |
| Max. rotational speed | 2,200 RPM |

▼ CAB (STANDARD)

| |
|---|
| ROPS ISO 3471 |
| Wide cab (1-seat configuration) |
| Three-point seatbelts |
| Parking brake linked with operator seatbelt |
| Lockable door |
| Adjustable operator seat with suspension |
| Two halogen front lights |
| One halogen rear light |
| Dome light |
| Front wiper with intermittent, low and high speed |
| Rear wiper with low, high speed |
| Front and rear windshield washer |
| Two 12 V power outlets |
| Fire extinguisher |
| Coat hanger |
| Front and side windows emergency exits |

▼ STANDARD EQUIPMENT

Lockable fuel cap, pressurized hydrostatic oil tank, D-ring for transportation (4x), back-up alarm, electric horn, front skid plate, Operating and Maintenance Manual, and spare parts catalog (on USB flash drive).

▼ OPTIONAL EQUIPMENT

| |
|---|
| FOPS ISO 3449 |
| Brushguard |
| Second seat (wide cab only) |
| Narrow cab (1 seat configuration) |
| Amber beacon light with protector |
| Remote controlled directional spotlight* |
| Electronic programmable inclinometer with indication in the display |
| Installation for dump body (hydraulic and hardware) |
| Dump body std (4.4 cubic meter/5.7 cubic yard capacity) |
| Air conditioning cab with adjustable temperature, fan control and fresh air intake |
| Engine coolant heater ESPAR* |
| Maintenance kit, 500 hours or 2000 hours include all filters for air/fuel/hydrostatic |
| Premium package including inclinometer, additional front lights, customer interface connector, second micro controller and wiring harness for winch, heater mirrors, programmable diesel coolant heater and directional light |
| Radio CD AM/FM with two speakers (world edition) |
| 2 exterior mirrors (heater available*) |
| Rear pintle hook (up to 30,000 lb capacity) |
| First aid kit |
| Front extensions |
| Rear extensions |
| 3rd AGM battery |
| Emergency driving system |
| PTO clutch |
| Various options for front winch installation |
| Engine block and hydraulic oil heater |

**Premium Package Required*



INNOVATION AT WORK.



With the highest payloads and lowest ground pressures in their respective classes, the PANTHER T8 and PANTHER T12 carriers deliver the toughness, tenacity and reliability you demand from a crawler. Plus, you'll find excellent pull ratios and generous deck space to get the job done safely and efficiently. No matter the terrain, weather conditions, or unique challenges presented with your project, you can rely on our innovative machinery to keep your jobs moving. **Let's work together.**



Contact Us:

USA: +1- 713-939-0007
Canada: +1-780-377-0336
China: +1-86-10-8468-3915
Netherlands: +31-70-353 8279
Australia: +61- 423 394 730

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