

HITACHI



## ZAXIS 50U-3

- Engine Rated Power: 38.1 hp (28.4 kW)
- Operating Weight: 10,811 lb. (4904 kg)
- Backhoe Bucket: 2.1–8.3 cu. ft. (0.06–.24 m<sup>3</sup>)

## Engine

Manufacturer and Model .....	Yanmar 4TNV88
Non-Road Emission Standards .....	certified to EPA interim Tier-4 emissions
Displacement .....	134 cu. in. (2.19 L)
Net Power (ISO9249) .....	38.1 hp (28.4 kW) @ 2,400 rpm

## Powertrain

Each track independently driven by hydrostatic axial-piston motor connected to two-stage planetary gear-reduction box	
Travel Speed (maximum)	
Low .....	1.7 mph (2.6 km/h)
High .....	2.7 mph (4.2 km/h)
Swing Speed .....	9 rpm
Swing Brake .....	spring applied, hydraulically released, automatic

## Hydraulics

Closed center load sensing with one variable-displacement pump and one fixed-gear pump	
Pump Flow .....	33 gpm (124.9 L/m)
Auxiliary Flow .....	22.5 gpm (85.2 L/m)
Controls .....	hydraulic pilot-operated for boom, arm, bucket, swing, boom swing, blade, travel, and auxiliary functions

## Electrical

Alternator Rating .....	55 amp
Work Lights .....	two halogen: one mounted on operator's station and one mounted on boom

## Undercarriage

Two-speed axial-piston propel motors				
Tracks, Rubber .....	16 in. (406 mm)			
	4-ft. 6-in. (1.38 m)	4-ft. 6-in. (1.38 m)	5-ft. 7-in. (1.69 m)	5-ft. 7-in. (1.69 m)
	Standard Arm, Canopy, and	Standard Arm, Cab, and	Long Arm, Canopy, and	Long Arm, Cab, and
	Standard Counterweight	Standard Counterweight	Extra Counterweight	Extra Counterweight
Ground Pressure with Rubber Track .....	4.06 psi (28 kPa)	4.06 psi (28 kPa)	4.49 psi (30.9 kPa)	4.49 psi (30.9 kPa)

## Upperstructure

Independent Swing Boom	
Left .....	80 deg.
Right .....	60 deg.
Counterweight	
Standard .....	1,455 lb. (660 kg)
Additional .....	485 lb. (220 kg)

## Serviceability

Refill Capacities	
Fuel Tank .....	18.5 gal. (70 L)
Cooling System .....	6.9 qt. (6.5 L)
Engine Oil with Filter .....	9.1 qt. (8.6 L)
Hydraulic Tank .....	13.2 gal. (50 L)

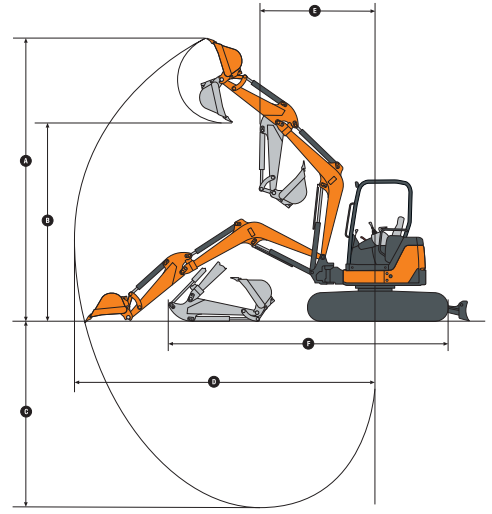
## Operating Weights

	4-ft. 6-in. (1.38 m)	4-ft. 6-in. (1.38 m)	5-ft. 7-in. (1.69 m)	5-ft. 7-in. (1.69 m)
	Standard Arm, Canopy, and	Standard Arm, Cab, and	Long Arm, Canopy, and	Long Arm, Cab, and
	Standard Counterweight	Standard Counterweight	Extra Counterweight	Extra Counterweight
With Full Fuel Tank and 175-lb. (79 kg) Operator .....	10,811 lb. (4904 kg)	11,164 lb. (5064 kg)	11,360 lb. (5153 kg)	11,712 lb. (5313 kg)

## Operating Dimensions

	4-ft. 6-in. (1.38 m) Standard Arm, Canopy, and Standard Counterweight	4-ft. 6-in. (1.38 m) Standard Arm, Cab, and Standard Counterweight	5-ft. 7-in. (1.69 m) Long Arm, Canopy, and Extra Counterweight	5-ft. 7-in. (1.69 m) Long Arm, Cab, and Extra Counterweight
<b>A</b> Maximum Digging Height .....	18 ft. 11 in. (5.76 m)	18 ft. 6 in. (5.63 m)	19 ft. 9 in. (6.01 m)	19 ft. 3 in. (5.87 m)
<b>B</b> Maximum Dumping Height .....	13 ft. 5 in. (4.08 m)	13 ft. (3.96 m)	14 ft. 2 in. (4.33 m)	13 ft. 9 in. (4.20 m)
<b>C</b> Maximum Digging Depth .....	11 ft. 8 in. (3.55 m)	11 ft. 8 in. (3.55 m)	12 ft. 8 in. (3.86 m)	12 ft. 8 in. (3.86 m)
<b>D</b> Maximum Digging Reach .....	19 ft. 6 in. (5.94 m)	19 ft. 6 in. (5.94 m)	20 ft. 6 in. (6.24 m)	20 ft. 6 in. (6.24 m)
<b>E</b> Minimum Front Swing Radius .....	7 ft. 1 in. (2.15 m)	7 ft. 7 in. (2.32 m)	7 ft. 5 in. (2.26 m)	7 ft. 7 in. (2.32 m)
<b>F</b> Transport Length .....	17 ft. 11 in. (5.46 m)	17 ft. 11 in. (5.46 m)	18 ft. 1 in. (5.52 m)	18 ft. 1 in. (5.52 m)
Breakout Force				
Bucket .....	8,273 lb. (36.8 kN)	8,273 lb. (36.8 kN)	8,273 lb. (36.8 kN)	8,273 lb. (36.8 kN)
Arm .....	5,401 lb. (24 kN)	5,401 lb. (24 kN)	4,718 lb. (21 kN)	4,718 lb. (21 kN)

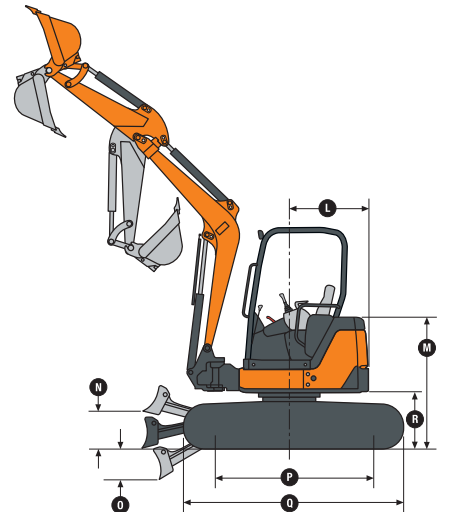
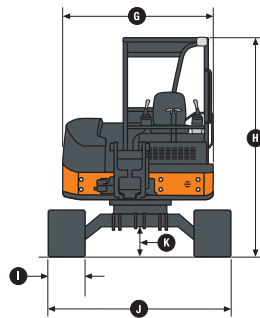
**ZAXIS 50U-3**



## Machine Dimensions

Blade	
Width .....	6 ft. 7 in. (2 m)
Height .....	17 in. (430 mm)
<b>G</b> Upperstructure Width .....	6 ft. 1 in. (1.85 m)
<b>H</b> Overall Height	
Canopy .....	8 ft. 3 in. (2.51 m)
Cab .....	8 ft. 4 in. (2.55 m)
<b>I</b> Track Width .....	16 in. (400 mm)
<b>J</b> Undercarriage Width .....	6 ft. 7 in. (2 m)
<b>K</b> Ground Clearance .....	13.4 in. (340 mm)
<b>L</b> Tail Swing Radius	
Standard Arm .....	3 ft. 3 in. (1 m)
Long Arm and Extra Counterweight .....	3 ft. 7 in. (1.08 m)
<b>M</b> Engine Cover Height .....	4 ft. 11 in. (1.51 m)
<b>N</b> Maximum Blade Lift Above Ground .....	16.9 in. (430 mm)
<b>O</b> Maximum Blade Drop Below Ground .....	13.2 in. (335 mm)
<b>P</b> Sprocket Center To Idler Center .....	6 ft. 6 in. (1.99 m)
<b>Q</b> Track Length .....	8 ft. 2 in. (2.50 m)
<b>R</b> Counterweight Clearance .....	24 in. (610 mm)

**ZAXIS 50U-3**



## Lift Capacities

	4-ft. 6-in. (1.38 m) Standard Arm and Canopy	4-ft. 6-in. (1.38 m) Standard Arm and Cab	5-ft. 7-in. (1.69 m) Long Arm and Canopy	5-ft. 7-in. (1.69 m) Long Arm and Cab
Ground Level at 10-ft. (3.05 m) Radius Over Front, Blade Down (limited by hydraulics), Standard or Extra Counterweight .....	5,258 lb. (2387 kg)	5,258 lb. (2387 kg)	5,183 lb. (2353 kg)	5,183 lb. (2353 kg)
Over Side				
Standard Counterweight .....	2,301 lb. (1045 kg)	2,377 lb. (1079 kg)	2,261 lb. (1026 kg)	2,336 lb. (1061 kg)
Extra Counterweight .....	2,595 lb. (1178 kg)	2,670 lb. (1212 kg)	2,555 lb. (1160 kg)	2,630 lb. (1194 kg)

## Equipment

Key ● Standard Equipment ▲ Optional or Special Equipment

### Engine

- Certified to EPA interim Tier-4 emissions
- Engine coolant to -34 deg. F (-37 deg. C)
- Engine preheater
- Fan guard
- Fuel/water separator
- Full-flow oil filter
- Isolation mounted
- Key start switch with electric fuel shutoff
- Single dry-type air filter
- Under-hood muffler

### Hydraulic System

- Auxiliary function right-hand pilot-lever control
- Auxiliary hydraulic lines with quick-couplers to end of boom
- Auxiliary return-flow selector valve
- Axial-piston swing motor
- Boom-swing foot control
- Excavator-to-backhoe control pattern change valve
- Closed center load sensing with one variable-displacement pump and one fixed-gear pump
- Hydraulic pilot-operated controls for boom, arm, bucket, swing, boom swing, blade, travel, and auxiliary functions
- Wet-disc swing brake

### Undercarriage

- Planetary final drive
- Propel motor shield
- Two-speed axial-piston propel motors
- Rubber track, 16 in. (400 mm)
- ▲ Steel track, 16 in. (400 mm) with triple semi-grousers
- ▲ Rubber crawler pad, 15.7 in. (400 mm)
- 360-degree rotation

### Upperstructure

- Counterweight, 1,488 lb. (676 kg)
- Hinged service-access doors
- One-piece airtight floor
- Toolbox (cab and canopy)
- ROPS/TOPS/FOPS (canopy)
- Vandal protection for service doors, fuel cap, and toolbox
- Zero-tail-swing configuration

### Front Attachments

- Arm, 4 ft. 6 in. (1.38 m)
- ▲ Long arm, 5 ft. 7 in. (1.69 m), includes additional 474-lb. (215 kg) counterweight
- Articulation hose shield
- Backfill blade, 6 ft. 7 in. (2 m)
- ▲ Hydraulic angle backfill blade
- Boom, 9 ft. 4.2 in. (2.85 m)
- Mechanical quick-coupler
- ▲ Augers: Planetary / Chain drive / Bits / Bit adapters
- ▲ Clamp
- ▲ Hammers: Points / Tools
- ▲ Quick-coupler buckets: Bucket teeth / Ditching / Heavy-duty

### Operator's Station

- Horn
- Hour meter
- Instrumentation lights
- Monitor system: Preheat indicator / Engine oil pressure indicator with alarm / Alternator voltage indicator / Fuel gauge and low-fuel-level indicator / Engine coolant temperature gauge and engine coolant temperature indicator with alarm / Hour meter / Work lights indicator
- Motion alarm with cancel switch

### Operator's Station (continued)

- Work lights switch
- Propel levers and foldable pedals
- Two travel speeds with automatic shifting
- Seat belt, 2 in. (51 mm), retractable
- ▲ Seat belt, 3 in. (76 mm), retractable
- Vinyl seat with fore/aft adjustment
- ▲ Suspension seat
- ▲ ROPS/TOPS/FOPS cab with air conditioning and heater
- ▲ Front screen
- ▲ Rear secondary exit kit

### Electrical

- 12-volt accessory outlet
- Alternator, 55 amp
- Low-maintenance battery
- Blade-type multi-fused circuits
- Positive-terminal battery covers
- ▲ ZXLink™ wireless communication system

### Lights

- Work lights: Halogen / One mounted on operator's station / One mounted on boom

## Control Owning and Operating Costs

Customer Personal Service (CPS) is part of Hitachi's proactive, fix-before-fail strategy on machine maintenance that will help control costs, increase profits, and reduce stress. Included in this comprehensive lineup of ongoing programs and services are:

**Fluid analysis program** – tells you what's going on inside all of your machine's major components so you'll know if there's a problem before you see a decline in performance. Fluid analysis is included in most extended coverage and preventive-maintenance agreements.

**Preventive Maintenance (PM) agreements** – give you a fixed cost for

maintaining a machine for a given period of time. They also help you avoid downtime by ensuring that critical maintenance work gets done right and on schedule. On-site preventive maintenance service performed where and when you need it helps protect you from the expense of catastrophic failures and lets you avoid waste-disposal hassles.

**Extended warranty coverage** – gives you a fixed cost for machine repairs for a given period of time so you can effectively manage expenses. Whether you work in a severe-service setting, or you just want to spread the risk of doing business, this is a great way to custom-fit coverage to your operation. Choose from engine, powertrain, powertrain with hydraulics, or full-machine two-year/2,000-hour or three-year/3,000-hour

coverage. An extended coverage contract travels well because it's backed by Hitachi and honored at all Hitachi Commercial Worksite Products dealers. What's more, extended coverage is fully transferable at no extra charge, so it adds value at trade-in.

**Customer Support Advisors (CSAs)** – Hitachi believes the CSA program lends a personal quality to Customer Personal Service (CPS). Certified CSAs have the knowledge and skills for helping make important decisions on machine maintenance and repair. Their mission is to help you implement a plan that's right for your business and take the burden of machine maintenance off your shoulders.

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions per ISO9249. No derating is required up to 6,600-ft. (2,000 m) altitude. This machine is not equipped with spark-arrestor mufflers. Usage in forestry applications is not recommended. Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on canopy units with standard arms; full fuel tanks; and 175-lb. (79 kg) operators; ZX50U-3 unit with 24-in. (610 mm), 5.7-cu. ft. (0.16 m<sup>3</sup>) bucket, 16-in. (400 mm) rubber track, and 1,455-lb. (660 kg) counterweight. Lift capacities shown are for base machine above with mechanical quick-coupler, less bucket.

# HITACHI