

SPECIFICATIONS

HL960A HD

Powered By Cummins Performance Series Engine



*Photo may include optional equipment.



Net Power

222 HP (166 kW) at 2,200 rpm

Operating Weight

19,450 kg (42,880 lb) -
20,280 kg (44,710 lb)

Bucket Capacity

3.3 m³ (4.32 yd³)

 **HYUNDAI**
CONSTRUCTION EQUIPMENT

SPECIFICATIONS HL960A HD

ENGINE

Maker / Model	CUMMINS / B6.7 / EU Stage V
Type	Turbocharged, charge air cooled, diesel engine
Gross Power (SAE J1995)	225 HP (168 kW) at 2,200 rpm
Net Power (SAE J1349)	222 HP (166 kW) at 2,200 rpm
Max. Power	251 HP (188 kW) at 1,900 rpm
Peak Gross Torque (SAE J1995)	1.186 N·m (875 lb.ft) at 1,300 rpm
Displacement	6.7 L (408 cu in)

· The indicated net power is available for the flywheel when the engine is equipped with a fan, alternator, air cleaner, and after-treatment device.
 · The indicated gross power is obtained with the fan at maximum speed.

TRANSMISSION

Travel Speed, km/h (mph)	4 Speed T/M	5 Speed T/M with lock up clutch
Forward	1st	6.3 km/h (3.9 mph)
	2nd	12.1 km/h (7.5 mph)
	3rd	24.5 km/h (15.2 mph)
	4th	39.6 km/h (24.6 mph)
	5th	-
Reverse	1st	6.8 km/h (4.2 mph)
	2nd	12.8 km/h (7.9 mph)
	3rd	25.7 km/h (15.9 mph)

• This is the maximum travel speed of a standard machine with unfilled bucket.

AXLES

Drive System	Four-wheel drive system
Mount	Rigid front axle and oscillating rear axle
Rear Axle Oscillation	Oscillating ±12 ° degrees
Hub Reduction	Planetary reduction at wheel end
Differential	Conventional
Reduction Ratio	24.667

HYDRAULIC SYSTEM

Type	Load sensing hydraulic system	
Implement System		
Maximum Pump Output	239 l/min (63.1 gal/min) at 2,130 rpm	
Maximum Operating Pressure	28,000 kPa (4,061 psi)	
Hydraulic Cycle Time with Rated Payload	Raise from Carry Position : 5.9 Sec.	
	Dump, at maximum raise : 1.5 Sec.	
	Lower, empty, float down : 3.5 Sec.	
	Total : 10.9 Sec.	
Cylinder	Type : double acting	
	No. of cylinders-bore × stroke	
	Lift	2-140 × 765 mm (2-5.5" × 30.1")
	HL960A HD Tilt	1-160 × 530 mm (1-6.3" × 20.9")

CABIN

ROPS / FOPS Cabin Meet ISO 3471 and ISO 3449 level II standards

OVERVIEW

Description	HL960A HD	HL960A HDXT
Operating Weight	19,450 kg (42,880 lb)	20,280 kg (44,710 lb)
Bucket Capacity	3.3 m ³ (4.32 yd ³)	3.3 m ³ (4.32 yd ³)
Breakout Force-Bucket	16,670 kg (36,750 lb)	16,430 kg (36,220 lb)
Tipping Load	14,400 kg (31,750 lb)	13,050 kg (28,775 lb)

TIRES

Type	Tubeless, loader design tires
Standard	23.5 R25, L3
Options Include	23.5 R25, XHA2
	23.5-25, 20PR, L3
	23.5-25, 20PR, L5

BRAKES

Service Brakes	Hydraulically actuated, wet disc brakes actuate all 4 wheels independent axle-by-axle system. Self adjusting & wheel speed brake.
Parking Brake	Spring-applied, hydraulically released brake
Emergency Brake	When brake oil pressure drops, indicator light alerts operator and parking brake automatically applies.

STEERING SYSTEM

Type	Load sensing hydrostatic articulated steering
Pump	Variable displacement piston pump, 148.5 l/min (39.2 gal/min)
System Pressure	210 bar (3,046 psi)
Cylinder	Double acting 2-80 mm (3.15") × 424 mm (16.7")
Steering Angle	40° to both right and left angle, respectively

SERVICE REFILL CAPACITIES

Fuel Tank	260.0 liters (68.6 US gal)
Def Tank	37.1 liters (9.8 US gal)
Cooling System	42.0 liters (11.1 US gal)
Crankcase	18.0 liters (4.7 US gal)
Transmission	33.0 liters (8.7 US gal)
Front Axle	35.0 liters (9.2 US gal)
Rear Axle	35.0 liters (9.2 US gal)
Hydraulic Tank	110.0 liters (29.0 US gal)
Hydraulic System (Including Tank)	200.0 liters (52.8 US gal)

CAB NOISE LEVEL

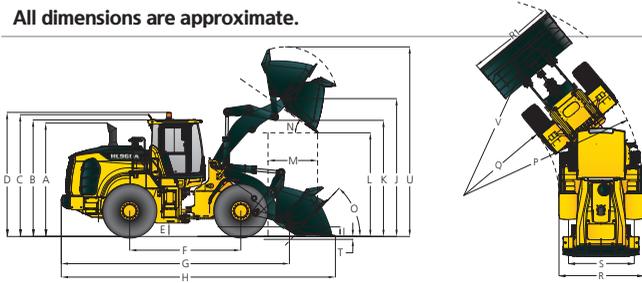
Guaranteed noise level presented below can be differed depending on a range of factors such as operating condition, speed of a cooling fan, types of engine and so forth. Hearing protection shall be necessary if an operator is working in the improperly maintained cabin or exposed to a noisy environment by leaving doors and/or windows open.

With cooling fan speed at maximum value:	
Operator sound pressure level (ISO 6396:2008)	70 dB(A)
Exterior sound power level (ISO 6395:2008)	105 dB(A)

* Distance of 15 m (49.2 ft), moving forward in second gear ratio.

HL960A HD DIMENSIONS

All dimensions are approximate.



Unit : mm (ftn)

Description	HL960A HD	HL960A HDXT
A Height to Top of Exhaust Pipe	3,340 (10' 11")	3,340 (10' 11")
B Height to Top of Cabin	3,450 (11' 3")	3,450 (11' 3")
C Height to Top of Product Link Antenna	3,505 (11' 6")	3,505 (11' 6")
D Height to Top of Warning Beacon	3,580 (11' 9")	3,580 (11' 9")
E Ground Clearance	410 (1' 4")	410 (1' 4")
F Wheelbase	3,300 (10' 10")	3,300 (10' 10")
G Overall Length (Without Bucket)	6,870 (22' 6")	7,425 (24' 4")
H Shipping Length (With Bucket Level on Ground)	8,140 (26' 8")	8,695 (28' 6")
I Hinge Pin Height at Carry Position	465 (1' 6")	600 (2')
J Hinge Pin Height at Maximum Lift	4,105 (13' 6")	4,535 (14' 11")

Description		HL960A HD	HL960A HDXT
K	Lift Arm Clearance at Maximum Lift	3,455 (11' 4")	3,885 (12' 9")
L	Dump Clearance at Maximum Lift and 45° Discharge	2,935 (9' 8")	3,365 (11')
M	Reach at Maximum Lift and 45° Discharge	1,285 (4' 2")	1,380 (4' 6")
N	Dump Angle at Maximum Lift and Dump (on Stops)	50	50
O	Roll Back Angle	Ground	42
		Carry	47
P	Clearance Circle (Diameter) to Outside of Tires	12,060 (39' 6")	12,060 (39' 6")
Q	Clearance Circle (Diameter) to Inside of Tires	6,430 (21' 1")	6,430 (21' 1")
R	Width Over Tires (Unloaded)	2,770 (9' 1")	2,770 (9' 1")
S	Tread Width	2,160 (7' 1")	2,160 (7' 1")

HL960A HD OPERATING SPECIFICATIONS WITH BUCKETS

Linkage Bucket Type	Standard Linkage General Purpose - Pin On				General Purpose - Hook On	High Lift Linkage Change
	Bolt-On Cutting Edges	1 Piece Tooth	2 Piece Tooth	2 Piece Tooth & Segment	Bolt-On Cutting Edges	
Capacity - Rated	3.3 m³ (4.3 yd³)	3.2 m³ (4.2 yd³)	3.2 m³ (4.2 yd³)	3.3 m³ (4.3 yd³)	3.3 m³ (4.3 yd³)	-
Capacity - Rated at 110% Fill Factor	3.6 m³ (4.7 yd³)	3.5 m³ (4.6 yd³)	3.5 m³ (4.6 yd³)	3.6 m³ (4.7 yd³)	3.6 m³ (4.7 yd³)	-
Width	2,900 mm (9' 6" ft/in)	2,950 mm (9' 8" ft/in)	2,970 mm (9' 9" ft/in)	2,970 mm (9' 9" ft/in)	2,900 mm (9' 6" ft/in)	-
Dump Clearance at Maximum Lift and 45° Discharge	2,935 mm (9' 7" ft/in)	2,810 mm (9' 3" ft/in)	2,775 mm (9' 2" ft/in)	2,775 mm (9' 2" ft/in)	2,755 mm (9' 1" ft/in)	430 mm (1' 5" ft/in)
Reach at Maximum Lift and 45° Discharge	1,285 mm (4' 3" ft/in)	1,370 mm (4' 6" ft/in)	1,390 mm (4' 7" ft/in)	1,390 mm (4' 7" ft/in)	1,465 mm (4' 10" ft/in)	95 mm (4" ft/in)
Digging Depth	90 mm (3.5" ft/in)	115 mm (4.5" ft/in)	125 mm (4.9" ft/in)	125 mm (4.9" ft/in)	90 mm (3.5" ft/in)	55 mm (2" ft/in)
Shipping Length (with Bucket)	8,140 mm (26' 8" ft/in)	8,290 mm (27' 2" ft/in)	8,330 mm (27' 4" ft/in)	8,330 mm (27' 4" ft/in)	8,395 mm (27' 7" ft/in)	555 mm (1' 10" ft/in)
Overall Height with Bucket at Maximum Lift	5,640 mm (18' 6" ft/in)	5,640 mm (18' 6" ft/in)	5,640 mm (18' 6" ft/in)	5,640 mm (18' 6" ft/in)	5,820 mm (19' 1" ft/in)	430 mm (1' 5" ft/in)
Loader Clearance Circle with Bucket at Carry Position	13,410 mm (44' ft/in)	13,570 mm (44' 6" ft/in)	13,620 mm (44' 8" ft/in)	13,620 mm (44' 8" ft/in)	13,570 mm (44' 6" ft/in)	450 mm (1' 6" ft/in)
Static Tipping Load. Straight (No Tire Deflection)	14,400 kg (31,750 lb)	14,600 kg (32,190 lb)	14,600 kg (32,190 lb)	14,350 kg (31,415 lb)	13,170 kg (28,835 lb)	-1,350 kg (-2,975 lb)
Static Tipping Load. Articulated (No Tire Deflection)	12,500 kg (27,560 lb)	12,670 kg (27,930 lb)	12,670 kg (27,930 lb)	12,450 kg (27,450 lb)	11,430 kg (25,200 lb)	-1,350 kg (-2,975 lb)
Breakout Force	16,670 kg (36,750 lb)	17,705 kg (39,030 lb)	17,705 kg (39,030 lb)	16,670 kg (36,750 lb)	13,870 kg (30,580 lb)	-240 kg (-530 lb)
Operating Weight*	19,450 kg (42,880 lb)	19,375 kg (42,710 lb)	19,375 kg (42,710 lb)	19,500 kg (42,990 lb)	19,840 kg (43,740 lb)	+830 kg (+1,830 lb)

* All height and tire related dimensions are with standard 20.5 R25, ★, L3 tires.

HL960A HD BUCKET SELECTION CHART

Standard lift arm - General Purpose

Type	m³ (yd³)	Material Density [ton / m³]													
		1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4
Cutting Edge	3.3 (4.32)	3.8 m³ (4.97 yd³)										3.1 m³ (4.05 yd³)			
1-Bolt on Tooth	3.2 (4.19)	3.7 m³ (4.84 yd³)										3.0 m³ (3.92 yd³)			
2-Bolt on Tooth	3.2 (4.19)	3.7 m³ (4.84 yd³)										3.0 m³ (3.92 yd³)			
2-Bolt on Tooth & Segment edge	3.3 (4.32)	3.8 m³ (4.97 yd³)										3.1 m³ (4.05 yd³)			
Cutting Edge Q/C	3.3 (4.32)	3.8 m³ (4.97 yd³)										3.1 m³ (4.05 yd³)			

High lift arm - General Purpose

Type	m³ (yd³)	Material Density [ton / m³]													
		1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4
Cutting Edge	3.3 (4.32)	3.8 m³ (4.97 yd³)										3.1 m³ (4.05 yd³)			
1-Bolt on Tooth	3.2 (4.19)	3.7 m³ (4.84 yd³)										3.0 m³ (3.92 yd³)			
2-Bolt on Tooth	3.2 (4.19)	3.7 m³ (4.84 yd³)										3.0 m³ (3.92 yd³)			
2-Bolt on Tooth & Segment Edge	3.3 (4.32)	3.8 m³ (4.97 yd³)										3.1 m³ (4.05 yd³)			
Cutting Edge Q/C	3.3 (4.32)	3.8 m³ (4.97 yd³)										3.1 m³ (4.05 yd³)			

115% 100% 95%

ENGINE	STD	OPT
ENGINE, CUMMINS, B6.7		
3 Stage air precleaner	•	
Alternator, 95A	•	
Fuel warmer	•	
Engine oil level dipstick gauge	•	
Fuel / water separator	•	
VGT (Variable Geometry Turbo)	•	
CLEAN EMISSION MODULE		
DOC, DPF and SCR	•	
Active Emission Regeneration (No Manual Regeneration Required)		
Stage V Certified Emissions	•	
EGR Free	•	
Automatic Regeneration	•	
COOLING SYSTEM		
Antifreeze	•	
Auto Reversing Fan (adjustable Time/ Interval Frequencies) w/ Manual Override	•	
Coolant Level Sight Gauge	•	
Fan guard	•	
Wide Fin Radiator	•	
POWER TRAIN		
TRANSMISSION		
Transmission F4/R3, computer controlled, electronic soft shift, auto-shift and kick-down features included	•	
Transmission oil sight level	•	
Wide Fin Transmission Oil Cooler	•	
AXLE		
Conventional (Rear)	•	
Hydraulic lock differential (Front)	•	
Limited slip differential (Front / Rear)		•
BRAKE		
Parking brake	•	
Service brake (Enclosed wet-disc)	•	
TIRES		
23.5 R25, ★★, L3	•	
23.5 R25, ★, XHA		•
23.5-25, 20PR, L3		•
23.5-25, 20PR, L5		•
23.5-25, Solid Tire		•
HYDRAULIC SYSTEM		
Diagnostic pressure taps	•	
Hyundai Bio Hydraulic Oil (VG46)		•
Hydraulic oil level sight gauge	•	
Hydraulic Oil VG32		•
Hydraulic Oil VG46	•	
Wide Fin Hydraulic Oil Cooler	•	
HYDRAULIC CONTROL		
Fingertip		•
Joystick		•
ELECTRO-HYDRAULIC CONTROL		
Boom kickout, automatic	•	
Bucket positioner, automatic	•	
Extra piping for auxiliary function		•
Fingertip	•	
Joystick	•	
Quick coupler piping	•	
Ride control system	•	
CAB & INTERIOR		
ALARMS, AUDIBLE AND VISUAL		
Air filter clogging	•	
Battery voltage	•	
Brake oil pressure	•	
DEF low level	•	
Engine coolant level	•	
Engine coolant temperature	•	
Engine oil pressure	•	
Fuel level	•	
Hydraulic oil temperature	•	
Parking brake	•	
Service brake oil pressure	•	
Seat belt ON/OFF	•	
Transmission error	•	

CAB & INTERIOR	STD	OPT
ALARMS, AUDIBLE AND VISUAL		
Transmission oil temperature	•	
GAUGES		
Diesel Exhaust Fluid (DEF) level	•	
Engine coolant temperature	•	
Fuel level	•	
Horn, electric	•	
Speedometer	•	
Transmission oil temperature	•	
INDICATOR LIGHTS		
Clutch Cut Off	•	
Differential Lock	•	
Engine auto stop	•	
FNR	•	
High beam	•	
Parking brake	•	
Pilot cut off	•	
Ride control	•	
Seat belt ON/OFF	•	
Turning light	•	
LCD DISPLAY		
Clock and fault code	•	
DEF level	•	
DEF low level	•	
Engine rpm	•	
Horn, electric	•	
Job time and distance	•	
Operating hour counter	•	
Transmission gear range	•	
BATTERIES		
850CCA, 12V, 2PCS	•	
LIGHTING SYSTEM		
Brake lights(Counterweight)	•	
LED dome light	•	
2 Head lights on front tower	•	
2 Head lights (LED) on front tower		•
2 Stop and tail lights	•	
4 Turn signals	•	
2 Working lights on front roof		•
4 Working lights on front roof		•
2 Working lights on rear roof		•
4 Working lights (LED) on front roof		•
2 Working lights (LED) on rear roof		•
2 Working lights on grill	•	
2 Working lights (LED) on grill	•	
SWITCHES		
Battery master switch	•	
Differential Lock	•	
Emergency steering		•
FNR shifter	•	
Hazard	•	
Parking	•	
Pilot cut off	•	
SYSTEM MEMORY SETTINGS		
Autolube, integrated in secondary display		•
Auto position	•	
Beacon light		•
Fine modulation	•	
Main light	•	
Mirror heat	•	
Quick coupler	•	
Rear wiper	•	
Ride control	•	
Work light	•	
Work load	•	
IGNITION		
Key	•	
Push Start Button		•
CAB (SOUND SUPPRESSED)		
24V to 12V DC converter (20A)	•	
Coat hook	•	
Magazine pocket	•	
One door cab	•	
Radio / USB player	•	

CAB & INTERIOR	STD	OPT
CAB(SOUND SUPPRESSED)		
Roller type sunshade (Front window)	•	
ROPS / FOPS CAB.	•	
Rubber floor mat	•	
Steering column, tilt and telescopic	•	
Steering wheel with knob	•	
Tinted safety glass	•	
Wrist rest	•	
DOOR		
Door and cab locks, one key	•	
Doors, service access (Locking)	•	
Doors, service access (Remote control)		•
AUTOMATIC CLIMATE CONTROL		
Air conditioner & heater	•	
Defroster	•	
Intermittent wiper and washer, front and rear	•	
SEAT		
3" Retractable seat belt & adjustable air suspension (Heated)	•	
PERSONAL STORAGE SPACE		
Console box	•	
Holder, can and cup	•	
PEDALS		
Accel pedal without ECO switch	•	
Dual-brake pedal		•
One accelerator pedal	•	
One brake pedal	•	
SAFETY		
Alarm, back-up	•	
Boom safety lock		•
Emergency steering		•
Emergency stop	•	
Fire extinguisher		•
OBJECT DETECTION		
AAVM - All Around View Monitoring		•
IMOD (Intelligent Moving Object Detection)		•
RADAR + Secondary Mornitor		•
OTHERS		
2nd Monitor		•
3 Spool MCV	•	
5 speed T/M with lockup clutch		•
Air Compressor		•
Auto Engine Shut Down	•	
Auto Grease System		•
Articulation Locking Bar	•	
Heavy Counterweight	•	
Hi-Mate, Satellite		•
ISO Quick Coupler	•	
LED Beacon Lamp		•
License Plate & 10W LED Lamp		•
Lift and tie-down hooks	•	
Loader linkage, sealed	•	
Sun Shade on Rear Window of Cabin		•
Vandalism protection caplocks	•	
Wheel Chocks		•
SAFETY		
Handrails	•	
Ladders	•	
Platforms	•	
Steps	•	
TELEMATICS		
ECD (Engine Connected Diagnostics)	•	
Hi MATE	•	
GUARDS		
Belly-Pan Guard		•
Crankcase	•	
Fenders (Front)	•	
Fenders (Rear)		•
Transmission	•	

* Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to international standards.
 * The photos may include attachments and optional equipment that are not available in your area.
 * Materials and specifications are subject to change without advance notice.
 * All imperial measurements rounded off to the nearest pound or inch.

PLEASE CONTACT



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