PC220LC-12
PC220LCi-12

Hydraulic excavator

Engine power
129 kW / 173 HP @ 2000 rpm

Operating weight
PC220LC-12: 24000 - 24885 kg
PC220LCi-12: 24100 - 24985 kg

Bucket capacity
max. 1.8 m^3

PC220LC/LCi-12

Up to 18%

Increased productivity (P+ mode)

Compared to PC210LC-11 (P mode)

18%

Reduced fuel consumption

Compared to PC210LC-11

Engine power
129 kW / 173 HP @ 2000 rpm

Operating weight
PC220LC-12: 24000 - 24885 kg
PC220LCi-12: 24100 - 24985 kg

Bucket capacity
max. 1.8 m³

Future-driven innovation

Welcome the next-generation of hydraulic excavator

Powerful and environmentally friendly

- NEW • 129 kW EU Stage V engine
- NEW • Automatic power off function
- NEW • Adjustable idle shutdown
- NEW • Komatsu fuel-saving technology
- NEW • 18% average fuel saving vs. PC210LC-11
- NEW • Reduced CO_2 emissions

First class comfort with a new larger cab design

- NEW • +16% larger cab
- NEW • +30% increase in legroom
- NEW • Upgraded standard and premium seats
- NEW • Wider access and egress
- NEW • Ergonomic switch console
- NEW • Programmable electronic multi-function levers
- NEW • 8 inch touchscreen monitor
- NEW • Keyless starting system
- NEW • Operator identification system

Maximum efficiency

- NEW • +6% increase in hydraulic pump capacity
- NEW • Electronic control, dual spool, main valve
- NEW • +7% increase in arm dig force
- NEW • +7% increase in bucket dig force
- NEW • +18% increase in P+ Mode productivity
- NEW • Payload meter and 2D machine control
- NEW • iMC 3.0 upgrade kit

intelligent Machine Control 3.0 (PC220LCi only)

- NEW • Tiltrotator integration and control
- NEW • Auto swing
- NEW • Swing to line
- NEW • Travel along line
- NEW • 3D boundary control
- NEW • Advanced payload system
- NEW • High-resolution 10.1-inch touch panel monitor
- NEW • Smart Construction Remote connectivity as standard
- Upgrade • Auto grade assist with auto boom down

Safety first

- NEW • 360 degrees KomVision
- NEW • Rollover avoidance
- NEW • Heading direction indicator
- NEW • Remote courtesy lights
- NEW • Parallel front wiper
- NEW • 2D virtual wall
- Upgrade • Ground level maintenance

Komtrax

- Komatsu Wireless Monitoring System
- 4G mobile communications
- Integrated communication antenna
- Increased operational data and reports

KOMATSU CARE™

A maintenance program for Komatsu customers

First-class comfort

Completely new larger cab design with increased visibility and operator comfort

Improved access and egress, increased floorspace with 30%* more legroom. Highly ergonomic control levers, switches and touchscreen monitor panel. Upgraded, high-comfort seat with adjustable side consoles.

Photo shows Japan specification control levers
(Image: PC220LCi-12)

New cab designed for the operator to reduce fatigue and improve performance

A wider cab has resulted in 30%* more legroom.

*Compared to PC210LC-11
Photos show Japan specification control levers

A new multi-functional operator seat with significantly improved comfort

The high quality operator seat is equipped with air suspension, cushion slide adjustment, seat slide adjustment, heating system, and lumbar support as standard features, greatly improving ride quality. Optional new Premium seat.

Tilting side console

Easy to move tilting side console increases access and egress by 70 mm

New air conditioning design

Air vents are strategically positioned within the cab roof to provide the optimum comfort and air flow to the operator.

Adjustable side consoles

Adjustable to achieve optimum comfort.

Operator convenience

- Openable polycarbonate roof window and sunroller blind
- Front window sunroller blind
- New easy-to-remove, pull-apart, two-part floor mat
- Ample storage

Smartphone storage

Small item storage space underneath the armrests

User interface

User-friendly 8 inch touchscreen monitor panel

The 8 inch touchscreen monitor panel is located within easy reach of the operator for ergonomic and stress-free operation.

The photo shows Japan specification control levers

High resolution, easily visible touchscreen monitor panel

1. Error information
2. 2D boundary control
3. Bird's-eye view icon
4. Payload meter
5. 2D machine control
6. Indicator display
7. Working mode, attachment display section for travel speed settings, etc.
8. ECO gauge
9. Bird's-eye view image
10. Single camera image
11. Fuel gauge and meter display for the AdBlue level, etc.
12. Level indicator

Intuitive operations that enable excellent controllability

The attachment, working mode, and travel mode can be selected intuitively from the monitor.

Example: switching from P mode to E mode

Keyless start system

The keyless start system provides operator convenience and enhanced security.

Monitor startup
Turning the start switch from the A position to the B position causes it to light orange

Security certification
Passcode entry or electronic key*

Engine start
Once authorized, the light turns green
Turn the start switch to the C position to start the engine

Start switch

1 Passcode entry

Enter the passcode registered to the operator ID

A PIN code system commonly used in many areas of life

2 Electronic key*

Connect to Bluetooth® and authenticate with dedicated key

A highly secure method with little authorization hassle

Operator ID

The operator ID and information on the right can be linked so that when the operator logs on, the settings are automatically carried over.

Operator name, security authentication method, operator information, standard screen settings, monitor settings, Bluetooth® settings, KomVision settings, travel heading indicator settings, rollover avoidance settings, lever switch settings, joystick pattern selection, adjustable priority, response adjustment, and speed adjustment, 3DMC app settings, payload meter app settings, etc.

User-friendly functions and equipment for greater work efficiency

Consolidated position for switch location

The switches are arranged on the right console in consideration of visibility and operability.

Bluetooth® compatibility

A smartphone can be easily connected to the system via Bluetooth® which enables hands free phone calls and the playing of music.

New electronic levers

Programmable, low fatigue highly ergonomic levers.

Operate the radio or air conditioner from the touchscreen monitor panel

Upgraded control system

Electric & Hydraulic System (EHS)

The control system has been revamped, adopting Komatsu's proprietary electro-hydraulic system (EHS). Fuel consumption, operability, robustness, and safety have all been improved as a result. Fuel consumption has been significantly reduced, and despite this, excavation performance has also been improved, helping to increase work efficiency. Even with an electronic control system, the machine offers excellent fine control and excels at leveling operation, while reducing response delay.

Significant reduction in fuel consumption

Fuel consumption has been significantly reduced by changing the control system, reducing pressure loss due to adopting the new control valve, and upgrading the pump capacity.

Significant improvement in productivity

The productivity has been significantly improved thanks to changes to the control system and the new high-power engine.

Productivity — Compared to PC210LC-11

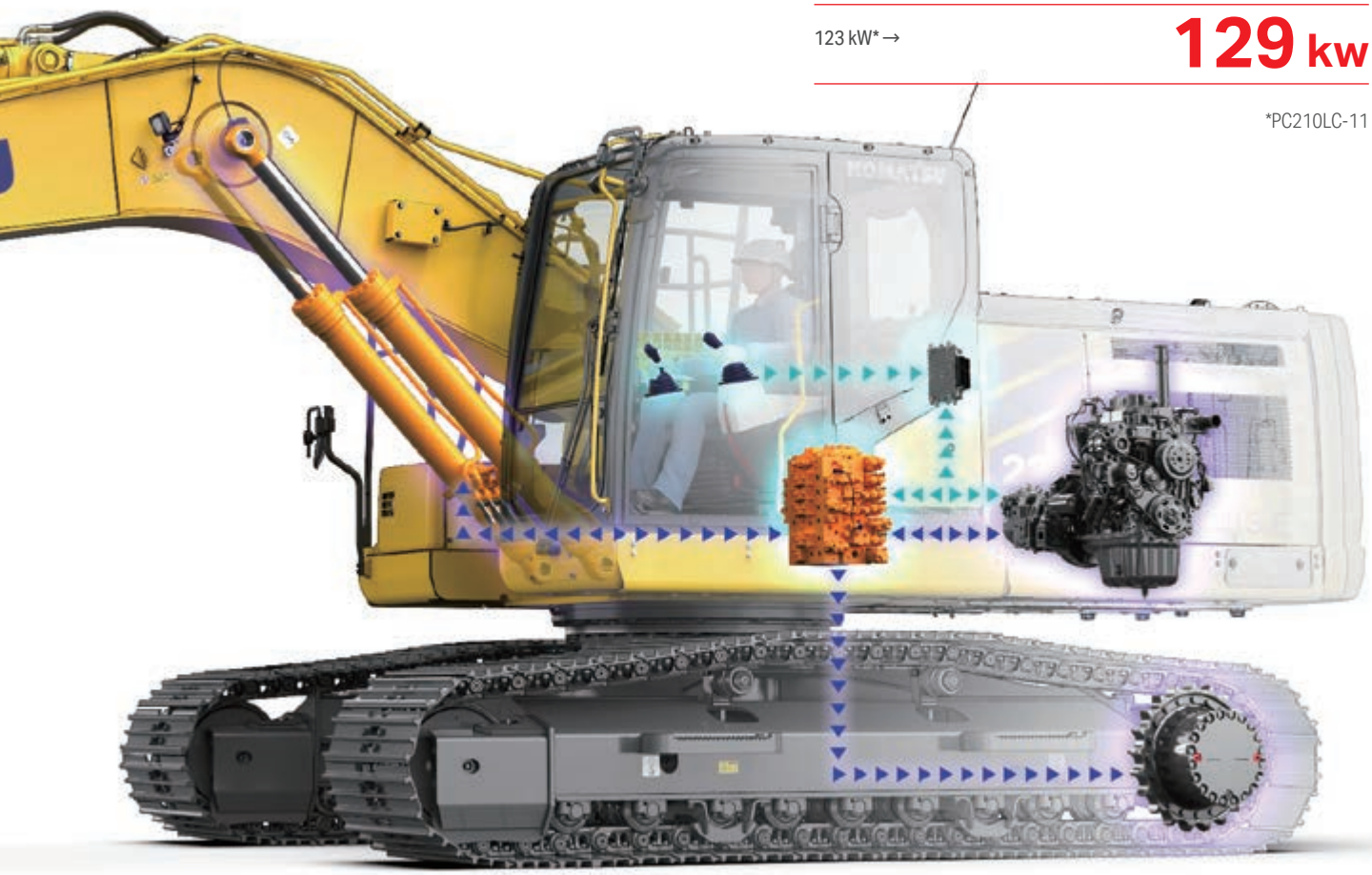
In P+ mode **18% UP**

Komatsu high performance engine with increased engine power, engine torque and efficiency

Engine output — (ISO 9249/SAE J1349)

123 kW* → **129 kw**

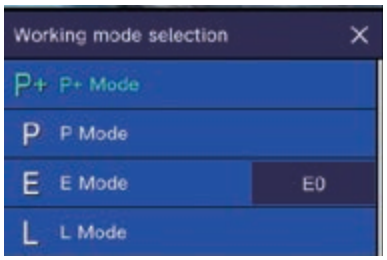
*PC210LC-11



New adjustable working modes and settings

New adjustable working modes and settings

Operators can easily select the working mode of their choice.



Changing electronic lever button settings (lever switch assignment)

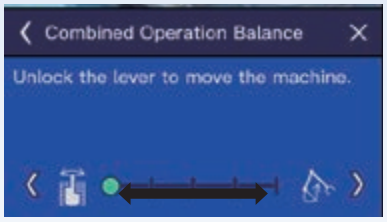
The operator can change the electronic lever functions, via the monitor, to their individual preferences. Furthermore, the button settings work in sync with the operator ID so that button settings change automatically according to the particular operator ID.

Speed adjustment

The speed of the boom, arm, bucket, and swing can be adjusted.

Multi-functional electronic levers

Switching working modes, answering phone calls, adjusting audio volume, selecting audio tracks, attachment operation, track control, etc.



Prioritizes swinging

Prioritizes boom raising

Adjustable priority and response adjustment

The joystick responsiveness of the boom, arm, bucket, and swinging mechanism, can be adjusted. The speed balance can also be adjusted for when performing combined boom and swinging operations. These settings automatically sync with the operator ID so the adjusted contents change according to the particular operator ID.

Even safer

KomVision, with its improved performance, is fitted as standard

Machine surroundings camera system: 360-degree view

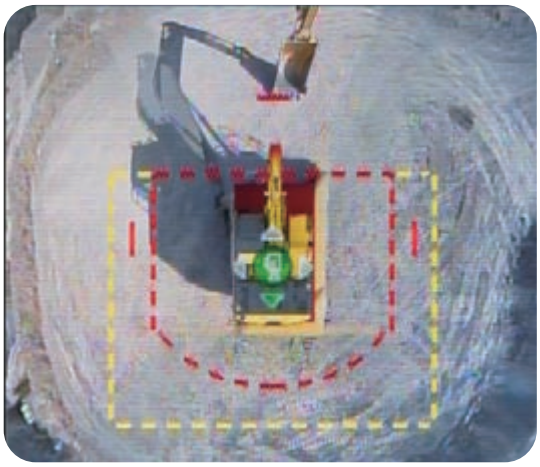
Four wide-angle high-definition cameras provide a 360 degrees field of view.


Front


Rear


Left side


Right side

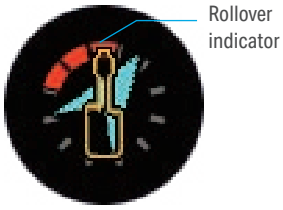

KomVision screen


KOMATSU

Even safer

Rollover avoidance

This mechanism calculates the machine's center of gravity and notifies the operator when the machine could roll over by displaying an indicator on the monitor and sounding a buzzer.



Travel heading indicator

The travel direction (orientation of the track frame) is displayed on the monitor at all times. If the track faces backward, the arrow indicating the travel direction will change from blue to yellow, helping to prevent incorrect operations when travelling.

Remote courtesy lights

When boarding the machine: When the machine detects the electric key or the operator unlocks the cab door, the LED lamps will light up and the operator can board the machine safely.
When disembarking the machine: After the cab door is closed, the LED lamps will light up for a certain amount of time and the operator can disembark the machine safely.

Safe easy access

The operator can access the top of the machine safely with three points of contact.

Large parallel wiper

Seat belt reminder

When working with the seat belt unbuckled, the operator will be warned by way of a buzzer sound and monitor icon. Performing swing or travel operations with the seat belt unbuckled will result in the operator being notified by the sound of a beeping buzzer and the seat belt indicator being displayed on the monitor.

Improved reliability and easy maintenance

20% reduction in maintenance costs

Extension to hydraulic oil replacement interval

5000 Hours* → **6000 Hours**

*PC210LC-11

Extension to hydraulic oil filter replacement interval

1000 Hours* → **3000 Hours**

*PC210LC-11

Improved AdBlue replenishment

AdBlue can be replenished on the ground. The installation of a bracket makes refilling of AdBlue even easier.

Extension to KDPF cleaning interval

4500 Hours* → **8000 Hours**

*PC210LC-11

Significant improvement in maintainability

Safe easy ground access to consolidated maintenance components. Maintenance can be done safely and efficiently.

Delayed engine shutdown

A function in which cooling continues when the engine or aftertreatment device is still hot, even if the starting switch is turned off. Once the temperature has dropped, the engine will stop automatically and the main power supply will also turn off.

Auto power off

Auto power off is a function that automatically turns off the system to prevent a flat battery. The main power supply will be automatically turned off if the set time passes with no machine monitor operation performed with the engine stationary.

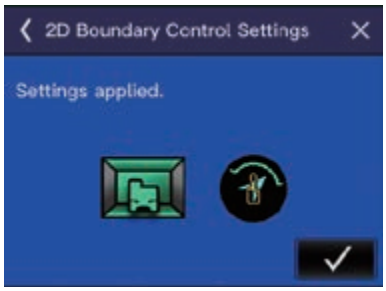
Other functions and equipment

- Maintenance-free battery
- Battery disconnect switch
- The number of hours until the next replacement of periodical replacement parts can be checked on the monitor
- Fuel pre-filter with water separator
- Air conditioner filter
- Hydraulic oil filter clogging sensor

Many more new features to support your operations

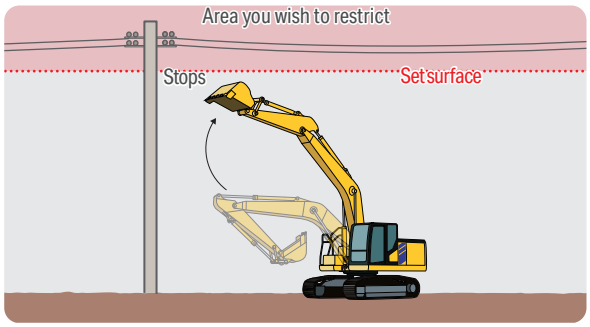
2D boundary control

By setting virtual walls on a coordinate system with the center of the machine as the origin, the work equipment/swing operation is decelerated automatically in response to the operator's operations, stopping the movement of the machine as it gets close to a virtual wall. This function helps reduce the risk of a collision with a worker or a surrounding object.
The operator can set virtual walls in front of, above, below, or to the left and right of the machine. The machine is also fitted with a swing angle limit function.



[Example using 2D boundary control]

Preventing contact with high-voltage cables by setting the 2D boundary control beforehand, it is possible to prevent contact with electric cables.



2D machine control

Easily set a depth or slope from a reference point on the machine monitor. Through the use of the work equipment sensors the semi-auto 2D machine control will assist the operator by stopping them from digging too deep and keep the bucket edge on the depth or slope limit as they grade.
In addition, Komatsu's 2D machine control enables a seamless sequence of work from dumping to the next step, as the set surface does not move even when the machine swings.

Payload meter

The bucket payload and dump payload are displayed in real time, allowing the operator to perform work while checking the payloads.

1 Dump truck remaining payload space display
2 Bucket payload display
3 Start loading, pause, resume button

Joystick steering

The machine is installed with a function that enables travel operations with the left and right work equipment control lever rollers. The operator can sit back and relax while performing a series of work such as traveling, swinging, and work equipment operations using just lever operations, with no need to switch back and forth between the travel pedal and controls.

Other basic performance improvements

Increased digging force

The arm and bucket cylinder size has been revised to increase the digging force and enable more powerful operation. The work equipment has also been reinforced to match this.

Arm crowd force (ISO 6015 rating)

101 (108) kN* → **108 (116) kN**

Bucket digging force (ISO 6015 rating)

139 (149) kN* → **149 (159) kN**

The number inside the parenthesis corresponds to when using the one-touch power max. function

*PC210LC-11

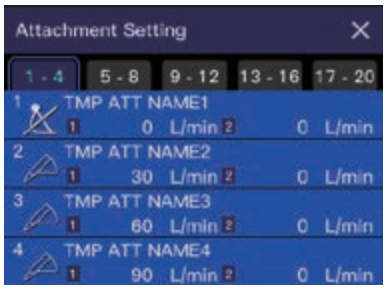
Increase in durability of structure

The work equipment has been enhanced to match the increase in digging force.

More new functions

Attachment settings (registering, bringing up, and setting bucket and attachment information)

Setting information such as the weight of the bucket or attachment and the flow rate or pressure of the attachment can be registered with touch-panel operations. Bringing up information when an attachment needs replacing reduces the effort spent on re-configuring the settings.



Software update

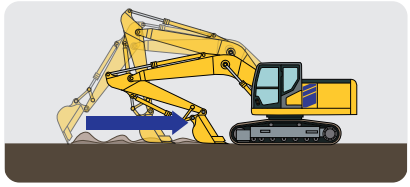
The software can be periodically updated to the latest version with OTA (over-the-air) updates just like a smartphone. This enables the addition of new features and the updating of software to be done remotely.

intelligent Machine Control 3.0 (PC220LCi only)

Building on Komatsu's deep experience of more than a decade of delivering fully integrated machine control to customers, iMC 3.0 delivers new and unique assist features for the operator, helping them get the job done faster, more accurately and at reduced cost.

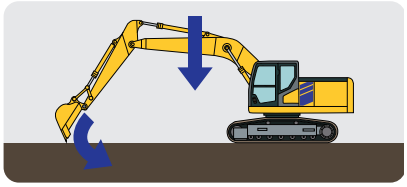
The photo shows Japan specification.

Assisting operations with various functions



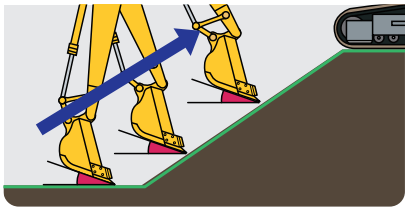
Auto grade assist with improved performance and stability

Automatically controls the bucket edge along the design surface so the operator can deliver the perfect grading pass with only using arm operation. Upgraded to now include automatic boom down function.



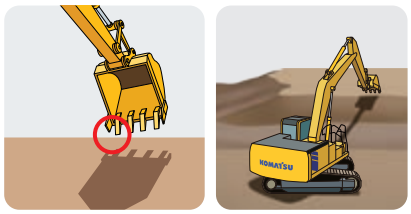
Auto stop control

Stops the bucket edge on the design surface during boom, arm or bucket operation, and eliminates over-digging past the desired grade. Operators can safely rely on the system's intervention when required: no more need to constantly check the monitor or to worry about re-work. Just relax and be productive.



Bucket angle hold feature

Enables the operator to automatically set the bucket grading or digging angle. The system maintains a constant bucket angle, removing the need for the operator to adjust manually, boosting ease of operation in final grading or trimming work.



Minimum distance control

A bucket cutting edge control mechanism that automatically detects the point closest to the design surface within the bucket width and contour points. The operator can perform work without worrying about digging too deep, even when the machine is not directly facing the design surface.

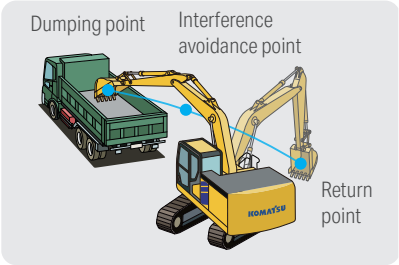
Auto tilt control (tilting bucket)

The system intuitively adjusts the bucket to the design surface, and keeps the bucket edge exactly on the grade throughout the grading pass, with no need for manual adjustment.

Tiltrotator integration and control (coming soon)

Tiltrotators from various manufacturers can be easily integrated to the iMC 3.0 excavator. iMC 3.0 also offers unique tiltrotator control functions, including Auto-Tilt and Auto-Rotate.

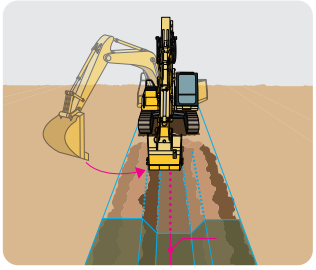
Semi-auto loading



Auto swing

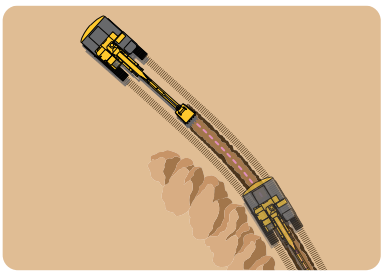
The machine will perform swinging automatically by setting a return point, dumping point, and interference avoidance point with a dump truck or a hopper/crusher. This allows the operator to make the loading steps semi-automatic.

Achieve semi-auto trenching work (coming soon)



Swing to line

The system will swing the upper structure automatically and align the bucket centre with the centre of the trench - at the press of a button.



Travel along line

If the machine is moved forward or backward when trenching, the steering will automatically align with the centre of the trench.

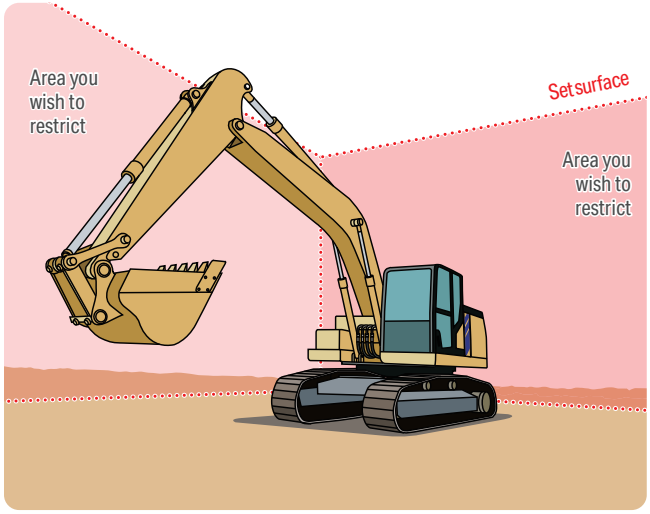
intelligent Machine Control 3.0 (PC220LCi only)

Now even safer

The ICT hydraulic excavator can also contribute significantly to worksite safety.

3D boundary control

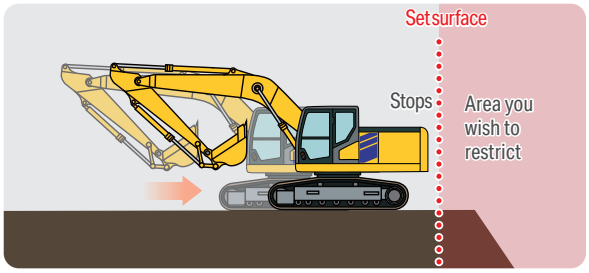
The operator can set a work-restriction surface with a specified height, depth, front, back, and side boundaries so that the machine will stop automatically when it approaches a restricted zone. This helps prevent accidents, allowing the operator to work with peace of mind. In addition, 3D boundary control can reduce the number of personnel monitoring worksite safety, which in turn reduces costs. There is no need to change the restricted zone settings even when moving the machine, further contributing to the safety and work efficiency of the worksite.
3D boundary control can be used to set not just one but multiple work restriction surfaces.



[Example using 3D boundary control]

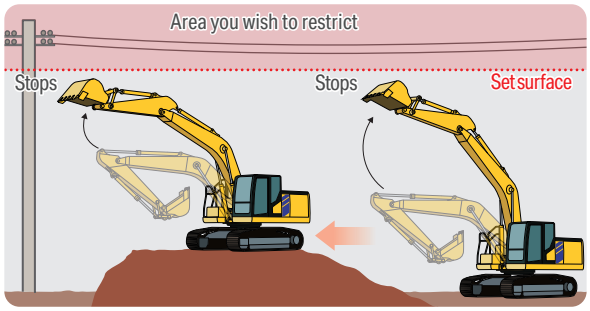
Fall prevention

3D boundary control can help prevent the machine falling during construction work near a slope.



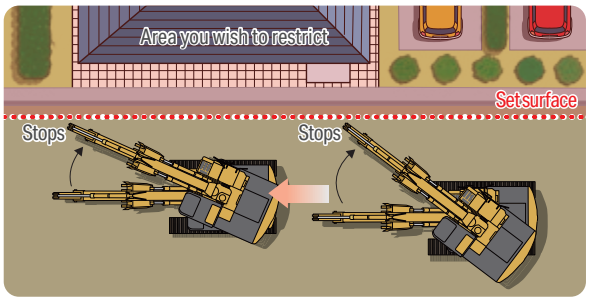
Preventing contact with high-voltage cables

3D boundary control determines the restricted areas based on height above sea level, so even if the position of the machine changes after, say, forming an embankment, the system is still capable of preventing contact with electric cables.



Preventing contact with adjacent buildings

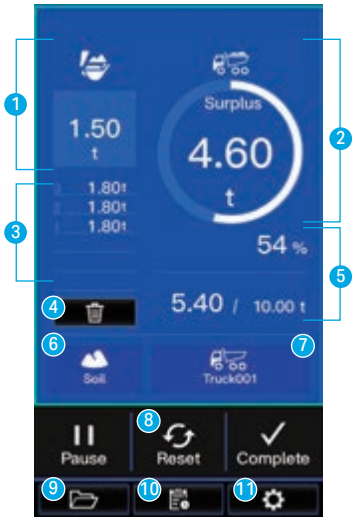
Prevents contact with things like buildings or trees to the side of the chassis.



Payload meter

The bucket payload and dump payload are displayed in real time, allowing the operator to perform work while checking the payloads with the iMC monitor. This function enables the management of payloads and helps prevent over or under loading.

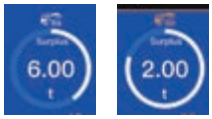
Use of the Smart Construction Fleet Lite app sees further improvements to work efficiency as a result of registered dump truck information being displayed on the monitor when near a dump truck.



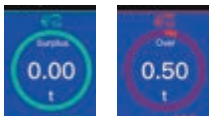
1 Bucket payload

Default | Confirmed weight

2 Dump truck remaining payload space

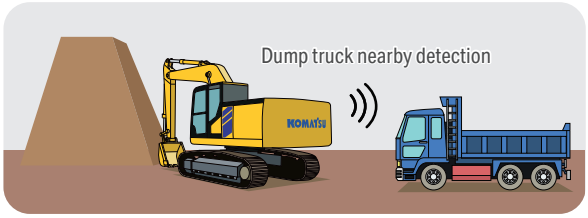


Loading in progress | Confirmed weight



Target achieved | Excessive load

3 Loading count and weight history
4 Delete latest load
5 Dump truck payload loading rate
6 Material selection
7 Select dump truck
8 Start loading
9 Dump truck list/Material list
10 Loading history/Performance data
11 Settings



Touch

or

Lever button

* The payload meter is not a measuring instrument that has passed a certification examination.

The photo shows Japan specification.

intelligent Machine Control 3.0 (PC220LCi only)

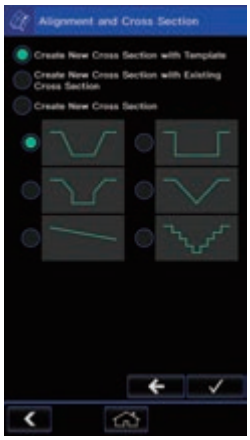
Non-bucket attachments also support semi-auto functionality

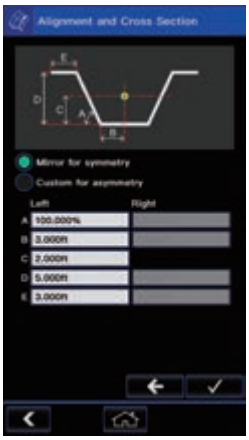
The intelligent machine control function is also compatible with non-bucket attachments and can be used at all kinds of jobsites. A wide range of tilt buckets can support the intelligent machine control function simply by installing an inertial measurement unit (IMU).

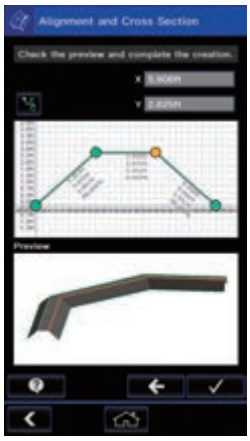
	Conventional bucket			Tilt bucket	Breaker	Tiltrotator	Twin header	Compactor	Grapple
	Standard	Slope	Trapezoid						
									
PC210LCi-11	●	●	–	●	–	–	–	–	–
PC220LCi-12	●	●	●	●	●	●	●	●	●

In-field design

A function in which operators can easily create design data at the worksite. Operators can create complex structures such as channels and levels with intuitive operations. With the new linear and cross-section modes, polyline creation and editing, cross-sectional addition to polylines, etc., the iMC 3.0 excavator can be operated smoother than ever before.







Easier calibration (simple measurements)

The bucket calibration has been modified to make it easier. There is no need for special tools, so operators can calibrate easily with a single steel tape measure.

Integrated GNSS antennas

A GNSS antenna are built into the exteriors and does not need to be installed or removed day-to-day. The GNSS antennas help prevent trouble such as theft or failures like connector mating problems or hitting trees.

3D machine control retro fit kit

With a retrofit kit, conventional spec. machines can be upgraded to 3D machine control. For more information, please contact your Komatsu dealer.

Integrated – Factory installed components

The intelligent Machine Control system is fully factory- integrated. Komatsu's unique iMC technology delivers incredible precision, efficiency, and consistency.

Smart Construction Remote

Smart Construction Remote is included as standard on PC220LCi-12. This software solution enables the customer to remotely send and update design plans even when the machine is offline. It also supports your operators remotely with shared screen control. Does an operator have an issue? Spare yourself that trip to the machine and resolve the problem from home, your office, or another jobsite.

For further information on Smart Construction Remote please check out smartconstruction.io

intelligent Machine Control 3.0 (PC220LCi only)

iMC 3.0 monitor

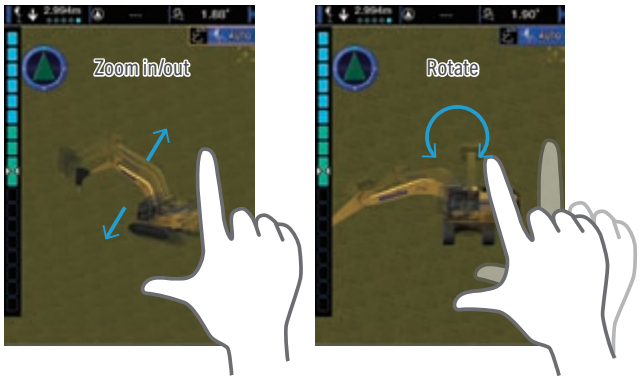
The machine is fitted with a 10 inch monitor that provides optimal visibility and enables intuitive, user-friendly operations. The monitor features a high-definition, lightweight, and tall, stylish design.

1. Direction indicator
2. Current time
3. GNSS-related icons
4. Shortcut bar
5. Data bar
6. Light bar
7. Settings bar
8. Design surface offset
9. Menu bar

The dashboard contains the frequently used functions and can be operated intuitively.

The photo shows Japan specification control levers

It can be operated smoothly just like a smartphone.



Information & communication technology

Knowledge

You get quick answers to basic and critical questions about your machines – what they're doing, when they did it, where they're located, how they can be used more efficiently and when they need to be serviced. Performance data is relayed by wireless communication technology (satellite, GPRS or 4G depending on model) from the machine to a computer and to the local Komatsu distributor – who's readily available for expert analysis and feedback.

Convenience

Komtrax enables convenient fleet management on the web, wherever you are. Data is analysed and packaged specifically for effortless and intuitive viewing in maps, lists, graphs and charts. You can foresee eventual maintenance issues and required spare parts, and troubleshoot a problem before Komatsu technicians arrive on site.

KOMTRAX

The way to higher productivity

Komtrax uses the latest wireless monitoring technology. Compatible on PC, smartphone or tablet, it delivers insightful and cost saving information about your fleet and equipment, and offers a wealth of information to facilitate peak machine performance. By creating a tightly integrated web of support it allows proactive and preventive maintenance and helps to efficiently run a business.

Power

The detailed information that Komtrax puts at your fingertips 24 hours a day, 7 days a week gives the power to make better daily and long-term strategic decisions – at no extra cost. Problems can be anticipated, maintenance schedules customised, downtime minimised and machines kept where they belong: working on the jobsite.

Specifications

Engine

Model	Komatsu Next Generation SAA4D107E-5
Type	Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel
Engine power	
at rated engine speed	2000 rpm
ISO 14396	129 kW / 173 HP
ISO 9249 (net engine power)	129 kW / 173 HP
No. of cylinders	4
Bore × stroke	107 × 124 mm
Displacement	4.46 l
Fan drive method for radiator cooling	Mechanical
Governor	All-speed, electronic
Fuel	Diesel fuel, conforming to EN590 Class 2/Grade D. Paraffinic fuel capability (HVO, GTL, BTL), conforming to EN 15940:2016

Swing system

Driven method	Hydrostatic
Swing reduction	Planetary gear
Swing circle lubrication	Grease-bathed
Service brake	Hydraulic lock
Holding brake/Swing lock	Mechanical disc brake
Swing speed	12.4 rpm

Undercarriage

Construction	X-frame centre section with box section track frames
Track assembly	
Type	Fully sealed
Shoes (each side)	49
Tension	Combined spring and hydraulic unit
Rollers	
Track rollers (each side)	9
Carrier rollers (each side)	2

Service refill capacities

Fuel tank	350 l
Radiator	28.2 l
Engine oil	18.0 l
Final drive (each side)	4.1 l
Swing drive	6.5 l
Hydraulic tank	119 l
AdBlue® tank	62.9 l

Hydraulic system

Type	HydrauMind. Closed-centre system with load sensing and pressure compensation valves
Number of selectable working modes	7
Main pump	
Type	Variable displacement piston type
Pumps for	Boom, arm, bucket, swing, and travel circuits
Maximum flow	504 l/min
Supply for control circuit	Self-reducing valve
Hydraulic motors:	
Travel	2× axial piston motors with parking brake
Swing	1× axial piston motor with swing holding brake
Relief valve setting:	
Implement circuits	37.3 MPa 380 kgf/cm²
Travel circuit	37.3 MPa 380 kgf/cm²
Swing circuit	28.9 MPa 295 kgf/cm²
Pilot circuit	3.2 MPa 33 kgf/cm²
Hydraulic cylinders: (number of cylinders – bore × stroke × rod diameter)	
Boom	2–130 mm × 1335 mm × 90 mm
Arm	1–140 mm × 1490 mm × 100 mm
Bucket	1–120 mm × 1114 mm × 85 mm

Drives and brakes

Steering control	2 levers with pedals giving full independent control of each track
Drive method	Hydrostatic
Maximum drawbar pull	202 kN 20600 kgf
Reduction system	Planetary gear triple reduction
Maximum drawbar pull	556 kN 56700 kgf
Gradeability	70%, 35°
Maximum travel speed: High	5.5 km/h
(Auto-shift) Mid	4.1 km/h
(Auto-shift) Low	3.0 km/h
Service brake	Hydraulic lock
Parking brake	Mechanical disc brake

Environment

Engine emissions	Fully complies with EU Stage V exhaust emission regulations
Noise levels	
LwA external	100 dB(A) (2000/14/EC Stage II)
LpA operator ear	67 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)	
Hand/arm	≤ 2.5 m/s² (uncertainty K = 0.38 m/s²)
Body	≤ 0.5 m/s² (uncertainty K = 0.16 m/s²)

Contains fluorinated greenhouse gas HFC-134a (GWP 1430).
Quantity of gas 0.9 kg, CO_2 equivalent 1.29 t

PC220LC/LCi-12

Operating weight (appr.)

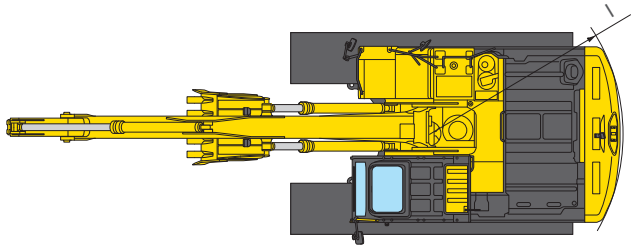
	PC220LC-12		PC220LCi-12	
Triple grouser shoes	Operating weight	Ground pressure	Operating weight	Ground pressure
600 mm	24000 kg	0.51 kg/cm²	24100 kg	0.51 kg/cm²
700 mm	24270 kg	0.44 kg/cm²	24370 kg	0.44 kg/cm²
800 mm	24540 kg	0.39 kg/cm²	24640 kg	0.39 kg/cm²
900 mm	24885 kg	0.35 kg/cm²	24985 kg	0.35 kg/cm²
600 mm double grouser shoes	24280 kg	0.51 kg/cm²	24380 kg	0.51 kg/cm²

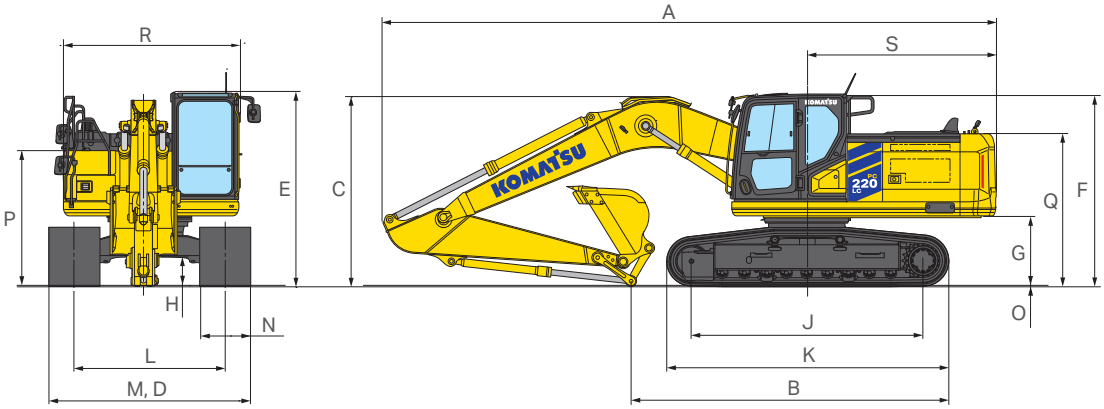
Operating weight, including specified work equipment, 2.9 m arm, 633 kg bucket, operator, lubricant, coolant, full fuel tank and the standard equipment

Max. bucket capacity and weight	Mono boom	
Arm length	2.9 m	
Material weight up to 1.2 t/m³	1.80 m³	1337 kg
Material weight up to 1.5 t/m³	1.55 m³	1172 kg
Material weight up to 1.8 t/m³	1.36 m³	1055 kg

Max. capacity and weight have been calculated according to ISO 10567:2007.
Please consult with your distributor for the correct selection of buckets and attachments to suit the application.

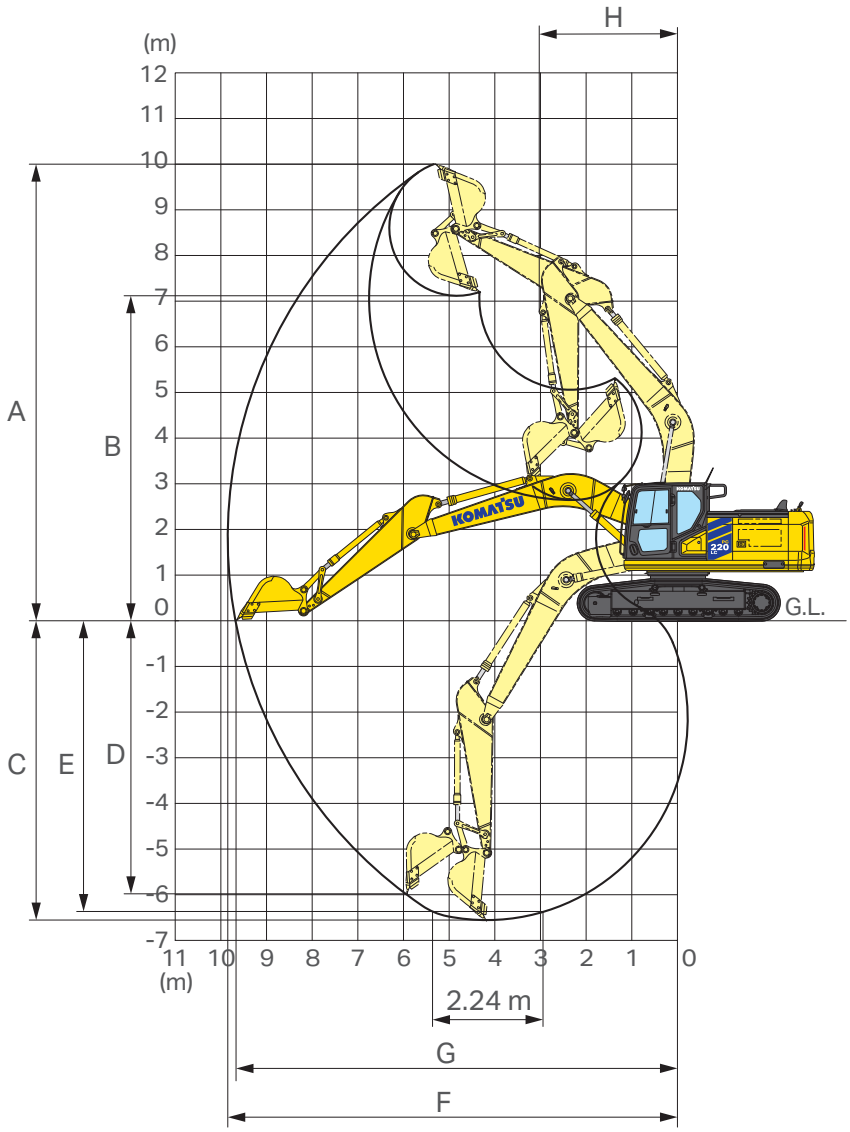
Dimensions and performance figures





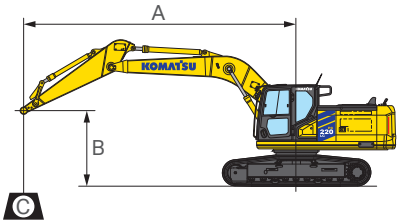
Machine dimensions		PC220LC-12/PC220LCi-12
Arm length		2925 mm
A	Overall length	9690 mm
B	Length on ground (transport)	5000 mm
C	Overall height (to top of boom)*	2995 mm
D	Overall width	3180 mm
E	Overall height (to top of cab)*	3060 mm
F	Overall height (to top of handrail)*	3000 mm
G	Ground clearance, counterweight	1085 mm
H	Ground clearance (minimum)	440 mm
I	Tail swing radius	3020 mm
J	Track length on ground	3655 mm
K	Track length	4450 mm
L	Track gauge	2380 mm
M	Width of crawler	3180 mm
N	Shoe width	800 mm
O	Grouser height	26 mm
P	Machine cab height	2115 mm
Q	Machine height to top of engine cover	2420 mm
R	Machine upper width	2810 mm
S	Distance, swing center to rear end	2975 mm

Working range



Working range		PC220LC-12/PC220LCi-12
	Arm length	**2925 mm**
A	Max. digging height	10000 mm
B	Max. dumping height	7110 mm
C	Max. digging depth	6620 mm
D	Max. vertical wall digging depth	5980 mm
E	Max. digging depth of cut for 2.44 m level	6370 mm
F	Max. digging reach	9875 mm
G	Max. digging reach at ground level	9700 mm
H	Min. swing radius	3065 mm
	Bucket digging force at power max.	159 kN / 16200 kgf
	Arm crowd force at power max.	116 kN / 11800 kgf

Lifting capacity



A – Reach from swing center

B – Bucket hook height

C – Lifting capacities

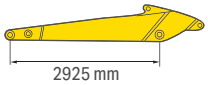
– Rating over front

– Rating over side

– Rating at maximum reach

With 600 mm shoes

Arm length	A			7.5 m		6.0 m		4.5 m		3.0 m		1.5 m	
	B												
	7.5 m	kg	*3900	*3900			*4500	*4500					
	6.0 m	kg	*3650	*3650			*6000	*6000					
	4.5 m	kg	*3600	*3600	*5650	4100	*6700	5850	*7250	*7250			
	3.0 m	kg	*3700	3400	5950	3950	*7750	5550	*9900	8550			
	1.5 m	kg	*4000	3250	5800	3850	8150	5300	*12000	7950			
	0.0 m	kg	*4500	3300	5700	3750	7950	5100	12600	7650	*7450	*7450	
	-1.5 m	kg	*5450	3600	5650	3700	7850	5000	12500	7550	*12250	*12250	*7700	*7700
	-3.0 m	kg	6600	4300			7900	5050	*12550	7600	*17850	14850	*12650	*12650
	-4.5 m	kg	*8200	6150					*10250	7850	*14350	*14350		



* Load is limited by hydraulic capacity rather than tipping.
Ratings are based on SAE Standard No. J1097.
Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.
When lifting with additional equipment installed to the arm, please subtract the weight of all additional equipment from the values stated.

Standard and optional equipment

Engine

Komatsu Next Generation SAA4D107E-5 turbocharged common rail direct injection diesel engine	●
EU Stage V and EPA Tier 4 final compliant	●
Suction type cooling fan with radiator fly screen	●
Automatic engine warm-up system	●
Engine overheat prevention system	●
Fuel control dial	●
Auto-deceleration function	●
Adjustable idle shutdown	●
Adjustable delayed engine shutdown	●
Engine keyless start stop	●
Engine ignition can be password secured on request	●
Alternator 24 V / 85 A	●
Starter motor 24 V / 5.5 kW	●
Batteries 2 × 12 V / 180 Ah	●

intelligent Machine Control 3.0 (PC220LCi-12 only)

Factory installed integrated 3D GNSS intelligent Machine Control system	●
3D Boundary control	●
Auto swing	●
Swing to line	●
Travel to line	●
Tiltrotator control	●
Smart Construction Remote	●

Hydraulic system

Closed-centre load sensing hydraulic system (HydrauMind)	●
Pump and engine mutual control (PEMC) system	●
7-working mode selection system; Power + mode, Power mode, ×4 Economy modes and Lifting mode	●
PowerMax function	●
Electronic control levers for arm, boom, bucket and swing, with 3 proportional controls for attachments and 5 auxiliary buttons	●
Prepared for hydraulic quick-coupler	●
High-efficiency large spool main valve with separate meter in and meter out spools and regeneration	●
Hydraulic tuning according to operator preference possible	●
Low back-pressure drain line for attachment	○
Additional hydraulic functions	○
Komatsu Integrated Attachment Control (KIAC)	○

Cabin

Reinforced safety SpaceCab™; highly pressurised and tightly sealed hyper viscous mounted cab with tinted safety glass windows, large clear polycarbonate opening roof window with sun blind, wide pull-up type front window with locking device, removable lower window, large parallel front window wiper with intermittent feature covers upper and lower screens, sun roller blind, luggage shelf, 2-piece floor mat, additional floor mat, 8 inch close at hand touchscreen monitor	●
Heated, high-back air-suspended seat with lumbar support, console mounted height adjustable arm rests, and retractable seat belt	●
Tilt-up console for easier access	●
Super ergonomic short stroke, low effort electronic levers	●
Keyless start system	●
Operator ID system linked to personalised settings	●
Automatic climate control system	●
12 / 24 Volt power supplies	●
USB-A power supply	●
Utility bar	●
Beverage holder and magazine rack	●
Hot and cool box	●
Integrated DAB+ radio with Bluetooth®	●
Remote electric door lock	●
Remote key fob	●
Premium comfort seat with adjustable horizontal and vertical damping	○
Rain visor (not with OPG)	○

Undercarriage

Track roller guards	●
Track frame under-guards	●
In cab undercarriage direction indicator	●
600, 700, 800, 900 mm triple grouser shoes	○
600 mm double grouser shoes	○
Full length track roller guards	○

Drives and brakes

Hydrostatic, 3-speed travel system with automatic shift and planetary gear type final drives, and hydraulic travel and parking brakes	●
Electronic control levers and pedals for steering and travel and selectable joystick steering	●

Safety equipment

KomVision surround view system	●
Electric horn	●
Overload warning device	●
Audible travel alarm	●
Boom safety valves	●
Large contrasting colour handrails	●
Rear-view mirrors (for cab adjustable without tools)	●
Battery main switch with lock out	●
ROPS compliant to ISO 12117-2:2008	●
Emergency engine stop switch	●
Seat belt caution indicator with optional exterior green lamp	●
Neutral position detection system	●
Arm safety valve	●
Electronic spirit level	●
Rollover prevention warning	●
2D Boundary Control	●
OPG Level II front guard (FOPS), hinged type	○
4 point seat belt (Opt. when fitted with Premium seat)	○
OPG Level II top guard (FOPS)	○

Service and maintenance

Automatic fuel line de-aeration	●
Double element type air cleaner with dust indicator and auto dust evacuator	●
Komtrax – Komatsu wireless monitoring system (4G)	●
Komatsu Care – a maintenance program for Komatsu customers	●
Multifunction video compatible colour monitor with Equipment Management and Monitoring System (EMMS) and efficiency guidance	●
Service points	●
Fuel refill pump	●
Ground level AdBlue fill	●
3 point of contact access system (r.h. side)	●
Extended service intervals	●
Automatic greasing system	○

LED lighting system

Working lights: 1 revolving frame, 1 boom (l.h.), 1 cab roof (l.h.)	●
Coming home light function	●
Additional working lights (#1), 1 cab roof (front r.h.), 1 cab roof (rear), 1 boom (r.h.), 1 counterweight, beacon	○
Additional working lights (#2): 3 cab roof (front), 1 cab roof (rear), 1 boom (r.h.), 1 counterweight, 2 boom cylinders, 2 revolving frame (l.h. + r.h.), beacon	○

Work equipment

IMU (Inertia Measurement Units) fitted to boom, arm and revolving frame	●
Stroke sensing bucket cylinder	●
Plug and Play solution for tiltrotators	●
Payload meter	●
Boom float	●
Mono boom	●
Advanced payload meter (standard with LCi) Requires 2nd monitor installed in cabin	○
Bucket linkage with lifting eye	○
2925 mm arm	○
Komatsu buckets	○
Komatsu breakers	○

Other equipment

2D machine control	●
Upgradeable to iMC 3.0 spec	●
Upgradeable to Smart construction 3DMG Kit	●
Upgradeable software system	●
Standard counterweight	●
Remote greasing for swing circle and pins	●
Electric refuelling pump with automatic shut-off function	●
Can also be installed with 3rd party machine guidance equipment	○
Side protection guards	○
Biodegradable oil for hydraulic system	○
Customised paint	○

Further equipment on request

● standard equipment
○ optional equipment

This specification sheet may contain attachments and optional equipment that are not available in your area.
Please consult your local Komatsu distributor for those items you may require.
Materials and specifications are subject to change without notice.

Your Komatsu partner:

komatsu.eu