

KOMATSU[®]

865

Powerful and productive

Forestry Quality[™]


865

FORWARDERS



Superb profitability

865

A red Komatsu 865 forwarder is shown in a forest setting. The machine is positioned on the right side of the frame, facing left. It has a large cab with a glass windshield and side windows. The body is red with black accents. The forest consists of tall, thin pine trees with green needles. The ground is covered in grass and some fallen branches. The sky is visible through the trees, showing a clear blue color with some light clouds.

Komatsu 865 is more than a new forwarder. It is also a benchmark for future demands on everything from productivity and cost-effectiveness to the operator's environment – in other words, demands on optimal forwarder performance. Here are the essential advantages:

Engine

The powerful SCR engine based on our special E3 power technology that minimizes NOx emissions (nitrogen oxides) and optimizes fuel economy. Additional benefits include reduced engine noise and a strong torque for hard work to cleaner engine oil. Noise reduction can be explained by variable fan control where the new, larger engine fan can run at exactly the speed required for cooling.

Operator environment

The all-new cab is higher, wider, has more legroom and more storage space. The feeling of more space inside the cab is striking. The large glass surfaces give improved visibility upwards and to the sides and makes crane operation easier and more relaxing. The cab is designed to provide a quiet operator environment. As an option there is a new driver's seat that provides superb comfort and work area, and that offers a variety of personal adjustments and settings.



Control system

With Komatsu 865, you get the MaxiXplorer control system that combines simplicity, power and functionality that is unparalleled in the market. The system gives you a leading machine control – engine, transmission, crane, lights, wipers, etc. – that can be easily adjusted, fine-tuned and adapted to the operator's needs and desires. Komatsu 865 has brand new hand controls, ergonomically designed and well equipped.

Transmission

With Komatsu 865, you start with a powerful foundation of traction (193 kN/19,680 kp) and unique interaction between the engine, control system and transmission. A design that ensures you get the most out of your machine at all times. Examples are cruise control, several preset and work optimized driving modes, extra traction on steep terrain and over obstacles. The result is maximum productivity and maximum deployment of each horsepower and liter of diesel.



Environment and fuel benefits

The powerful new SCR engine both minimizes emissions and optimizes fuel economy.

MAXIMIZES YOUR PROFITABILITY – WHICHEVER WAY YOU LOOK AT IT



Outstanding operator environment

The redesigned cab offers more storage space. The high-performance design concept is quieter and provides better visibility.



ORFS couplings

All critical hydraulic connections use ORFS couplings, which help to minimize the potential for leaks and avoid unplanned downtime.

On one hand, the new Komatsu 865 is at the forefront of development with respect to the forest environment and the operator's environment. On the other hand, it is also more advanced than the competition with regard to productivity and cost efficiency. If it sounds too good to be true, we understand. Yet that is exactly the heart of the matter – a totally new forwarder with the potential to radically optimize your performance.

An important part is the 865's new powerful SCR engine is its special e3 power technology which minimizes emissions while it maximizes fuel



The new HST transmission with powerful traction of 193 kN gives increased performance through the unique interaction with the control system and the engine.



The full power of MaxiXplorer provides you everything from more accurate and efficient machine control to market-leading operating and production reporting.

865



efficiency. And the engine performance news does not end there, additional benefits include everything from improved low-end torque to cleaner engine oil. Service costs are cut further thanks to the leak-resistant ORFS couplings and centralized lubrication points.

However, something that Komatsu 865 does not cut down on at all is productivity. This is mainly due to the new ingenious transmission solution, which provides optimal interaction

between the engine, transmission and control computer. Advantages such as several work-optimized driving modes and increased traction up steep slopes and over obstacles makes you almost unstoppable. And equally as impressive is the comprehensive functionality of MaxiXplorer, especially its superior operating and production monitoring.

Uncompromising is also something that characterizes the 865's extremely high-performance operator environment. The

all new and pleasantly quiet cab is bigger in all directions and has been specially designed to make the operator's day with repeated crane movements as gentle on the body as possible. The result, as you can understand, is both remarkably healthy and profitable – profitability that fully meets the demands of modern forestry.

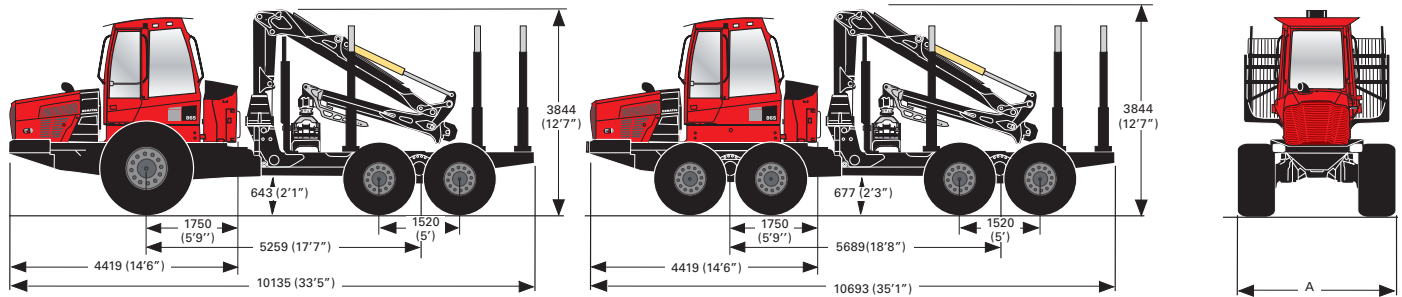
Forestry Quality Economy



Our unique bogie solution, Komatsu Comfort Bogie, gives you superb mobility and stability.



TECHNICAL SPECIFICATIONS



Dimensions shown are for 6 WD long frame arrangement, 8WD extra long/extra long frame arrangement (mm / inches)

WHEEL OPTIONS, FRONT AND REAR, AND MACHINE WIDTH (A) WITH DIFFERENT TIRES

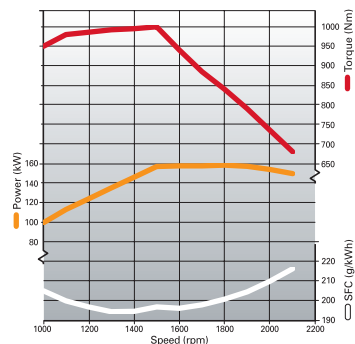
	Tire	Width (mm/inches)		Tire options	Width (mm/inches)
6WD (front)	600/65x34	2,690/8'10"	8WD (front/rear)	600/55x26.5	2,756/9'1"
	710/55x34	2,894/9'6"		710/45x26.5	2,976/9'9"
6WD (rear)	600/55x26.5	2,756/9'1"	NOTE: Stated dimensions are nominal and may vary slightly.		
	710/45x26.5	2,976/9'9"			

WEIGHT

	6 WD	8 WD
Weight from:	17,100 kg (37,700 lb)	18,900 kg (41,670 lb)

ENGINE

	74 AWI. 6-cylinder, turbo with Commonrail. EU Stage IIIB and EPA Tier 4 Interim. DEF/SCR after-treatment. (Stage II/EPA Tier 2 for Russia, Australia and South America.)
Stroke volume:	7.4 l (1.95 gal)
Power, max.:	158 kW DIN (215 hp) at 1,500-1,900 rpm
Torque:	1,000 Nm (742 lb-ft) at 1,500 rpm.
Fuel tank:	165 l (43.6 gal)
DEF tank:	18 l (4.76 gal) for Stage IIIB/EPA Tier 4 engine
Miscellaneous:	Belt guard (according to EU Directive 2006/42/EC) for all markets.



TRANSMISSION

	Computer-controlled hydrostatic-mechanical transmission. 6/8 wheel drive. Disengageable rear wheel drive operation. Differential locks front and rear.
Driving speed:	0-20/23 km/h (0-12.5/14 mph) (without/with steering wheel)
Pulling force:	193kN (43,388 lbf)

FRAME/AXLES

Three rear frame option. Smooth frame of high strength steel. Portal bogie with hub reduction. Dampening bogie stops. Towing point forward and rear. Permanently lubricated bearings.

Available options: Front blade.

HYDRAULIC SYSTEM

Single circuit load sensing system with variable piston pump. Wear protection under bogie bearing.

Flow:	290 l/min (76 gal/min) at 2,000 rpm
Max. working pressure:	260 Bar (2,650 psi)
Hydraulic oil reservoir:	122 l (32.2 gal)
Miscellaneous:	Pressure filter for hydrostatic circuit. Double return oil filters for hydrostatic and working hydraulics. Hydraulic oil level alarm.

BRAKE SYSTEM

	2-dual circuit, fully hydraulic multi-disc brakes. Hydraulic accumulator charging valve.
Driving brake/ Working brake:	Multi-disc brakes in oil bath. Automatically engaged when stopped.
Parking brake:	Spring-action brake with electro-hydraulic control. Emergency brake.
Braking performance:	Conforms to ISO 11169 and VVFS 2003:17

CAB/ERGONOMICS

	Spacious and bright cab, with excellent vision. Thermal and acoustic insulation. Conforms to ISO 8082 (ROPS), ISO 8083 (FOPS) and ISO 8084 (OPS). Alternative cab that also conforms to WCB OPS G603.
Seat:	Three alternative seat options. Ergonomically designed with headrest, arm rests, control panels and waist belt. Different opportunities for individual adjustment of the seat cushion, back and lumbar support are provided depending on the seat selection. Seat pillar with 0-180 degree working area.
Windshields:	Polycarbonate material in rear side windows and rear window. Alternative cab conforming to WCB OPS G603, with protective glass in all windows.

Heating/ventilation:	Fully automatic heating and cooling unit ACC. Filtered intake air.
Noise level:	As per ISO standard.
Vibrations:	As per ISO standard.
Miscellaneous:	Windshield wipers and washer on front and rear windows. Fire extinguisher, 2 kg (4.41 lb) (in EES countries in compliance with EU Directive 2006/42/EU).
Available options:	Sun-blinds around and/or sun raster front. Radio with Bluetooth and Hands-free support. Air-ventilated seat. Food box heater. Refrigerator box. Side wiper. Allergy filter 3 μ (mu). Extra floor mats for easier cleaning. Seat pillar that enables 220-degree working area and freely chosen locked position. Interior light on roof and floor and reading lamp on flexible arm.

LOAD AREA

	6 WD	8 WD
Gross load:	15,000 kg (33,070 lb)	15,000 kg (33,070 lb)
Load area:	3.3–4.5 m ² (34–44 sq. ft.), hydraulic shifting.	
Load bunks:	Mounted on runners, movable	
Available options:	Widening kit to expand the load area up to 4.8 m ² (51.7 sq. ft.). Komatsu LoadFlex, mechanical or hydraulic height-adjustable supports.	

CRANE AND GRAPPLE

Crane:	CRF 11
Reach:	7.8 m (25'7")
Lifting torque, gross:	126 kNm (92,900 lb-ft)
Slewing torque, gross:	28.7 kNm (21,170 lb-ft)
Rotator:	G121 and slew damper link
Grapple:	Komatsu G28
Available options:	CRF 11 C (Combi crane with a reach of 9.6/10 metres (31'6"/32'10")). Komatsu ProTec. Komatsu ProTec, Komatsu G36, G36HD, E28 or E36 grapple. Multiplate link.

STEERING

	Hydraulic articulated joint.
Lever steering:	Load-sensing (LS) proportional steering with steering rocker
Steering wheel:	Load sensing (LS) proportional servo.
Steering angle:	+/- 42°

ELECTRICAL SYSTEM

Voltage:	24 V
Battery capacity:	2 x 140 Ah
Generator:	2 x 100 A

LIGHTING

	More than 30 lux in working area.
Available options:	Xenon lighting. Working lights rear (Halogen or Xenon). Articulated lighting (Xenon)

CONTROL AND INFORMATION SYSTEM

MaxiXplorer is a CAN-based control system where you control all machine functions with the support of ergonomic hand controls and a user-friendly PC. The system includes functions for setting of crane functions, transmission control, diesel engine and other machine functions. The system also offers area management, integrated production and operation follow-up, troubleshooting, and alarms.

PC, basic equipment

	2 alternative computers	
	MaxiPC X20	MaxiPC X30
Processor	Intel Atom 1.6 GHz	Intel Core 2.4 GHz
RAM	1 GB	4 GB
Hard drive	40 GB	60 GB
Screen	12"	12"
USB ports (incl. screen)	7	7
Serial ports	3	2
Operative system	Windows XP Pro	Windows XP Pro
Available options	Slave screen 12", A4 printer, GPS receiver	

EXAMPLES OF OTHER EQUIPMENT

Sprinkler system. Semi-automatic, water-based fire extinguishing. Conforms to SBF 127.

Hand-held extinguisher. 2 x 6 kg (2 x 13.2 lb) ABE-3

Powder extinguisher.

Operator's manual in paper format (even electronic in Maxi).

Spare part manual in paper format (even electronic in Maxi).

Diesel heater. 9.1 kW incl. timer. Hydraulic oil heater.

Environmentally-friendly hydraulic oil

Water separator ventilation filter

Extra water separator (diesel).

Tracks, chains.

Toolbox with tools (heated in the engine compartment).

Central lubrication.

Reversing camera rear (standard in EES countries in compliance with EU Directive 2006/42/EU).

Reversing camera front.

Vacuum pump

Wear protection and chain guard for bogie casings.

Service ladder by hydraulic tank (standard in EES countries in compliance with EU Directive 2006/42/EU).

Front protection.

NOTES

Standard and extra equipment are market specific and vary from country to country. The specification describes possible equipment; not what is standard or optional. Weights are based on the equipment stated in the basic specification. Specifications and designs are subject to alteration without prior notice.



WHY A KOMATSU FORWARDER?

High productivity, low operating costs, innovative technology, excellent operator environment – these are just a few examples of the advantages that earn Komatsu forestry machines a place among the best in the world. Behind all this is a highly-focused strategy to continually build upon the advantages of owning a Komatsu forwarder. A strategy based on the following principal ideas.

Ergonomics

Your forwarder is a mobile work environment where the operator's opportunities to perform optimally without tiring are a decisive factor for success. This is an important reference point that has helped us develop the important ergonomic advantages of Komatsu forwarders. Good examples are the stability and the operator environment with its perfect view whether driving or operating the loader.

Economy

The ambition to maximize profitability is one of the most important driving forces in the further development of Komatsu's forwarders. Each small improvement that increases productivity and reliability, reduces costs, or saves time is of interest. Tangible and quantifiable examples from today's Komatsu forwarders include fuel-efficient engines, high reliability, and unmatched high productivity per unit of time.

Productivity

More work in less time. This is something we often hear from contractors who switch from competing brands to Komatsu forwarders. And there are many reasons behind this, both large and small. The most important include the high-performance operator environment, superior loader geometry, and great maneuverability and speed.

Customer Support

Fast and competent service has a direct bearing on the performance and economy of any forestry machine. Our extensive service network provides you as a Komatsu owner with a sense of security. Well-trained technicians – Komatsu experts – provide additional assurance. Another benefit is ProSelect, our special line of accessories and consumables. The range is based on a selection of items that are all of the highest quality and designed for both Komatsu and other brands of professional forestry machinery.

Environment

Forests are an essential and fragile element of the global ecology. This is why every new Komatsu product, and all its component parts, is examined with an eye to both the short-term and long-term environmental effects. This has resulted in real environmental improvements such as highly-effective exhaust emission control and low, evenly-distributed ground pressure in Komatsu forwarders. Environmental considerations also permeate our broad range of accessories and consumables, such as our special, rapidly biodegradable oils.

Global Experience

Komatsu forwarders can be found the world over. Consequently, they have been adapted to deliver optimum profitability regardless of working conditions. The same fundamental idea lies behind the global service and dealer network that provides support to thousands of Komatsu owners on a daily basis.