

# 7R Series

210- to 310-Horsepower Tractors



# Confidence has a name...

The John Deere 7R Series has the raw power and intelligence to take your operation to the next level, improving productivity while delivering impressive fluid economy. With a range of engine horsepower from 210 to 310-engine hp, these machines are ready to prove themselves day in and day out, without compromise.







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# Built for the pursuit of better

Unlike anything in the market, the John Deere 7R Series Tractors pack big-tractor power onto a rugged yet nimble frame, making for a tough easy-to-operate tractor that refuses to settle. Their high-power density and high horsepower rating, coupled with the FT4 engine and the efficiency features found on the IVT and new e23™ Transmissions, make these tractors an excellent choice for all your field applications, yard work, and transport needs. With the 7R Series Tractors you get a line up that's as versatile and hardworking as you.







## 7R SERIES TRACTORS

Model	Engine hp <sup>1</sup>	PTO hp <sup>2</sup>
7210R	210	170
7230R	230	189
7250R	250	205
7270R	270	224
7290R	290	242
7310R	310	260

1 – Rated engine hp (ISO) per 97/68/EC. 2 – Rear PTO at 2,100 engine RPM.

# It's not just one thing, it's everything

The 7R Series redefines what's possible with a row-crop tractor, thanks to a number of new features to help you be more productive and more efficient.

■ An LED lighting option available on the new 7R Series Tractors, lights up the night with 40% more coverage using 45% less amps. So now when the sun goes down, the lights come on, and you see more with less fatigue. [See page 12 for more.](#)

■ 210 to 310 Engine hp. The New 7R Series Tractors combine world-class efficiency with increased horsepower to push productivity to higher levels than ever before. Intelligent Power Management, or IPM provides a horsepower increase during non-stationary PTO and transport applications of up to 30 horsepower for full PTO power and speed. [See page 11 for more.](#)

■ An improved cooling system delivers even in harsh operating conditions. The new cooling package limits dirt and debris buildup and offers improved serviceability. The improvements to the cooling package result in a reduced noise level. [See page 9 for more.](#)







- **CommandView™ III Cab.** Designed to keep you comfortable and productive, this cab has it all—from laminated glass and a front console barrier for less noise intrusion to an intuitive CommandARM™, with the bigger, brighter and easy-to-use Generation 4 CommandCenter Display. There's also an integrated refrigerator option. [See pages 18-19 for more.](#)

- **PowerTech PSS 6.8L and PSS 9.0L Engines.** With engine horsepower up to 310 hp, the 7R Series Tractors, powered by the PowerTech™ PSS 6.8L or PowerTech™ PSS 9.0L engine, outperform both in the field and during transport. They do it all, while still meeting Final Tier 4 emission requirements. [See page 11 for more.](#)

- **e23™ PowerShift Transmission.** The New 7R Series Tractors feature the New e23™ PowerShift Transmission with Efficiency Manager™. With the widest gear selection on the market and automation capabilities, you can improve machine efficiency and operator productivity. [See pages 14 -15 for more.](#)

- **IVT improvements** including capabilities like pedal mode and eco settings. Pedal mode which has previously been available on 6R Series Tractors with IVT, allows operators to change the ground speed independent of the engine speed. The all new eco feature can help improve fluid efficiency by affecting how the tractor reacts to throttle and speed commands. [See page 15 for more.](#)



# Take it for an endurance run

Go ahead, push the limit and extend a few boundaries. The 7R is one tractor that won't back down from challenging conditions or complain about long days.

The 7R Series offers the Group 49 tires as an option. With a larger footprint, these tires reduce compaction and improve traction, making each trip more productive with less impact to the field and improving yield potential.





## A better design for better performance

■ **Pull-style cooling system.** The 7R Series Tractors feature an increased front area cooling system that utilizes a pull-style fan to improve cooling efficiency over an increased surface area. This provides better cooling capacity and reduces fan noise during increased power levels or while under heavy loads.

The 7R Series Tractors also have an increased screen area on the hood and redesigned side shields. The new cooling system provides easy, cooler cleanout and service accessibility without affecting turning radius or front hitch and front PTO applications.









# Get-it-done approach

Being profitable these days means being more efficient, making the most of your equipment, making smarter decisions, reducing downtime, and making every tank of diesel last longer – which is exactly what the 7R Series is designed to do. A variety of design details combine with transmission options and advanced, integrated technology to save fuel while helping you get more done in a day.

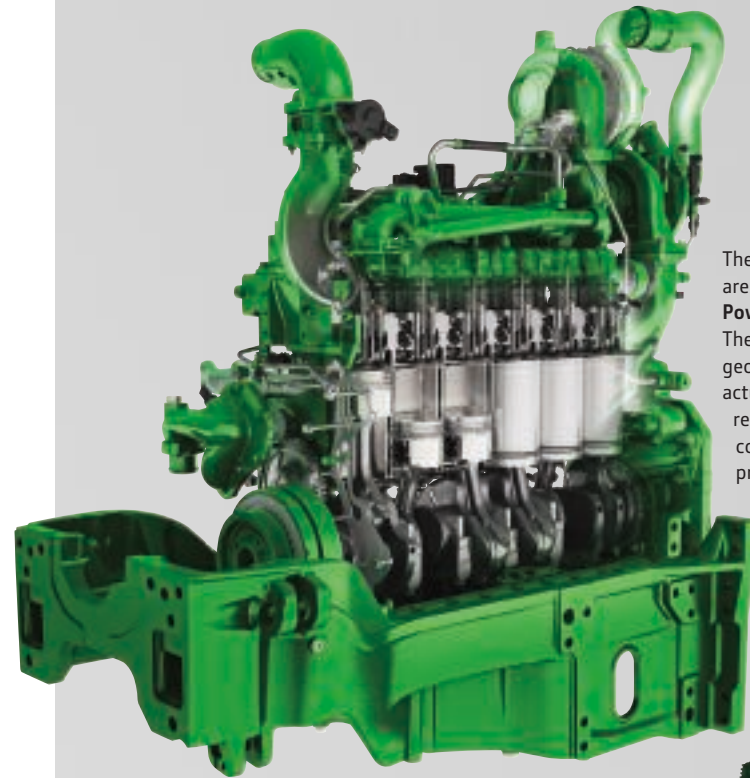
## Compliant without compromise

By following a building block approach, we were able to meet Final Tier 4 emission regulations with a 6.8L PSS and 9.0L PSS Series turbocharged engine that delivers improved fuel economy, performance, and features an Integrated Emissions Control System.

Our Integrated Emissions Control system consisting of cooled EGR, a diesel oxidation catalyst (DOC), diesel particulate filter (DPF), and a selective catalytic reduction (SCR) system is specifically designed to meet the rigorous demands of agriculture applications. This seamlessly integrated solution can use less diesel fuel and DEF for total fluid efficiency.

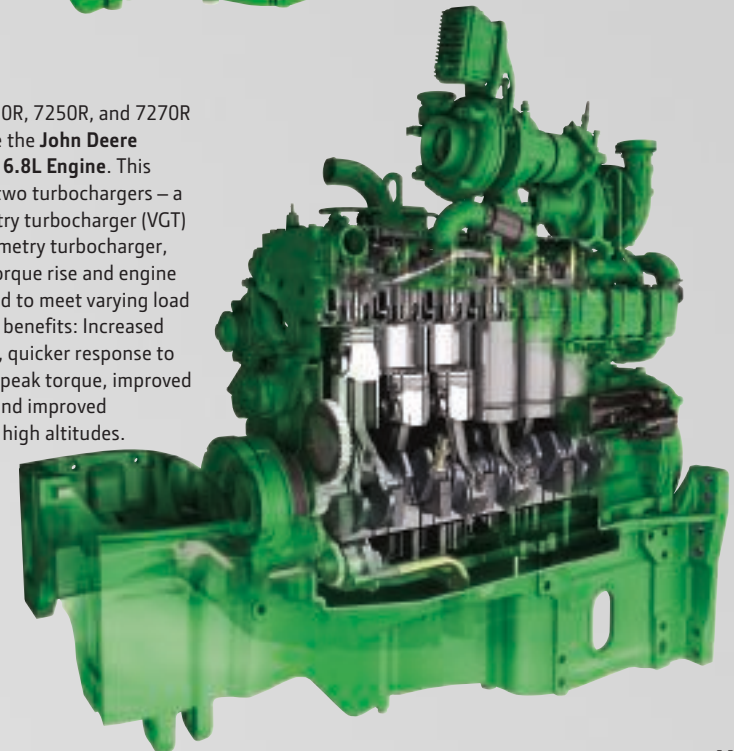
The Final Tier 4 technology used in the John Deere PowerTech™ PSS 6.8L and PSS 9.0L engines deliver an economic, total fluid solution that won't delay peak performance in the field.

### Engines



The 7290R and 7310R Tractors are built with the **John Deere PowerTech PSS 9.0L Engine**. The field-proven variable geometry dual-turbocharger actuates the turbo vanes as required to provide more consistent engine boost pressure and the ability to respond to load quickly across the engine rpm range. The benefits: Increased low rpm torque, quicker response to load, increased peak torque, improved fuel economy, and improved performance at high altitudes.

The 7210R, 7230R, 7250R, and 7270R Tractors feature the **John Deere PowerTech PSS 6.8L Engine**. This engine utilizes two turbochargers – a variable geometry turbocharger (VGT) and a fixed geometry turbocharger, providing the torque rise and engine response needed to meet varying load conditions. The benefits: Increased low rpm torque, quicker response to load, increased peak torque, improved fuel economy, and improved performance at high altitudes.



# Light up the night

with the optional LED lighting package available on the 7R Series Tractors. Compared to the HID lighting packages, the new LED option has a longer life expectancy, 40% greater coverage, and utilizes 45% less amperage. Additionally, they provide greater quality and color, improving visibility and eliminating strain on the eyes.





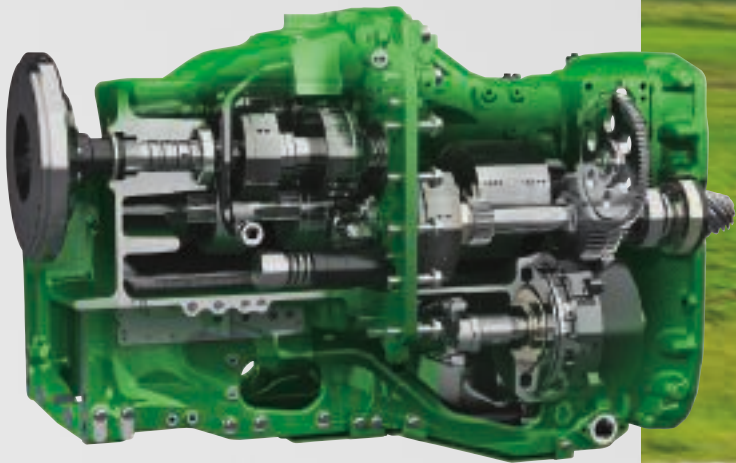


## Lighting

The cab lighting pattern provides 330- degrees of coverage while the hood lighting provides the remaining 30-degrees for completely programmable 360-degrees, stadium-style lighting. This ensures there are no dead zones or lighting adjustments needed. The lighting configurations are available to match various applications and ensure maximum around-the-clock productivity.

## Smooth operator

The 7R Series Tractors feature the e23™ PowerShift Transmission option with Efficiency Manager™ which pairs the benefit of a mechanical transmission with the ease of an IVT™. The transmission has 23 forward gears that are evenly spaced 15% apart to provide a wide speed range to complement different operating conditions and implements. The spacing also provides smooth shift quality which helps improve ride quality and helps maintain maximum ground speed at reduced engine rpms to save fuel. The e23™ also provides 11 reverse selections with a 30% speed change between gears.



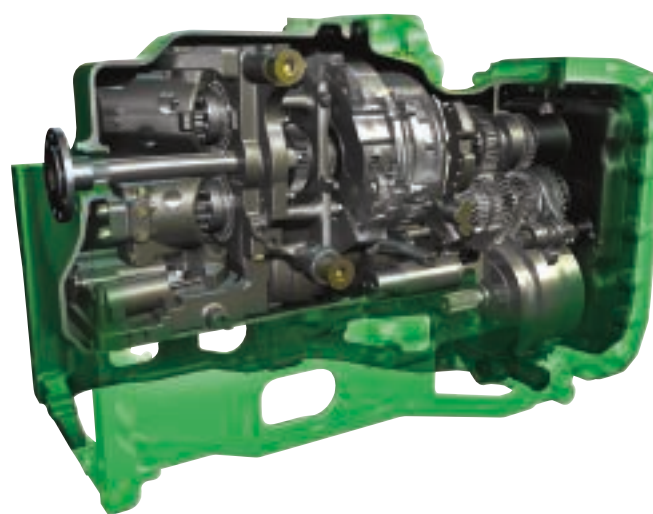


## The right transmission for the job

The 7R Series offers six transmission options to help you meet the challenges of your operation: CommandQuad™ with Efficiency Manager™, the e23™ and the Infinitely Variable Transmission (IVT). Each is available in either a 26 or 31 mph/40 or 50 km/h version.

■ **CommandQuad™ Eco with Efficiency Manager** offers two operating modes and push-button controls. In manual mode, you shift through speeds and ranges simply by moving the control lever. With auto mode, you set the target ground speed and Efficiency Manager automatically selects the right gear and engine rpm to save fuel. The transmission is equipped with 20 forward and 20 reverse (20F/20R) speeds, a left-hand reverser, and four power shiftable gears in five fully synchronized ranges.

■ **John Deere IVT** gives you the best in performance and operation. A single lever lets you move smoothly from 0 to 26 or 31 mph (40 or 50 km/h) ... and any speed in between. Dial in a specific ground speed and the transmission and engine work together to keep the tractor there, instantly responding to changing load conditions.



The AutoPowr/IVT operates similarly to the traditional gear-up and throttle-back operation performed manually with other transmissions. However, because the system is continually communicating with the engine and transmission, making appropriate adjustments based on inputs received from the tractor, it responds quickly and precisely to changing conditions.









# Turn your information into a plan

**MyJohnDeere Operations Center** lets you see average yield, total yield, average moisture, seeding variety and rates, machine information from JDLink™ and more. The Field Analyzer tool lets you compare these layers side by side. And you can easily share planing and yield data with trusted advisors and receive recommendations such as variable rate prescriptions.

## JDLink Connect.

JDLink comes standard on every 7R Series Tractor. With a JDLink activation, you can stay informed on machine location and hours, protect your assets with Geofence and Curfew alerts, keep your machines running with maintenance tracking and preventative plans, track and analyze machine and fuel usage and much more. Using the power of JDLink you can optimize productivity, increase uptime, and boost profits with machine information accessible from a laptop, desktop, or mobile device.

■ **Wireless Data Transfer.** Easily share data with trusted advisors to turn your information into a plan. Send files wirelessly to your operators in the field, and once they're done, all the information is sent back to your MyJohnDeere account to analyze.

■ **Remote Display Access.** By viewing an operator's screen remotely, you can significantly reduce the time it takes to resolve issues, often eliminating a service call from your dealer or a trip to the field.

■ **Service ADVISOR™ Remote** allows your dealer to make sure your equipment is running at peak performance. It saves you time on repairs as your dealer can determine what parts are needed before they arrive.

\* Activation/subscription required. Some additional accessories and/or components may be required. JDLink requires a cellular data connection to transfer information from machine to JDLink website. Consult your local John Deere Dealer for coverage availability. \*\* Gen 4 Activations are machine specific activations that remain with the tractor.



**GreenStar™ 3 2630 Display** comes ready with parallel tracking, field documentation, map-based prescriptions, harvest documentation and on-screen mapping. AutoTrac and SectionControl can also be added to improve efficiencies even more.

**The 4600 and 4100 CommandCenter Displays** create the primary user interface for 7R Tractors. The Generation 4 CommandCenter provides an excellent, user-savvy operating experience. Producers can also use a variety of implements with the Generation 4 CommandCenter as it is ISOBUS virtual terminal (VT) capable. Expect machine productivity gains, along with increased operator confidence thanks to a simple, customizable interface. The reliability of the Generation 4 CommandCenter also helps improve productivity making ever pass more efficient. The Generation 4 CommandCenter lets you easily control and adjust hydraulic settings, hitch settings, transmissions settings, FieldCruise, iTEC functions, radio, lights, and all functions including diagnostic and display settings. Add a new and convenient easy-to-use AutoTrac™ Activation\*\* and increase pass-to-pass accuracy in demanding applications.

# Run in Comfort

Take a seat in the New CommandView™ III Cab and the first thing you'll notice when you shut the door is how quiet it is. Thanks to the laminated glass and front console barrier, you'll enjoy less noise intrusion and vibration, making for a more relaxed day. Once you settle in, you'll find the views even better, especially when you rotate the seat to the right 40-degrees for a nearly unobstructed view of your implement. Next glance down and be amazed at the crisp clarity of the new high-resolution 10-inch CommandCenter™ Display. Finally rest your arm on the new, smartly-configured CommandARM™, and with the touch of a finger control all the key tractor functions like the throttle, transmission speed and direction, SCVs and PTO.

- Totally redesigned CommandARM™
- New 10-inch high-resolution CommandCenter Display  
(New 7-in. display option available on the 7210R and 7230R)
- Improved sound quality minimizes noise intrusion
- Seat with 40° right-hand swivel
- Integrated, actively-cooled refrigerator option
- John Deere's ActiveSeat utilizes electrohydraulic technology in combination with air suspension, giving you a better ride-quality over standard air-suspension seats.

Available options include a heated, leather operator's seat, leather-wrapped steering wheel; and a premium radio package with a superb sound system.



**Swivel Seat**  
Rotates 40° to the right, giving you a nearly unobstructed rear view of your implement.

**Integrated Refrigerator Option**  
Actively cools to keep food and beverages cold all day.





New  
**CommandARM™**  
Puts everything within  
easy reach.

40° seat swivel



Optional integrated refrigerator





### CommandCenter Display

Bigger, brighter and easier to learn and operate. The Generation 4 CommandCenters feature fast adjustment of tractor functions and controls and are integrated into the CommandARM to create a seamless control center. The 4100 CommandCenter features a 7-inch (178-mm.) touchscreen display and is standard equipment on 7210R and 7230R models, while the 4600 CommandCenter features a 10-inch (154-mm) touchscreen and is standard equipment on 7250R – 7310R models.



# Nothing is beyond reach

The completely redesigned CommandARM™ incorporates all the key tractor functions, like the AutoTrac™\* resume, throttle, transmission speed and direction, SCVs and PTO into one ergonomic and intuitive command arm. Everything you need to hit the ground running with confidence is within reach.

\*Activation/subscription required. Some additional accessories and/or components may be required.

If you're running a loader or front hitch, you'll appreciate the new integrated joystick in the New CommandARM™, putting control at your fingertips.

It's all about convenience that makes sense and improves performance. The New CommandARM™ puts everything from satellite radio and climate control to AutoTrac™\* and FieldCruise™\*, within easy reach, meaning less stress and strain after a full day of running.

\*Activation/subscription required. Some additional accessories and/or components may be required.

## Controls and Displays



The cornerpost display is large and bright making it easy to read fuel, temperature, and oil-pressure gauges; engine speed; gear selection; and ground speed.



The instructional seat folds down and doubles as a work station so you can take care of important decisions during meal breaks and planter refills.



# The power and capacity to get the job done

With impressive hitch-lift capacity, hydraulic flow, SCVs, an integrated front hitch and PTO, and ballasting options, you can quickly change from loader work to heavy-duty field work and everything in between.





## Versatility is its middle name

■ **Integrated front hitch and PTO** make the 7R Series an impressive performer in front-implement applications. The integrated and compact style maintains full maneuverability even with large front tires. You can outfit the front hitch with a push-bar when your operation calls for front-mounted soil-engaging implements.

■ **Hitch-lift capacity.** Designed with strength and versatility, the 3-point hitch has a lift capacity of up to 17,300 pounds (7847 kg) on select models.

■ **Drawbar.** Now you can clearly see the drawbar while sitting in the operator's seat – so you can easily back up and connect to an implement. A Category 3 drawbar with 6,000-pound (2700 kg) maximum vertical-load capacity is standard. Or choose the optional 10,000-pound (4536 kg) vertical-load-capacity Category 3 drawbar for use with grain carts and slurry wagons.

■ **Electrohydraulic SCVs.** Get up to six SCVs at the rear of the tractor, based on how you configure the tractor. For even more flexibility, you can get up to three mid-mounted SCVs for use with front-hitch implements or for attaching the H480 Loader. You can choose between 32-, 43-, and 59-U.S. gpm flow to suit your needs. The closed-center, pressure-and-flow compensated system provides ample flow, even at lower engine rpm, so you can gear up, throttle back, and still be productive. SCV controls are located on the CommandARM™ and offer adjustable flow rates and timed detents.





# Beyond capable

It's one thing to be capable and a whole other to be impressive. All John Deere mechanical front-wheel-drive (MFWD) axles are designed and built for demanding conditions while serving up plenty of strength and reliability for greater drawbar pulling power and increased productivity. You'll also get sufficient traction with less ballasting resulting in reduced soil compaction.





■ **1150 Series MFWD Front Axle.** The 1150 utilizes a twin-cylinder steering design for improved steering capacity. Ideal for heavy loader work and heavy-front ballast applications. The 1150 Series MFWD axle is available on the 7210R and is compatible with all 26 mph (40 km/h) 7R Series Tractor transmissions.

■ **1300 Series MFWD Front Axle.** This reliable, robust, and durable axle has a high-capacity wet clutch and four-pinion, limited-slip differential that automatically transmits torque to the wheel to assist the tractor in tough or wet conditions. The 1300 Series MFWD axle comes in base on the 7230R, 7250R, 7270R, 7290R, and 7310R.

Both MFWD options give you a five-degree caster angle for tight turns, even with narrow tread spacings. A high-pivot-point axle mounting allows the front axle to oscillate nine degrees before contacting the axle stops. This helps the wheels maintain better ground contact. MFWD has electrohydraulic, automatic engagement, or you can manually engage or disengage the MFWD on-the-go if needed.

The 1300 Series MFWD Front Axle.



■ **Triple-Link Suspension (TLS™) Plus.** The optional TLS Plus is a fully integrated, self-leveling front suspension system available on the 1300 Series MFWD axle. TLS Plus improves traction by keeping the front wheels in contact with the ground and lets you increase field speeds. Bumps and jolts are absorbed by the system so you can work in comfort. TLS Plus also gives you impressive versatility in farmyards and feed yards as it automatically adjusts to front-end loads for steady performance. TLS Plus is available with a hydraulic differential lock and wet-disk brakes for serious pulling power and heavy-load transport needs. In the Generation 4 CommandCenter™, the operator is able to select maximum pressure to accommodate for the transfer of heavy loads with minimal front axle movement.

The differential lock is another feature of the 1300 Series MFWD axle with Triple-Link Suspension (TLS) PLUS, driveline shield, hydraulic on/off differential lock, and wet-disk front brakes. When the rear differential lock is engaged or disengaged, the front differential lock is also engaged or disengaged. This also includes a driveline shield. If one wheel begins to slip, the differential lock can be engaged on-the-go and the axles are hydraulically locked together for maximum traction.

**Tire Options, including Group 49s.** John Deere offers a wide selection of tires to fit a variety of row-crop, broad-acre, and transport applications, including an expanded lineup of Group 48 duals, and Group 49 tire options. Group 49s have a larger diameter and longer footprint for improved traction and reduced compaction when compared to smaller tires of the same section-width and design.

Intelligent Power Management (optional equipment) gives you an additional 30 engine hp during mobile rear PTO work. Baling up hills or in heavy windrows won't slow you down.





## Powerful, economical PTO options

Feeding, mowing, baling, mixing ... no matter what PTO application you have on your to-do list, you'll appreciate the flexibility of the 7R Series.

■ An independent, 1 $\frac{3}{4}$ -inch (45 mm) 1000-rpm PTO is available if your operation calls for full-horsepower heavy-PTO applications, such as grain carts, rotovators, and silage choppers. PTO controls are located on the CommandARM™ Console for convenient operation.

■ Need the full-horsepower, heavy PTO and also a 1 $\frac{3}{8}$ -in (35 mm) 540/1000-rpm PTO for use with augers, manure spreaders and rotary cutters? The manual, two-speed PTO option has a longer, easier-to-reach external shift lever. After swapping the ends of the PTO shaft, you simply shift the lever to select the 1 $\frac{3}{8}$ -inch (35 mm) 540/1000-rpm PTO position, then engage the PTO from inside the cab via the CommandARM.

■ The 7R Series offers two different economy three-speed options with electronic shifting from the CommandCenter™ Display. Choose the 540/540E/1000 or the 540E/1000/1000E option to match your implements and applications. When running in the economy mode, the tractor will produce rated PTO speeds at 1730 engine rpm. The 540- and 1000-rpm speeds allow for standard PTO operations for higher-power requirements within the constant power range. The 540E and 1000E option is good for any application that does not use full tractor power but needs a 540- or 1000-rpm output.



The 7R Series Tractors offer a choice of mechanical or electrical speed-change power take-off (PTO) options to provide the versatility and flexibility needed to satisfy implement demands at this power level. The PTO activation switch is located on the CommandARM™. In addition, PTO engagement modulation is adjustable with the settings located in the CommandCenter™.



Loader controls are easy to learn – either use the SCV controls on the CommandARM™ Console or equip your tractor with a joystick and tailor control to your task. You can even equip your tractor with a left-hand reverser so you can change direction with your left hand while you keep your right hand on the loader controls for jolt-free loader work.





## Make the big jobs feel small

Connect the H480 Loader to your 7R Series Tractor and turn your tractor into the ultimate versatility machine. Load silage. Move round bales. Clean your feedlots. And more. The H480 is built with the added strength befitting the largest loader in our ag lineup, with mounting frames that are integrated into the tractor frame for a durable connection between the loader and the tractor. Oil lines are routed through the boom arms to protect them from damage. And a mechanical self-leveling linkage helps ensure the load remains at the same angle to the ground. Your John Deere dealer has plenty of Frontier attachments for the H480 – from buckets to pallet forks and everything in between.

Loader Applications



Go from feeding to mowing in tight places in minimal time. The H480 Loader uses single-point hydraulic and electrical connections, which makes parking the loader fast and easy – without tools, and with virtually no oil loss. The hood guard (standard with loader-ready package) helps protect the hood and grill from falling debris.









## You can feel the confidence at every turn

The ActiveCommand steering technology is an operator's best friend. With ACS, John Deere has designed one of the most robust and encompassing steering system in the industry. Whether in the field or on the road, ACS reduces steering effort, so you stay fresh, comfortable and in control.

- **Dynamic road-wheel offset control.** A gyroscope senses tractor yaw and can automatically make small steering adjustments to help you hold the line. If you encounter bumpy road, you'll quickly notice that ACS makes it easier to keep the tractor straight, even over rough terrain delivering a more controlled and comfortable ride, even at transport speeds of 31 mph (50 km/h).

- **Variable-ratio steering** changes the amount of effort required to turn the wheel based on conditions. You'll make more turns of the wheel during transport for improved control. Variable-effort steering changes the resistance of the steering wheel in respect to ground speed for light steering effort at slower speeds and higher steering-wheel torque during transport speeds.



The 31-mph (50 km/h) option lets you move at faster speeds to haul more throughout the day. It's available on tractors equipped with the e23™, CommandQuad™ or Infinitely Variable Transmission (IVT™). These tractors also require Triple-Link Suspension (TLS™) Plus with a 1300 Series MFWD axle and brakes, trailer brakes (air or hydraulic), front fenders, and B-speed rated front and rear tires. Row-crop duals are now available with 31-mph (50 km/h) transmissions.

## Supported by one of the most responsive dealer networks in the business

Nobody cares more about keeping your equipment in solid working order than your John Deere dealer. With a complete inventory of genuine John Deere parts, highly trained service technicians, and a thorough understanding of your business, your John Deere dealer knows how to keep you and your equipment up and running.

A strong name in equipment, and a strong dealership network: get it all with John Deere.



### Protect your investment with a PowerGard™ Plan

The John Deere PowerGard Maintenance Plan allows you to purchase scheduled maintenance when you purchase your tractor ... you pick the program that's right for your usage (high-hour commercial application or lower-hour specialty use, for example), and your equipment will get routine inspection and service by your John Deere dealer.

The PowerGard Protection Plan allows you to purchase extended coverage and powertrain warranty coverage for up to an additional three years or 3,000 hours over the normal warranty period. You get flexible coverage, low deductibles, and peace of mind. Ask your dealer for details, or go to [www.powergard.com](http://www.powergard.com).

### Record-breaking uptime is closer than you think

Your 7R Series Tractor comes standard with a free one-year JDLink™ Connect subscription.\* Once you activate the service, you get all the benefits of Service ADVISOR™ Remote. With your permission, your John Deere dealer can “dial in” to your tractor’s diagnostic data to assess trouble codes and help you avoid downtime. Plus, if your tractor throws a code while in the field, service technicians at the dealership can view the code along with the tractor’s location so they know which tools and parts to bring, and where to drive, for best-in-class service. And software updates are a breeze – your dealer can upload the latest version from the dealership to your tractor while the tractor is in the field.

\*Free subscription to JDLink Ultimate expires one year from date of purchase of qualifying 7R Series Tractor. This subscription will not be automatically renewed. For subscription to continue, customer must actively renew and subscription fees shall apply.





## 7R Series Tractors Specs

# 7R

### CAB SPECIFICATIONS

#### Command View III™ Cab

Cab glass area	70.18 sq ft (6.52 sq m)
Cab volume	127 cu ft (3.597 cu. m)



	7210R	7230R	7250R	7270R	7290R	7310R
POWER (manufacturer's estimates)						
Rated PTO power (hp SAE) at rated engine speed (2100 erpm)*	170 hp (126.8 kW)	189 hp (140.9 kW)	205 hp (152.9 kW)	224 hp (167 kW)	242 hp (180.5 kW)	260 hp (193.9 kW)
Rated engine PS (hp ISO) per 97/68/EC at 2,100 engine rpm**	210 hp (154.5 kW)	230 hp (169.2 kW)	250 hp (183.9 kW)	270 hp (198.6 kW)	290 hp (213.3 kW)	310 hp (228 kW)
Maximum engine power PS (hp ISO) per 97/68/EC at 1,900 engine rpm**	231 hp (169.9 kW)	253 hp (186.1 kW)	275 hp (202.3 kW)	297 hp (218.4 kW)	319 hp (234.6 kW)	341 hp (250.8 kW)
Intelligent Power Management (available)	Available: 30 additional engine horsepower (22 kW) at 2,100 rpm (rated speed)					
PTO torque rise	40%	40%	40%	38%	40%	40%
PTO power bulge	10%					
ENGINE						
Description	John Deere PowerTech PSS 6.8L Engine: B20 Diesel Compatible, in-line, 6-cylinder, wet-sleeve with 4 valves-in-head				John Deere PowerTech PSS 9.0L Engine: B20 Diesel Compatible, in-line, 6-cylinder, wet-sleeve with 4 valves-in-head	
Rated speed	2,100 rpm					
Aspiration (US EPA Tier4/EU Stage IV)	Dual turbochargers, variable geometry turbo with fixed geometry turbo in series					
Filter, engine air	Dual stage					
Displacement	415 cu. in. (6.8 L)				549 cu. in. (9.0 L)	
Bore and stroke	4.19 in. (106 mm) x 5 in. (127 mm)				4.66 in. (118 mm) x 5.35 in. (136 mm)	
Compression ratio	17.2:1	16.0:1	16.0:1	16.0:1	16.0:1	
Lubrication	Full-pressure, full-flow filtration with bypass					
Filter, oil	Spin-on canister oil filter				Replaceable cartridge-style	
FUEL SYSTEM						
Description	Electronically controlled, high-pressure common-rail with electric fuel transfer pump (self priming)					
Filter system	Two-stage with water separator and service-indicator light					
Filter, primary	10 micron replaceable cartridge with water indication sensor and drain					
Filter, secondary	2 micron spin-on element					
Fuel-tank capacity CQT, G47/48	503L (133 gal)		—			
Fuel-tank capacity PST, G47/48	475L (125 gal)					
Fuel-tank capacity IVT, G47/48	520L (137 gal.)					
Fuel-tank capacity PST, G49	—		497L (131 gal)			
Fuel-tank capacity IVT, G49	—		543L (143 gal)			
DEF Tank Capacity	23L (6 gal)					
Required fuel type	Ultralow sulfur diesel (B20 diesel compatible)					
TRANSMISSIONS						
20-speed CommandQuad, 26 mph (40 km/h)	Available (40 km/h at 1,567 rpm with group 47 tires, 40 km/h at 1,501 rpm with group 48 tires)		—			
20-speed CommandQuad, 31 mph (50 km/h)	Available (50 km/h at 1,865 rpm with group 47 tires, 50 km/h at 1,770 rpm with group 48 tires)		—			
e23 Transmission 40K, 26 mph (40 km/h)	Standard (40 km/h at 1,683 rpm with group 47 tires, 40 km/h at 1,598 rpm with group 48 tires)		Standard (40 km/h at 1,683 rpm with group 47 tires, 40 km/h at 1,598 rpm with group 48 tires, 40km/h at 1,515 rpm with group 49 tires)		Standard 40 kph @ 1600 rpm w/grp 48 tires, 40kph @ 1520 rpm w/grp 49 tires)	
e23 Transmission 50K, 31 mph (50 km/h)	Available (50 km/h at 2,004 rpm with group 47 tires, 50 km/h at 1,902 rpm with group 48 tires)		Available (50 km/h at 2,004 rpm with group 47 tires, 50 km/h at 1,902 rpm with group 48 tires, 50 km/h at 1,804 rpm with group 49 tires)		Standard 50 kph @ 1900 rpm w/grp 48 tires, 50kph @ 1800 rpm w/grp 49 tires)	
John Deere Infinitely Variable Transmission (IVT), 26 mph (40 km/h)	Available					
John Deere Infinitely Variable Transmission (IVT), 31 mph (50 km/h)	Available					
ELECTRICAL SYSTEM						
Description	Two batteries in parallel					
Alternator/battery	Standard: 200 amps/12 Volt Available: 240 amps/12 Volt					
Total cold-cranking amps	1850 (2-925CCA grp 31 batteries)					
FINAL DRIVES						
Description	Inboard planetary, three pinion					
REAR AXLE						
3.94 x 100.4 in. (100 x 2550 mm) diameter	Available		—			
3.94 x 110.5 in. (100 x 2808 mm) diameter	Available		—			
3.94 x 118.5 in. (100 x 3012 mm) diameter	Available		—			
4.33 x 100.4 in. (110 x 2550 mm) diameter	—		Available			
4.33 x 118.5 in. (110 x 3012 mm) diameter	—		Available			
4.72 x 100.4 in. (120 x 2550 mm) diameter	—		Available			
4.72 x 118.5 in. (120 x 3012 mm) diameter	—		Available			
REAR-WHEEL EQUIPMENT						
Tires	Group 47/48 tires available as Singles/Duals		Group 47/48/49 tires available as Singles/Duals			Group 48/49 tires available as Singles/Duals
FRONT AXLE						
1150 Series MFWD, tread range 60 to 88 in. (1524 to 2235 mm)	Standard		—			
1300 Series MFWD, tread range 60 to 88 in. (1524 to 2235 mm)	—		Standard			
Triple Link Suspension Plus (TLS), tread range 60 to 88 in. (1524 to 2235 mm)				Available		
Triple Link Suspension Plus (TLS), with front brakes, available with 40 km/h transmissions (standard with 50 km/h transmissions)				Available		

Continued on next page.



	7210R	7230R	7250R	7270R	7290R	7310R
DIFFERENTIAL LOCK						
Front axle, 1150 Series MFWD	Limited slip	—				
Front axle, 1300 Series MFWD	—	Limited slip				
Front axle, TLS Plus	Limited slip					
Front axle, TLS Plus with front brakes	Full-locking electrohydraulic (actuated at same time as rear diff-lock)					
Rear axle	Full-locking electrohydraulic					
STEERING						
Hydrostatic power steering	Standard: Load Sensing, Hydrostatic, Flow Metering with a 406mm diameter steering wheel					
ActiveCommand Steering (ACS) with electric pump back-up	Available: Variable ratio 15:1 to 23:1 (3.1-5.0 turns lock to lock) w/Stability Augmentation and passive tactile feedback-345mm diameter steering wheel					
HYDRAULIC SYSTEM						
Description	Closed-center, pressure and flow compensated					
Selective control valves (SCVs)	3, 4 Standard, 5 and 6 Available					
Main pump, axial piston (displacement)	63 cc standard 45 and 85 cc available		63 cc standard 85 cc available			
Maximum pressure	2,958.1 psi (20 400 kPa) +/- 4.4 psi (300 kPa)					
Rated flow, 45 cc pump	32 U.S. gpm (121.1 L/min)		—			
Rated flow, 63 cc pump	43 U.S. gpm (162 L/min)					
Rated flow, 85 cc pump	59 U.S. gpm (223.3 L/min)					
Available flow at a single rear SCV	35 U.S. gpm (132 L/min)					
Available flow at a single front SCV	33 U.S. gpm (126 L/min)					
3-POINT HITCH, REAR						
Description	Electrohydraulic sensing					
Category 3/3N with Quik-Coupler	Standard: 12,000 lb. (5,443 kg) 7,300 kg max lift Available: 15,200 lb. (6,895 kg) 9,208 kg max lift		— Standard: 15,200 lb. (6,895 kg) 9,208 kg max lift			
Category 3N/3 with Quik-Coupler	—		Standard: 15,200 lb. (6,895 kg) 9,208 kg max lift Available: 17,300 lb. (7,847 kg) 1,0206 kg max lift			
3-POINT HITCH, FRONT						
Description	Category 3N, available Premium Front Hitch for use with ground-engaging front implements					
Standard lift capacity	11,464 lb. (5200 kg)					
DRAWBAR						
Category 3, 4,050 lb. (1837 kg) - 6,000 lb. (2700 kg) maximum vertical load dependent on drawbar position	Standard					
Category 3 HD with high capacity 10,000 lb. (4536 kg) maximum vertical load	Available					
POWER TAKE-OFF (PTO) <sup>1</sup> , REAR, INDEPENDENT						
1 ¾ in. (44 mm) 20-spline, 1,000 rpm	Standard					
1 ¾ in. (44 mm) 20-spline, 1,000 rpm; capable of 1 ⅜ in. (35 mm) 540/1000 rpm gearcase	Available					
1 ¾ in. (44 mm) 20-spline, 1,000 rpm; capable of 1 ⅜ in. (35 mm) 540E/1000/1000E rpm gearcase	Available					
1 ¾ in. (44 mm) 20-spline, 1,000 rpm with 1 ⅜ in. (35 mm) 540/540E/1000 rpm gearcase	Available					
PTO speed at engine rpm	540/1,000 at 1,950 engine rpm; 540E/1,000E PTO at 1,750 engine rpm					
POWER TAKE-OFF (PTO) <sup>1</sup> , FRONT, INDEPENDENT						
1 ⅜ in. (35 mm) 21-spline, 1,000 rpm	Available; Counter Clockwise Rotation (when facing Front PTO)					
1 ¾ in. (44 mm) 20-spline, 1,000 rpm	Available; Counter Clockwise Rotation (when facing Front PTO)					
PTO Power (SAE hp)	175 hp (130 kW) maximum output					
PTO Speed at engine RPM (1:2 ratio)	1,000 PTO rpm at 1,940E rpm					
WHEELBASE						
MFWD/TLS	115.2 in. (2925 mm)					
MFWD / TLS axle clearance - 1300 axle, G43 420/85R34 tires	19.5 in. (495mm)					
INTEGRATED TECHNOLOGY						
AutoTrac Ready	Standard					
JDLink™	Available JDLink™ Connect and Ethernet Harnesses <sup>†</sup>					
Service ADVISOR™ Remote	Capable with JDLink™ Select & Ultimate					
CommandCenter™ 7-inch Display video with 4100 Processor	Video capable; single video input (Tyco Connector PN 776536-1) for camera with PAL or NTSC signal (camera and extension harness available through John Deere Parts)		—			
CommandCenter™ 10-inch Display video with 4600 Processor	Available		Video capable; four video inputs (Tyco Connector PN 776536-1) for camera with PAL or NTSC signal (camera and extension harness available through John Deere Parts)			
Factory-installed GreenStar™ 3 2630 Display	Available					
AVERAGE STANDARD WEIGHT (less front weights)						
MFWD**	23,175 lb (10,512 kg)		—			
TLS <sup>††</sup>	25,521 lb (11,576 kg)		25,738 lb (11,674 kg)		26,468 lb (12,005 kg)	

Specifications and design subject to change without notice. <sup>1</sup>PTO Power for IVT models. Does not include Available equipment losses. <sup>††</sup>97/68/EC power refers to average [50% MOE] net brake power measured and corrected for ambient conditions according to the EC emissions directive. It is equivalent to internal Deere Standard RES10080, and SAE Standards J1349, J1995. <sup>\*\*\*</sup>Weight based on MFWD, CommandQuad, one 450 lb. (204 kg) inner weights, front weight support, Category 3 hitch with Quik-Coupler, shipping fuel, DEF, 480/80R46 duals, 420/90R30 fronts. <sup>†</sup>Weight based on TLS, e23, 1400 lb. (635 kg) inner weights, front weight support, Category 3 hitch with Quik-Coupler, shipping fuel, DEF, 480/80R50 duals, 380/80R38 fronts. PowerTech, CommandQuad, IVT, TLS Plus, CommandView, AutoTrac, JDLink, Service ADVISOR, and CommandCenter are registered trademarks of Deere and Company. 48539 (07/25/11)

# Attachments



Add more convenience,  
versatility, power, performance

Hook up implements faster and easier. Turn your cab into a high-tech command center. John Deere attachments help you work smarter and achieve more productivity every single day. The examples here are just a few of the ways you can equip your 7R Tractors for maximum performance. See your John Deere dealer today to learn more about the full array of attachments available to you.



## CommandARM™ bracket

This bracket for Final Tier 4 (FT4) Tractors offers a convenient way to mount a cell phone or tablet to the CommandARM for easy use. No. BRE10147

This bracket for Final Tier 4 (FT4) Tractors offers a convenient way to mount a cell phone or tablet to the CommandArm for easy use. It is not compatible with joystick-equipped tractors. Compatible with tablet mount BRE10034 and cell phone mount BRE10015. Tablet and cell phone mount not included in BRE10147.



## Utility box

Keep essential items within reach – without taking up valuable cab space. This front weight-mount kit bolts on in minutes without compromising headlight visibility or tractor functions.

No. BRE10151 Front-mount utility box (requires BRE10153)

No. BRE10153 Utility box bracket kit



## Cell phone bracket kit

Easily access your phone without interfering with visibility and control. Specially developed for John Deere equipment, the RAM X-Grip® bracket holds firm without covering your phone's screen.

No. BRE10015



## Wheel weight

Lower your tractor's center of gravity and get better traction with wheel weights, so you can achieve maximum productivity and performance

R167153 starter wheel weights

R207782 450 lb. wheel weights (requires R167153)



## Self-leveling drink holder

Keep your favorite beverage within reach and prevent spilling. Easily installed, this attachment will hold in even the roughest terrain.

BRE10152

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