## Compact Wheel Loaders F-SERIES EVOLUTION 12EV | 21F | 121F | 321F

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# DELVER, ADAPT, EVOLVE,

### INTRODUCING THE EVOLUTION SERIES

The Evolution series combines CASE's usual lifting and loading performance with brand new electro-hydraulic "smart features", enhancing the on-board experience and ensuring the best settings for every task, no matter how challenging.

## FEATURES DESIGNED FOR YOU,

### SMART SETTINGS AT YOUR FINGERTIPS

With a brand-new colour display, operated with an encoder and the new membrane keypad, all machine parameters and electro-hydraulic settings are visible at a glance and at your fingertips, allowing for intuitive, user-friendly customisation to the operator's preferences.

Eco mode for reduced fuel consumption and noise during travel and load/ unload operations.

40 km/h high-speed Retu versions and standard travspring applied hydraulically men

released parking brake on 221F and 321F models. Superior dump height, with

XR version available on 321F model.

New P&CM modem allowing for integration into the most advanced fleet management systems. Smart features for easy, effortless operation in all jobs and applications.

Return-to-dig, return-totravel and return-to-height memory settings for a smooth and effortless operation.

Cruise control for constant speed during on-road travel, limited speed on the jobsite and constant creep speed setting.



# JOIN THE JOBSITE EVOLUTION.

### THE EVOLUTION SERIES' SIX STEPS FOR SUCCESS

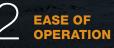
#### SUSTAINABILITY AT THE CORE

3.4 litre FPT Stage V engine DOC, EGR & DPF after treatment

High pressure common rail injection

Electronically controlled waste gate valve

HVO diesel & XTL synthetic fuel compatibility



ROPS/FOPS level 2 cab also available in deluxe version

Low cab profile for easy transport

Large colour display operated via encoder

Membrane keypad for quick and intuitive machine settings

## B POWERFUL DRIVELINE

Hydrostatic 4-wheel drive

SAHR parking brake on 221F and 321F

Inch & brake pedal

High-speed 40 km/h version available on 221F and 321F

Creep speed and cruise control can be combined

Oscillating rear axle for outstanding stability on uneven ground



WATCH THE FULL WALKAROUND



Standard- or high-flow auxiliary circuits

Electro-hydraulic "smart features"

New Eco mode

Smooth operation

Highly customisable settings

Combined movements and bucket shake features



New P&CM modem as standard

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More opportunities to integrate CASE compact wheel loaders into your fleet management system

CASE exclusive Site Manager and Sitewatch



Easy access to all service points

Excellent component layout for quick and precise intervention when required



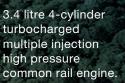
# CLEAN, EFFICIENT POWER,

### SUSTAINABILITY CHANGES THE WORLD

CASE compact wheel loaders feature advanced in-house engine technology developed by our sister company, FPT Industrial. Pioneering low-emission, high-efficiency solutions, FPT brings you the competitive advantage of powertrain technologies, reliably delivering high performance with low operating costs.







Wastegate for optimum turbo pressure stability.



compliant with EGR

Valve, DOC & DPF.

EU Stage V



Compatible with HVO and all other XTL synthetic fuels (CTL, BTL, GTL) for flexible, sustainable fuel solutions.

	21F	121F	221F	321F
Engine Brand	FPT	FPT	FPT	FPT
Engine Type	F5HFL463B	F5HFL463C	F5HFL463A	F5HFL463A
Engine Power (hp/kw)	58 / 43	64 / 48	74 / 55	74 / 55
Emission Level	Stage V	Stage V	Stage V	Stage V
No. Of Cylinders	4	4	4	4
Displacement (It)	3.4	3.4	3.4	3.4
Torque (Nm)	245	261	316	316

# BE PRODUCTIVE IN COMFORT.

#### ENHANCING YOUR ONBOARD EXPERIENCE

The operator's comfort and safety are top priorities for CASE – that's why all its compact wheel loaders are equipped with a spacious ROPS/FOPS level 2 certified cab, letting you get on with the job at hand untroubled.

#### CAB PROFILE

The low cab profile allows for quick and easy access to the operator's compartment as well as the machine's easy transportation on a truck.

#### **COLOR DISPLAY**

The brand-new encoder-operated colour display, all-in-one joystick and membrane keypad hosting all the main buttons ensure all the settings are at your fingertips for easy, intuitive use of all functionalities.

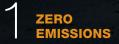
#### DE LUXE CAB

If you fancy a little extra-comfort, the deluxe cab option includes additional storage compartments, an adjustable wrist rest, full vertical adjustment of the steering wheel in addition to the standard tilt and 180° opening of the right-hand side window.



# THE SILENT REVOLUTION.

12EV'S SIX STEPS TO SUSTAINABILITY



23 kWh cobalt-free lithium-ion battery at the heart of the machine

Driveline powered by a 17 kW electric motor

Loader arm and attachments powered by a 22 kW electric motor

Clean and silent power ideal for restricted areas or indoor operation



ROPS/FOPS level 2 cab also available in deluxe version

Work in a silent and emission-free environment

Large colour display operated via encoder

Membrane keypad for quick and intuitive machine settings

### EASY TO CHARGE

CASE

A 1-0

The battery can be charged through every household outlet with the standard 230V on-board charger

Optional fast charger reduces the charge time to 1 hour 20% to 80% to always have your 12EV ready to go



WATCH THE FULL WALKAROUND

#### SMART ENERGY SAVING SOLUTIONS

EV

Excellent front weight balance to reduce the unnecessary consumption during loading unloading phases

3 preset Drive Modes plus a customizable one to ensure energy supply in all conditions

No battery consumption during idle periods



RE

Access to noise and pollution restricted areas

Ideal for indoor operations



P&CM modem as standard

More opportunities to integrate Case compact wheel loaders into your fleet management system

CASE exclusive Site Manager and Sitewatch



# SUSTAINABLE, ELECTRIC POWER.

### THE NEW ECO-FRIENDLY SOLUTION

CASE is at the top of the game also where silent and emission free solutions are needed to access environmentally sensitive, indoor and restricted access jobsites.

12EV is the first electric compact wheel loader ever produced by CASE. Its features are:



23 kWh cobalt-free lithium-ion battery with 96V nominal voltage. The driveline and loader arm hydraulics are powered by two 3-phase asynchronous induction motors of respectively 17 kW and 22 kW. The noise level of 69 dB internal (LwA) and 87 dB external (LpA) makes the 12EV one of the most silent construction equipment in the industry.



The optional off-board fast charger, available both in IP21 and IP54 versions, recharges the 12EV's battery on the jobsite quickly and easily. The 12EV can also be recharged overnight through a regular household power network.

# MAINTAIN TOP PERFORMANCE,

### AFTER SALES SERVICES

Keep your equipment performing at its best and protect your investment's value with the extensive offering of highquality CASE Parts.

Genuine Parts HIGH PERFORMANCE Optimize your performance and add value to your machine with high-quality genuine parts.

Attachments BUSINESS SOLUTIONS Add versatility to performance with CASE attachments designed for CASE machines and tested by CASE engineers.



Ensure your machine's performance beyond warranty and manage your budget with CASE's quality second-line range of parts.

Reman = Parts REMANUFACTURED Choose sustainable quality with remanufactured parts designed for CASE equipment of all ages.

### **CASE** ServiceSolutions

Enjoy the peace of mind of knowing CASE Service Solutions will keep your equipment in top condition with maximum uptime, no unexpected costs, and help you optimize your profitability.



CASE CARE Maximize your machine's uptime and efficiency with this planned maintenance program.



CASE FLUID ANALYSIS Ensure your machine's uptime with detailed fluid reporting.

### CASE SITEWATCH

Boost your machine's profitability by tracking and managing your fleet's operating data.

CASE SITECONNECT Connects your Dealer to yourmachine for remote support.



# OVERVIEW SPEC SHEET,

	12EV	21F	121F	221F	321F
CAB & OPERATOR COMPARTMENT					
ROPS/FOPS Level II base cab (tilt adjustment of the steering column, partially openable right window)	٠	•	٠	•	•
ROPS/FOPS Level II deluxe cab (full adjustment of the steering column, 180° openable swing door, larger storage compartment)	0	0	0	0	0
Mechanical suspended seat	-	•	•	•	•
Air suspended seat	•	0	0	0	0
Wide rear view mirror	•	•	•	•	•
Heater	•	•	•	•	•
Air conditioning	-	0	0	0	0
Color display with encoder	•	•	•	•	•
Keypad for easy machine settings	•	٠	٠	•	•
Radio with MP3 and USB plug	0	0	0	0	0
Rotating beacon	0	0	0	0	0
TRANSMISSION					
Hydrostatic 4-wheel Drive Transmission (2-Speed)	-	•	•	•	•
Electric drive motor 17 kW	•	-	-	-	-
Speed with standard tyres	-	-	-	-	-
Travel speed range (STD speed version)	0 - 20 km/h	0 - 20 km/h	0 - 20 km/h	0 - 20 km/h	0 - 20 km/h
Optional High Travel Speed	-	-	-	40 km/h	40 km/h
"Inch & Brake" Pedal	_*	•	•	•	•
AXLES					
Limited slip front & rear	•	•	•	•	•
Open with 100% lock on front and rear differentials	-	-	_	0	0
Rear axle oscillation	9°	9°	9°	9°	9°
BRAKES					
Standard brakes	Drum type	Drum type	Dry caliper	Multidisc v	vet brakes
Parking brakes	Mechanically actuated drum type	Mechanically actuated drum type	Mechanically actuated dry caliper	Spring applie	d hydraulically d (SAHR)
STEERING					
Fully hydraulic center pivot steering	•	•	•	•	•
Steering angle	40° each side	40° each side	40° each side	40° each side	40° each side
TYRES					
Standard	10.5 - 18	12.5 - 18	12.5 - 18	12.5 - 20	14.5 - 20
ELECTRO-HYDRAULIC FEATURES					
ECO Mode	•	•	•	•	•
Creep Speed	_*	-	_	0	0
Cruise Control	0	0	0	0	0
Return to Dig function	0	0	0	0	0
Return to Travel function	0	0	0	0	0
Return to Height function	0	0	0	0	0
Ride control	0	0	0	0	0
Floating	-	•	•	•	-
Loader arm response control	-	•	•	•	-
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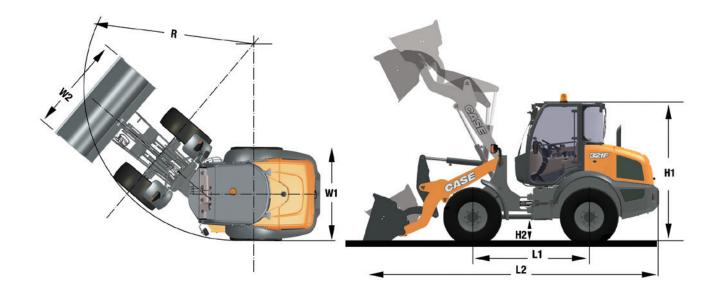


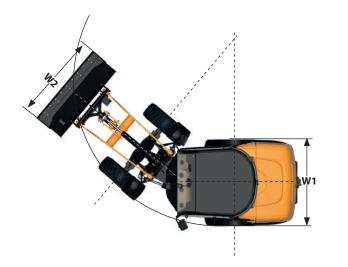
DEEP DIVE INTO THE FULL SPECS

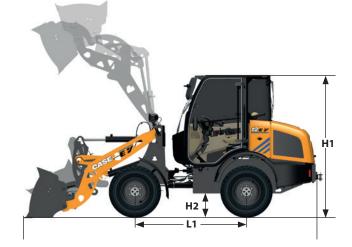
	12EV	21F	121F	221F	321F
ELECTRO-HYDRAULIC FEATURES					
Standard flow	55 lpm	67 lpm	67 lpm	85 lpm	85 lpm
Max. pressure	230 bar	230 bar	230 bar	230 bar	230 bar
High Flow (optional)	-	-	-	130 lpm	130 lpm
3 <sup>rd</sup> Function	•	•	•	•	•
4 <sup>th</sup> Function	0	0	0	0	0
ADDITIONAL FEATURES					
14-pin front electric socket	0	0	0	0	0
Anti-drop valves	0	0	0	0	0
LED working lights	0	0	0	0	0
Cold weather package	0	0	0	0	0
Reverse alarm	0	0	0	0	0
Heavy counterweight	-	-	0	-	0
Emergency tow hook	•	•	•	•	•
Front salt sprayer predisposition	0	0	0	0	0
Road homologation	0	0	0	0	0
QUICK COUPLER					
Horizontal pin	٠	•	•	•	•
Skid steer loader type	0	0	0	0	0
Eurocoupler	0	0	0	0	0
ELECTRICAL SYSTEM					
Voltage	96 V	12 V	12 V	12 V	12 V
Battery	260 Ah	95 Ah	95 Ah	95 Ah	95 Ah
Alternator	-	120 Ah	120 Ah	120 Ah	120 Ah
CAPACITIES					
Diesel	-	86 I	86 I	86 I	86 I
Engine oil	-	71	71	7	7
Cooling Liquid	-	13	13	13	13
Total hydraulic oil	53 I	53 I	53 I	53 I	53 I
Front axle	91	91	91	91	91
Rear axle	11	11	11	11	111
CONNECTIVITY					
Telematics on board (P&CM modem)	٠	•	•	•	•
NOISE AND VIBRATIONS					
External - Guaranteed acoustic power-level LWA (according to 2000/14/EG & appendixes)	87 dB	101 dB	101 dB	101 dB	101 dB
Cab interior - Sound Pressure Level (according to ISO 6396)	69 dB	71 dB	71 dB	71 dB	71 dB
Hand- / arm- / body -vibration (according to ISO 8041)	< 2.5 / 0.5 m/s <sup>2</sup>	< 2.5 / 0.5 m/s			

\* Not applicable as creep speed is naturally supplied by electric propulsion





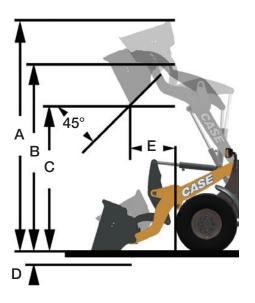


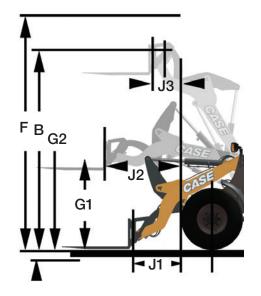


GEN	GENERAL DIMENSIONS		12EV	21F	121F	221F	221F 321	
			Z-BAR	Z-BAR	Z-BAR	Z-BAR	Z-BAR	XR
H1	Height to the top of the ROPS	mm	2453	2458	2458	2627	2680	2680
H2	Ground clearance	mm	395	444	444	440	493	493
W1	Overall width (exclusive of bucket)	mm	1570	1740	1740	1860	1860	1860
W2	Overall width (with bucket)	mm	1650	1900	2050	2050	2100	2100
L1	Wheelbase	mm	1925	2075	2075	2225	2225	2225
R	Turning radius (outside of tires)	mm	3429	3721	3721	3987	3987	3987
L2	Max. length in carry position	mm	5164	5297	5388	5623	5684	6130



DEEP DIVE INTO THE FULL SPECS





SPECIFICATIONS WITH BUCKET	ICATIONS WITH BUCKET		21F	121F	221F	321F	
		Z-BAR	Z-BAR	Z-BAR	Z-BAR	Z-BAR	XR
Bucket Volume (SAE)	m <sup>3</sup>	0.5	0.7 - 1.0	0.8 - 1.1	0.9 - 1.2	1.0 - 1.3	1.0 - 1.3
Tipping load straight	kg	2300	3328	3806	4493	4625	3710
Tipping load at full turn (40°)	kg	1941	2854	3269	3872	3924	3393
Payload @50%	kg	971	1427	1635	1936	1962	1696
Breakout Force	kg	2913	5434	5251	6241	6725	6218
A Max bucket height	mm	3902	3950	4011	4179	4322	4604
B Hinge pin height	mm	3088	3137	3176	3289	3395	3705
C Dump height @45°	mm	2458	2500	2521	2598	2690	2969
D Dig Depth	mm	52	67	102	101	84	319
E Reach at full height	mm	879	780	832	844	849	1082
Operating weight (std. bucket)	kg	3880	4660	5100	5612	5980	6017
Operating weight (4-in-1 bucket)	kg	-	4981	5427	5960	6340	6357

SPECIFICATIONS WITH FORKS		12EV	21F	121F	221F	32	21F
		Z-BAR	Z-BAR	Z-BAR	Z-BAR	Z-BAR	XR
Tipping load straight	kg	1699	2458	2857	3168	3430	2895
Tipping load at full turn (40°)	kg	1431	2109	2458	2811	2913	2652
Payload @80%*	kg	1145	1632	1901	2249	2330	2045
F Max overall height	mm	3491	3534	3582	3805	3805	4105
B Hinge pin height	mm	3088	3137	3176	3289	3395	3705
G2 Max fork height	mm	2875	2924	2963	3129	3183	3537
G1 Forks height @ max reach	mm	1296	1280	1278	1391	1395	1468
J1 Reach @ ground level	mm	984	957	1023	1001	983	1413
J2 Max Reach	mm	1431	1375	1428	1440	1445	1814
J3 Reach @ max height	mm	720	620	655	632	614	852
Operating weight with forks	kg	3910	4615	5035	5559	5910	5917

 $^{\ast} on$  even ground, according to ISO 8313 and EN 474-3





## BUILDING ON OUR HERITAGE

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Since 1842, at CASE Construction Equipment we have lived by an unwavering commitment to build practical, intuitive solutions that deliver both efficiency and productivity.

The vast CASE dealers' network is always ready to support and protect your investment. At the end of the day, we do what's right for our customers and our communities so that they can count on CASE.

CNH Industrial Deutschland GmbH Case Baumaschinen Benzstr. 1-3 - D-74076 - Heilbronn DEUTSCHLAND CNH Industrial Maquinaria Spain, S.A. Avenida Aragón 402 28022 Madrid ESPAÑA CNH Industrial France, S.A. 16-18 Rue des Rochettes 91150 Morigny-Champigny FRANCE CNH Industrial Italia Spa Lungo Stura Lazio 19 10156, Torino ITALIA CASE Construction Equipment Cranes Farm Rd Basildon - SS14 3AD UNITED KINGDOM

NOTE: Standard and optional fittings can vary according to the demands and specific regulations of each country. The illustrations may include optional rather than standard fittings - consult your Case dealer. Furthermore, CNH Industrial reserves the right to modify machine specifications without incurring any obligation relating to such changes.

Conforms to directive 2006/42/EC

#### CASECE.COM 00800-2273-7373

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