SANY

QUALITY CHANGES THE WORLD

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Due to continuous technical updates, technical parameters and configurations are subject to change without notice. The machine in the picture may include additional equipment. This album is for reference only, subject to actual product.

SANY FORKLIFT

Tik Tok

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SCP30/35F7

LITHIUM-BATTERY COUNTERBALANCED FORKLIFT TRUCK

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F7 Series Lithium-Battery Counterbalanced Forklift Truck

Main features

Superior performance

- The industry's first 96V eight-in-one powertrain with liquid cooling for continuous and efficient operation
- Powertrain, battery and core electrical components with protection level of IP67, and vehicle with protection level of IPX4
- Driving speed >16km/h, gradeability >17%, leading the industry

Efficiency improvement

- Self-developed dual-core VCU with super computing power, millisecond response, strong driving control explosiveness
- Fast chargeable high performance battery, 20%-100% full charge in 1 hour (200A charger)
- Permanent magnet synchronous electric drive for high power and high efficiency

Safety and reliability

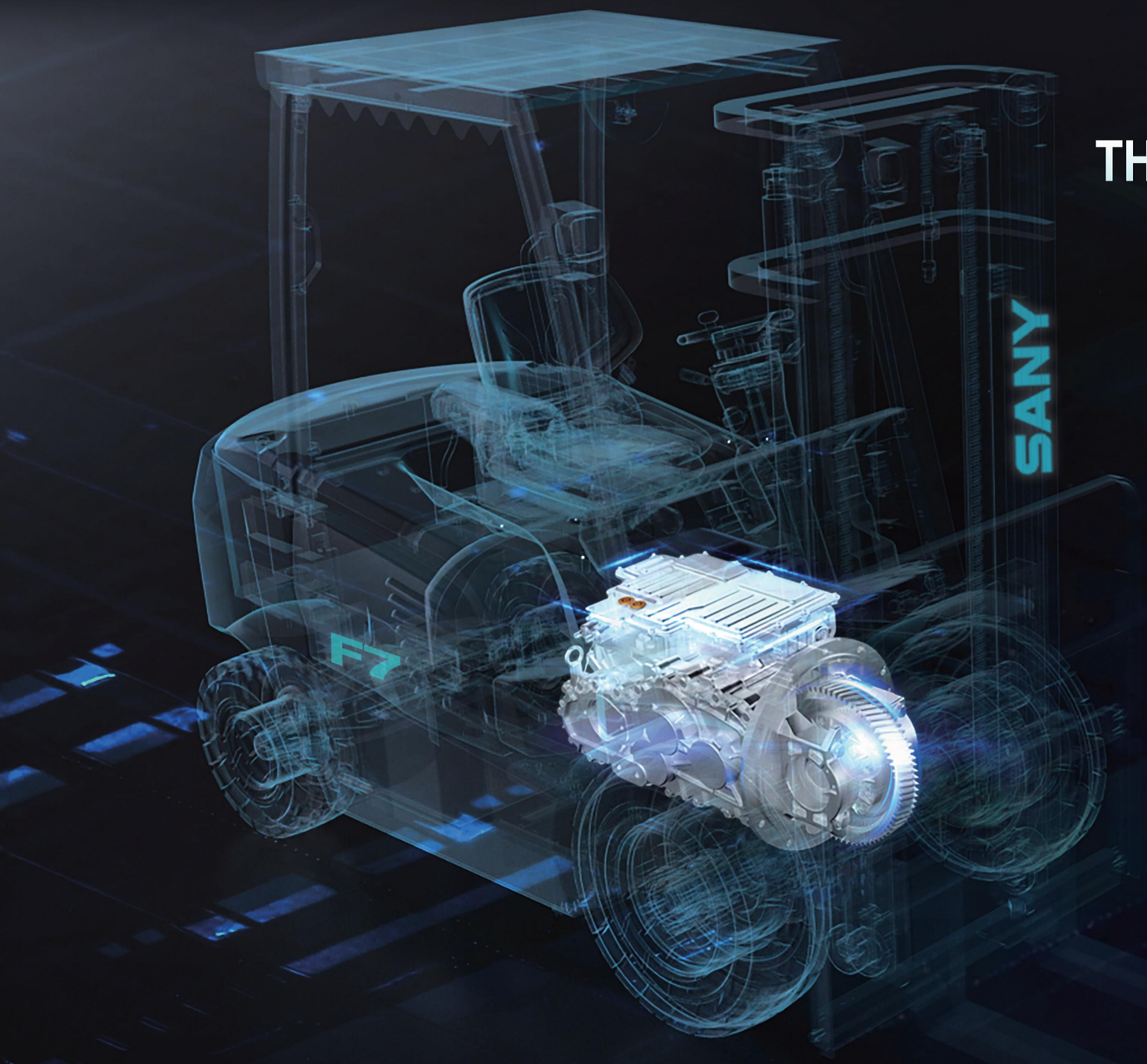
- Active safety system: Detect human movement and predict danger in advance for alarm (optional)
- High-precision face recognition system to avoid fatigue driving (optional)

Energy saving and cost reduction

- Powertrain structure for strong power, with vehicle energy consumption lower than that of the mainstream models in the market
- Meet the usage requirements of over 80% of the customers in light and medium working conditions
- Extremely high cost performance, with customer use and maintenance costs reduced by 1/3

Extended warranty

- Five-year or 10,000-hour warranty for battery and powertrain (one-year warranty for gearbox) for worry-free use



THE INDUSTRY'S FIRST 96V WATER-COOLED EIGHT-IN-ONE POWERTRAIN

Up to 15% lower energy consumption compared to mainstream electric forklifts

15% Energy Consumption

Power performance increased by 10%
Gradeability (unladen) over 18%

10% Performance

Simplified overall layout for reduced maintenance time

20% Maintenance time

30% reduction in life cycle maintenance costs

30% Maintenance cost

90% reduction in primary electrical ports
Improved waterproofing and reliability

90% Interface

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SAME CONFIGURATIONS WITH THOSE OF NEW ENERGY VEHICLES FOR EXCELLENT PERFORMANCE AND HIGH EFFICIENCY

Travel speed
> 16 km/h

Gradeability (laden)
> 17 %

Acceleration (laden)
4.5 s/10m

Full-load Lifting
350 mm/s

Voltage platform
96 V

Standard electric quantity
22.1 kw.h

Domestic: the whole series meets the national standard charging protocol

Overseas: National standard, European standard, American standard charging protocols can be selected

*Charging pile subject to actual delivery

Automotive-grade powertrain

Joint R&D with INOVANCE
Automotive-grade 96V eight-in-one powertrain

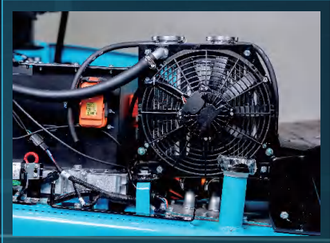
Automotive-grade lithium battery

Industry first
Highly-integrated lithium battery with BMS for battery management

Automotive-grade wiring harness

Tidy wiring harness for high reliability and easy maintenance

Automotive-grade liquid-cooling

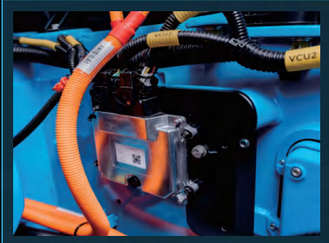


Eight-in-one, and battery equipped with automotive-grade liquid-cooling system
High-temperature adaptability and durability

Automotive-grade protection

Core electrical components with protection level of P67
Vehicle protection level of IPX4

Automotive-grade VCU



Self-developed dual-core VCU with super computing power
Forklift "brain", featuring millisecond response and quick acceleration

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TO BUILD A HUMAN-VEHICLE-NETWORK SMART PLATFORM FEATURING INTELLIGENT HEALTH CHECK, MANAGEMENT, OPERATION, DRIVING, AND CONTROL

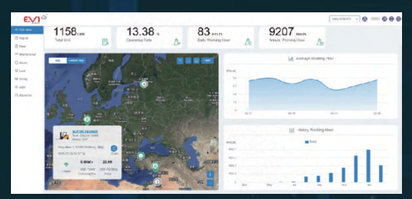
Intelligent health

Automatic diagnosis of three key E-drive systems and circuit; leverage deep operational data mining and AI-powered analytics for fault prediction and optimal performance assurance

Intelligent control

Remote over-the-air (OTA) upgrading, remote positioning and speed limit, remote encrypted immobilization

Intelligent Management (T_BOX)



The first independently-developed cloud platform in the forklift industry

Overseas EVI management platform

- After-sales intelligence
- Intelligent monitoring
- Visual management of equipment
- Fleet dispatching management

Intelligent driving

ADAS (advanced driver assistance system)

- 360 surround view
- Driving environment recognition
- Active protection
- Driving recorder

DMS (driver monitoring system)

- Face recognition
- Seat belt detection
- Fatigue driving identification
- Dangerous driving behavior identification

7-inch touch screen

Intelligent Operation

- Mast lowering cushioning, cargo lowering cushioning and cylinder end cushioning
- Automatic turning deceleration
- Hydraulic system, anti-shock
- Ramp suppression system (optional)
- Charging protection, power failure protection, low battery protection
- Overload protection
- OPS (operator presence sensing) with seat-initiated speed limiting

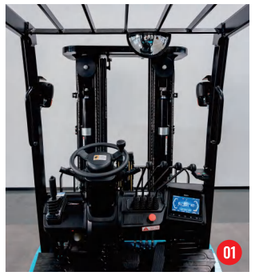
DRIVING COMFORT

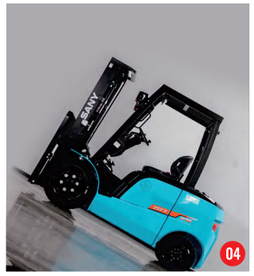
01 Industry-leading super-large-vision mast for improved smoothness and hydraulic system, as well as high strength.

02 Shock-absorbing seat ensures a smooth ride regardless of terrain and reduces operator fatigue; the seat comes standard with an OPS switch for occupant presence sensing.

03 Standard 7-inch intelligent instrument touch display, with such functions as fault diagnosis, remote control, parameter customization, etc. Optional IC card.

04 Quick acceleration, smooth parking, and slope-assisted operation, to be simple, accurate and efficient.





EASE OF MAINTENANCE

Any position can be reached in one minute for maintenance with reasonable parts arrangement; all parts are within reach after removal of the cover for easy maintenance.

WORRY-FREE AFTER-SALES SERVICE

Exceeding Customer Expectations: By providing customers with exceptional service, SANY will maximize the value of each customer's equipment. With relentless attitude, employ every conceivable means, and deliver unparalleled service.

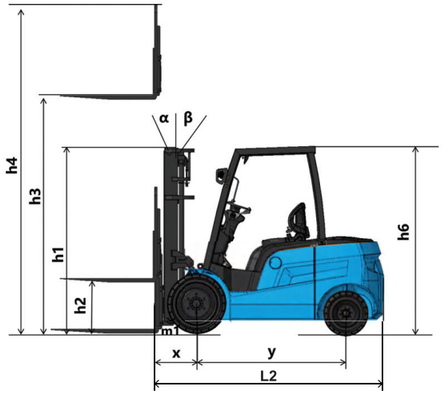
Exceeding Industry Standards: By implementing the highest service standards in the industry, SANY will achieve the highest level of customer satisfaction.

- **Proactive Service (Green Action)**
  Search and locate machines, inspect machines, resolve issues, and respond to other needs to enhance customer satisfaction.
- **Customer Complaints**
  Direct communication with the Chairman's office Ensure customer satisfaction.
- **Lifetime Commitment**
  Provide full life-cycle serviceand accessory supply for equipment.
- **24/7 Service**
  Rapid response mechanism for quickly resolving customer issues regardless of cost.

TABLE OF STANDARD PARAMETERS

Class		Unit	Parameter	
Overview	**Product model**		**SCP30F7**	**SCP35F7**
	Rated loading capacity	Q(kg)	3000	3500
	Load center distance	c(mm)	500	500
	Front overhang	x(mm)	485	490
	Wheel base	y(mm)	1750	1750
Weight	Dead weight	kg	4670	5100
	Axle loading, laden front/rear	kg	6700/970	7690/910
	Axle loading, unladen front/rear	kg	2150/2520	2200/2900
Tire	Type of tyre	/	Pneumatic tyre	Pneumatic tyre
	Front wheel specification	/	28×9-15	28×9-15
	Rear wheel specification	/	21×8-9	21×8-9
	Front wheel track	b10(mm)	1020	1020
	Rear wheel track	b11(mm)	1000	1000
Dimension	Tilt of mast, forward/backward	α/ β (°)	6/12	6/12
	Height when the gantry is retracted	h1(mm)	2130	2130
	Free lift	h2(mm)	130	130
	Lift height	h3(mm)	3000	3000
	Maximum lifting height of gantry	h4(mm)	4190	4190
	Height of overhead guard	h6(mm)	2190	2190
	Length to face of forks	L2(mm)	2680	2680
	Overall width	b1(mm)	1250	1250
	Fork size (thickness / width / length)	s/e/l(mm)	45/122/1070	50/122/1070
	Spacing of forks	mm	247-1100	247-1100
	Minimum ground clearance at gantry	m1(mm)	130	130
	Center of wheelbase Min. ground clearance	m2(mm)	150	150
	Aisle width for pallets 1000 x 1200 crossways	Ast(mm)	4050	4050
	Aisle width for pallets 800 x 1200 lengthways	Ast(mm)	4250	4250
	Minimum turning radius	Wa(mm)	2350	2350
Performance	Maximum driving speed (laden/unladen)	km/h	16/17	16/17
	Maximum lifting speed (laden/unladen)	mm/s	350/400	350/400
	Lowering speed (laden/unladen)	mm/s	420/380	420/380
	Drawbar pull (laden/unladen)	N	17300/15800	17300/15800
	Gradeability (laden/unladen)	%	17/18	16/18
	Service brake	/	Hydraulic type	Hydraulic type
	Parking brake	/	Mechanical type	Mechanical type

Class		Unit	Parameter	
Motor battery	Travel motor (S2-60min)	kW	18	18
	Lifting motor (S3-15%)	kW	25	25
	Battery voltage/power	V/kWh	96/22	96/22
	Dead weight of battery	kg	210	210
Controller	Travel control form	-	AC/MOS tube	AC/MOS tube
	Attachment to provide pressure	Mpa	19.5	19.5



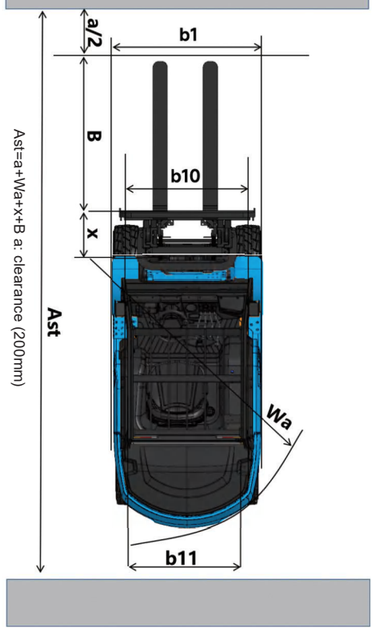


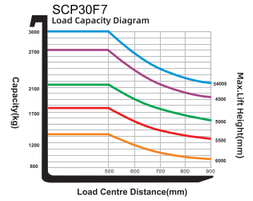
TABLE OF OPTIONS

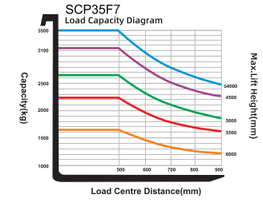
●Standard ○Optional - No such configuration

SCP		30F7	35F7
Tire	Pneumatic tyre	●	●
	Solid tyre	○	○
	Non-marking tyre	○	○
Seat	Domestic standard seat	●	●
	Domestic suspension seat	○	○
	Grammer suspension seat	○	○
Control valve	Spool 2 of OPS mechanical valve	●	●
	Spool 3 of OPS mechanical valve	○	○
	Spool 4 of OPS mechanical valve	○	○
	Spool 2 of solenoid-operated joystick valve	○	○
	Spool 3 of solenoid-operated joystick valve	○	○
	Spool 4 of solenoid-operated joystick valve	○	○
	Spool 2 of finger-tip control solenoid valve	○	○
	Spool 3 of finger-tip control solenoid valve	○	○
	Spool 4 of finger-tip control solenoid valve	○	○
Smart terminal	Remote diagnosis function	●	●
Intelligent speed limit	Intelligent turning deceleration	○	○
Mast	Standard 2-stage mast 3m	●	●
	Standard 2-stage mast 3.5m	○	○
	Standard 2-stage mast 4m	○	○
	Standard 2-stage mast 4.5m	○	○
	Standard 2-stage mast 5m	○	○
	2-stage full free mast 3m	○	○
	3-stage full free mast 4.5m	○	○
	3-stage full free mast 5m	○	○
	3-stage full free mast 5.5m	○	○
	3-stage full free mast 6m	○	○
Line guard	Single additional attachment line (standard mast)	○	○
	Double additional attachment line (standard mast)	○	○
	Single additional attachment line (2-stage free mast)	○	○
	Double additional attachment pipeline (2-stage free mast)	○	○
	Single additional attachment line (3-stage free mast)	○	○
	Double additional attachment pipeline (3-stage free mast)	○	○
Fork	1070mm	●	●
	No forks	○	○
	1220mm	○	○
	1370mm	○	○
	1520mm	○	○
	1670mm	○	○
	1820mm	○	○
	2000mm	○	○

SCP		30F7	35F7
Light	Standard lighting (front and rear combination lights)	●	●
	Slewing warning light (yellow)	○	○
	Slewing warning light (blue)	○	○
	Rear light	○	○
	Blue spot light	○	○
	Contour marking light strip (blue) Contour marking light strip (red)	○	○
	Rotating beacon with siren (yellow)	○	○
	Fog light (yellow)	○	○
Cab	Standard overhead guard	●	●
	Front windshield + top PC, wiper, sprayer + fan	○	○
	Full cab (without A/C)	○	○
	Full cab (without A/C + electric heater)	○	○
	Full cab (cooling and heating A/C)	○	○
Battery	19.2% DoD (192V)	–	–
	22% DoD (96V)	●	●
	29.4% DoD (96V)	–	–
	29.4% DoD (294V)	–	–
	31% DoD (96V)	○	○
	43.2% DoD (288V)	–	–
	44% DoD (96V)	○	○
	47% DoD (288V)	–	–
	50% DoD (336V)	–	–
	52% DoD (320V)	–	–
	70% DoD (307.2V)	–	–
Alternator	96V100A (380V industrial power)	●	●
	96V200A (380V industrial power)	○	○
	20kW (380V industrial power)	–	–
	30kW (380V industrial power)	–	–
	40kW (380V industrial power)	–	–
	60kW single gun (380V industrial power)	–	–
Working device	External side shifter, etc.	○	○

Load Curve Diagram





PARAMETERS OF MAST

Mast type	Model of mast	Height, mast extended	SCP30/35F7					
			Load Capacity (Load center 500mm)	Load Capacity (Load center 500mm)	Overall height of lowered mast	Maximum height of mast operation	Free lift	Tilt of mast
			3t	3.5t		Selective pallet rack/thru pallet rack	Selective pallet rack/thru pallet rack	Front/rear
		mm	kg	kg	mm	mm	mm	°
2-stage wide-view mast	S30	3000	3000	3500	2140	3730/4200	125	6/12
	S35	3500	3000	3500	2390	4230/4700	125	6/12
	S40	4000	3000	3500	2740	4730/5200	125	6/10
	S45	4500	2700	3150	2990	5230/5700	125	6/6
	S50	5000	2350	2750	3240	5730/6200	125	6/6
2-stage full free mast	D30	3000	3000	3500	2140	3730/4200	1400/930	6/12
3-stage full free mast	T45	4500	2500	2900	2180	5265/5700	1410/970	6/6
	T48	4800	2250	2650	2235	5565/6000	1465/1025	616
	T50	5000	2100	2500	2450	5765/6200	1680/1240	6/6
	T55	5500	1700	2000	2610	6265/6700	1840/1400	3/6
	T60	6000	1200	1500	2830	6765/7200	2060/1620	3/6

Optional attachment

External side shifter

Installation level: 2A, 3A
Application: For working conditions requiring side-shifting

Side shifter with fork positioner

Installation level: 2A, 3A
Application: For working conditions requiring both side-shifting and fork positioning

Rotator

Installation level: 2A, 3A
Application: For working conditions requiring load dumping and turnover

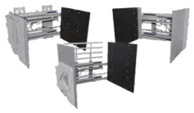
Single/double pallet fork

Installation level: 2A, 3A
Application: For dual-pallet handling, commonly used in breweries

Paper roll clamp

Installation level: 2A, 3A
Application: For handling paper rolls in the paper industry

Carton clamp

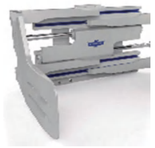


Installation level: 2A, 3A
Application: For handling cartons in the paper industry

Push-pull

Installation level: 2A, 3A
Application: For handling bagged goods, boxed food, etc.

Soft package clamp



Installation level: 2A, 3A
Application: For handling bulk materials such as scrap, recyclables, waste paper, soft bales, and textiles

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