



**UGO
WORK®**

Lithium-ion batteries for industrial trucks

Energy to keep you moving



ugowork.com



A better battery is just the start

Imagine an energy solution designed to meet the most demanding material handling needs. A solution that allows you to transfer risk, simplify operations, and focus on your core business—all while meeting your efficiency, productivity, and sustainability goals. Discover an innovative approach that elevates the performance of your demanding operations.

At UgoWork, we design, manufacture, and deploy superior lithium-ion batteries that transform the way your people work and how fast material is delivered from point A to point B.

Tap into round-the-clock performance

48V

for Class I & II

Sit-down counterbalanced forklifts and high-capacity heavy equipment



F424

36V

for Class I & II

Counterbalanced forklifts and reach trucks



F324

24V

for Class II & III

Walkie pallet jacks and order pickers



W207

Engineered for your day-to-day reality

Our mission to address the challenges of material handling started over 10 years ago. As trained electrical engineers yet new to the material handling world, we invested countless hours in meeting users and operations managers before heading into the development phase of the UgoWork battery. Our R&D team designed and performed the necessary reliability, safety, and ruggedness tests to design a battery that precisely meets the needs of the market and evolves with our customers. UgoWork products exceed the highest industry standards. Our batteries are independently tested and UL listed.

When you choose UgoWork, you sign up for an **energy partnership that goes beyond just a battery**. You start a relationship with energy experts dedicated to achieving your business goals and gaining a competitive edge. Whether you are faced with manufacturing or warehousing challenges, we'll help you reduce your operational costs through improved efficiency in your material handling operations.



We help you keep teams and goods moving

Invest in high-performance solutions and smart services to keep your operations running—no matter what your application is:



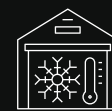
3PL & Warehousing



Automotive



Food & Beverage



Cold Storage



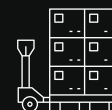
Manufacturing



Printing



Pulp & Paper



Wholesale & Distribution

Make room for inventory that brings in revenue thanks to a universal charging infrastructure

Our pioneering infrastructure features a **compact universal charging station** and **in-battery chargers** that ensure superior management of energy and operator time.

They also free up prime space on your factory floor so that you can maximize space efficiencies and ROI on your building spend. A proven charging infrastructure that is flexible and future-proof starts here.



Compact and universal

Powers all UgoWork batteries independently of voltage. Designed for maximum flexibility in any shop floor layout to simplify operations.

Automotive-grade charging connector

Compatible with all UgoWork charging stations and batteries. Planned for ease of use and operator safety in mind.



A modular design based on performance, efficiency, functionality and safety

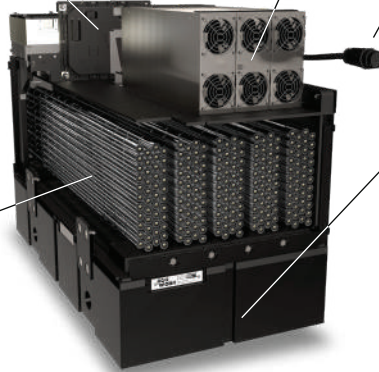
Every UgoWork battery is assembled with modules that work together to deliver maximum zero-emission performance from Day 1. From temperature regulator, lithium packs, chargers and counterweights, each component ensures the battery is a direct retrofit for any forklift.

Battery Management System (BMS)

Our proprietary BMS keeps track of battery's health parameters, thermal management and charging. Data gathered for our energy experts through the cloud delivers optimized performance, guaranteed uptimes, and safe operation.

Lithium-battery pack

The NMC lithium pack provides stable energy throughput and high performance as well as a high recycling value when the battery reaches its end of life.



Embedded chargers

Combined with the automotive-grade connectors and universal charging infrastructure, UgoWork batteries deliver fast charging in a compact design.

Auxiliary connector

Auxiliary output to power accessories and communicate with the truck.

Counterweight

The modular counterweight ensures the UgoWork batteries fit any forklift weight and size requirements.

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Battery state indicator

A convenient user interface displays the state of charge and triggers sound alerts if an issue arises.

Embedded battery chargers

A rugged design adapts to harsh environments for intense applications.





We make you see the right things

Pedal time, kWh consumption, temperature monitoring, and cell voltage is irrelevant data unless you know how to analyze it. With constant support from UgoWork energy experts, fleet uptimes are ensured and usage per truck overtime generate historical data and fleet reports, providing a clear assessment of overall trends.

Decision-making is evidence-based—and now in your hands.

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Expertise



Trained energy experts

You can trust our energy experts and partners to ensure consistent and superior service where and when you need it.



Reporting and key insights

Uncover ways to optimize your material handling operations with fleet data at your fingertips—and achieve your KPIs.

Convenience



Guaranteed uptime

The combination of 24/7 cloud-based monitoring with preventive and predictive maintenance by our energy experts means no downtimes for your operations.



Continous improvement processes

As advocates for your organization, our customer success team works alongside you to help you plan, execute and manage your energy optimization strategies by translating data into concrete action plans.

Peace of mind



Hitting ESG targets

UgoWork proactively replaces lithium packs so that you never have to compromise on performance. Used packs are responsibly revalued or recycled as per industry best practices.



Dedicated customer success

From the proof of concept to deployment and from onboarding to continuous improvement, our energy experts guide you through every step of your energy transition.

Achieve energy and operational resilience with Energy as a Service

Battery

- 480 Vac chargers
- BMS (battery management)
- TMS (thermal management)
- Frame and counterweight
- Charging station



Lithium pack

- LG Chem lithium cells
- UgoWork energy modules
- Busbars and electrical connexions
- Fuses (safety features)
- Sensors



Let our energy experts walk you through a customized solution to power up your operations.

		Purchase	Hybrid	Subscription
Product¹	Hardware	Lithium pack Upfront	Pay-per-use	Pay-per-use
		Battery & charging station Upfront	Upfront	Pay-per-use
	Lithium pack refueling ²	Optional	Included	Included
Warranty	Lithium pack	5 years 3,250 cycles ³	Unlimited	Unlimited
	Battery & charging station	5 years	5 years	Unlimited
Proactive expertise⁴				
	Monthly reporting	Included	Included	Included
	Uptime Guardian	Optional	Included	Included
	<ul style="list-style-type: none"> • 24/7 battery monitoring • Proactive interventions 			
	Dedicated customer success manager	Optional	Included	Included
	<ul style="list-style-type: none"> • Customized key insights • Fleet optimization analysis 			

¹ Managing the end of life of products is carried out according to the best industry standards for recycling and disposal. As lithium recycling initiatives are rapidly evolving, UgoWork is committed to remaining compliant with the latest best practices.

² Lithium pack refueling includes replacement of lithium cells, recycling, labor costs, firmware updates, and battery cleaning and testing. Transportation is not included.

³ Example for 48V model (spec 451 Ah & 22.1 kWh) : 3,250 cycles = 1,370,000 Ah & 71,900 kWh.

⁴ Requires an Internet connection through Wi-Fi. Wi-Fi to LTE hotspot available upon request.

What is Energy as a Service (EaaS)?

Energy as a Service (EaaS) is an innovative business model that gives you the energy outcomes you need to run your business and meet your goals—with no upfront capital and low operational risks.

UgoWork's EaaS approach includes the whole power infrastructure (i.e., battery, charging infrastructure, software, service) in exchange for a recurring fee. Since UgoWork remains owner of the equipment, we have an obligation to always maintain it in perfect working condition, because any downtime results in revenue loss. For the client, paying diligently for its energy supply ensures that the service is maintained, hence that its trucks are always up and running.

UgoWork's lithium-ion batteries and EaaS plans extend beyond energy efficiency and offer OPEX-based financing to meet clients' needs. The EaaS package comes with embedded guarantees (i.e., fleet uptime), is comprehensive, and represents a fully scalable energy solution that guarantees energy savings for large forklift fleet operators.

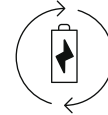
Is EaaS right for you?

Industry leaders have made the transition to UgoWork's Energy as a Service and experienced immediate and long-term benefits. Here's what these companies have in common:

- Operate large forklift fleet
- Work around the clock: >18 shifts a week
- Are data-driven, seek improved efficiency and cost reduction
- Have a forward-looking vision and sustainability targets



If you recognize yourself then **reach out to one of our energy experts.**



Up-to-date technology

- Proprietary technology
- Ever-evolving personalized user portal
- Updatable BMS firmware



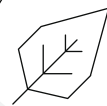
Guaranteed power

- Uptime | 24/7 IoT and cloud monitoring
- UgoWork certified service partner network
- Wear monitoring and pack refuel



Flexible power infrastructure

- Universal charging station (all voltages)
- Ergonomic charging connector
- Small footprint



Sustainable power solution

- Lithium-ion's energy efficiency
- Modular design allowing revaluation of lithium pack



Product lifecycle management

- Recycling produces 95% battery-grade material
- Battery components responsibly disposed and revalued



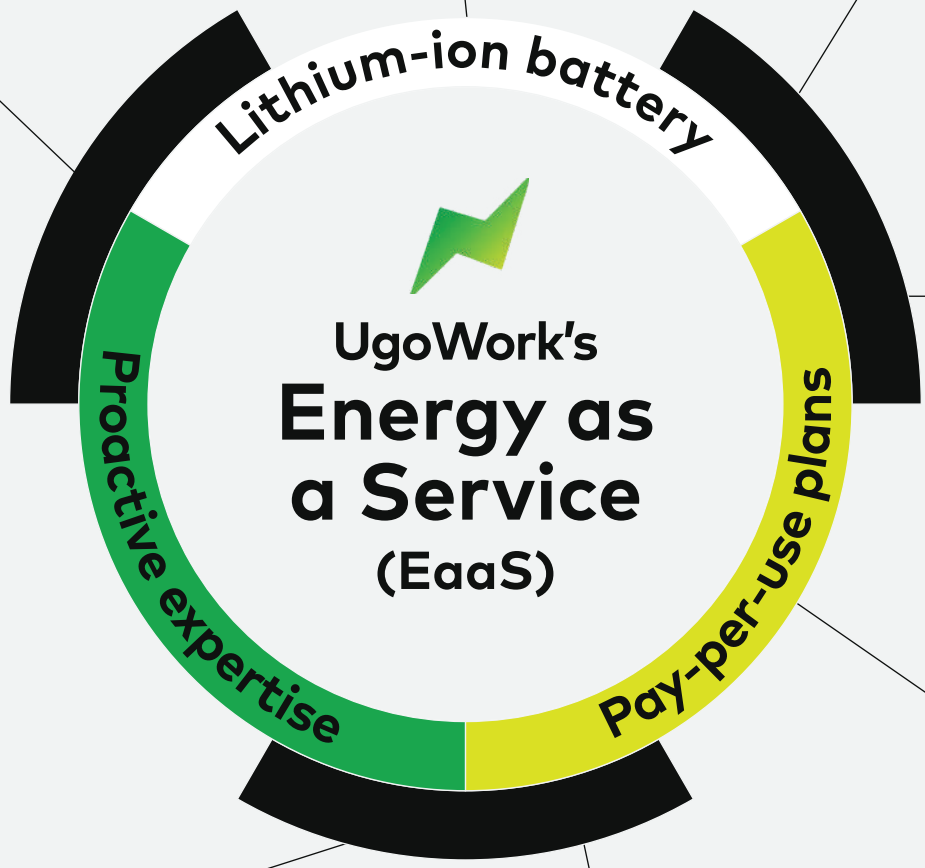
Financial flexibility

- CAPEX to 100% OPEX
- Payment proportional to consumption
- Customizable services



Optimized operations

- Dedicated energy experts
- Fleet analysis, trends, insights



Specifications¹

Lithium-ion batteries



48V F424



36V F324



24V W207

Maximum voltage at full charge	54.7 Vdc	39.1 Vdc	27.4 Vdc	
Nominal voltage	51.8 Vdc	37.0 Vdc	25.9 Vdc	
Discharge end voltage	42.7 Vdc	30.5 Vdc	21.4 Vdc	
Rated Ah capacity (5hr-rate)	451 Ah	631 Ah	269 Ah	
kWh capacity	23.4 kWh		7.0 kWh	
Charging current (max.)	22 A		8 A	Embedded charger, rated at 480 Vac
Continuous discharging current (max.)	325 Adc		175 Adc	SB output connector limited
Weight	731–1,499 kg (1,612–3,305 lbs)		220–488 kg (485–1,076 lbs)	Varies based on counterweight configuration
Continuous operating temperature	-20–30 °C (-4–86 °F)		0–30 °C (32–86 °F)	Continuous operation at full specifications
Sporadic operating temperature	-30–45 °C (-22–113 °F)		0–45 °C (32–113 °F)	For limited time or at reduced specifications
Charging voltage	277Y/480 Vac			Embedded charger, nominal
Charging time (standard)	1 hr			0–85%
Auxiliary output current (max.)	10 Adc			Battery voltage output for accessories
Communication with truck	CAN & IWS (Interrupt Warning Signal)			Compatible with OEM standards
Wi-Fi connection	Continuous remote monitoring for guaranteed uptime (part of the UgoWork EaaS program)			
Dimensions	Adaptable counterweight configuration in order to fit truck compartment			
Certifications	UL2580, UL1642, UN 38.3, FCC / IC			

A power solution for your whole fleet

UgoWork's modular counterweight architecture adapts to any compartment size and weight requirements.



Contact an energy expert to select the appropriate battery

or if your weight and dimension requirements is not within the specified range.



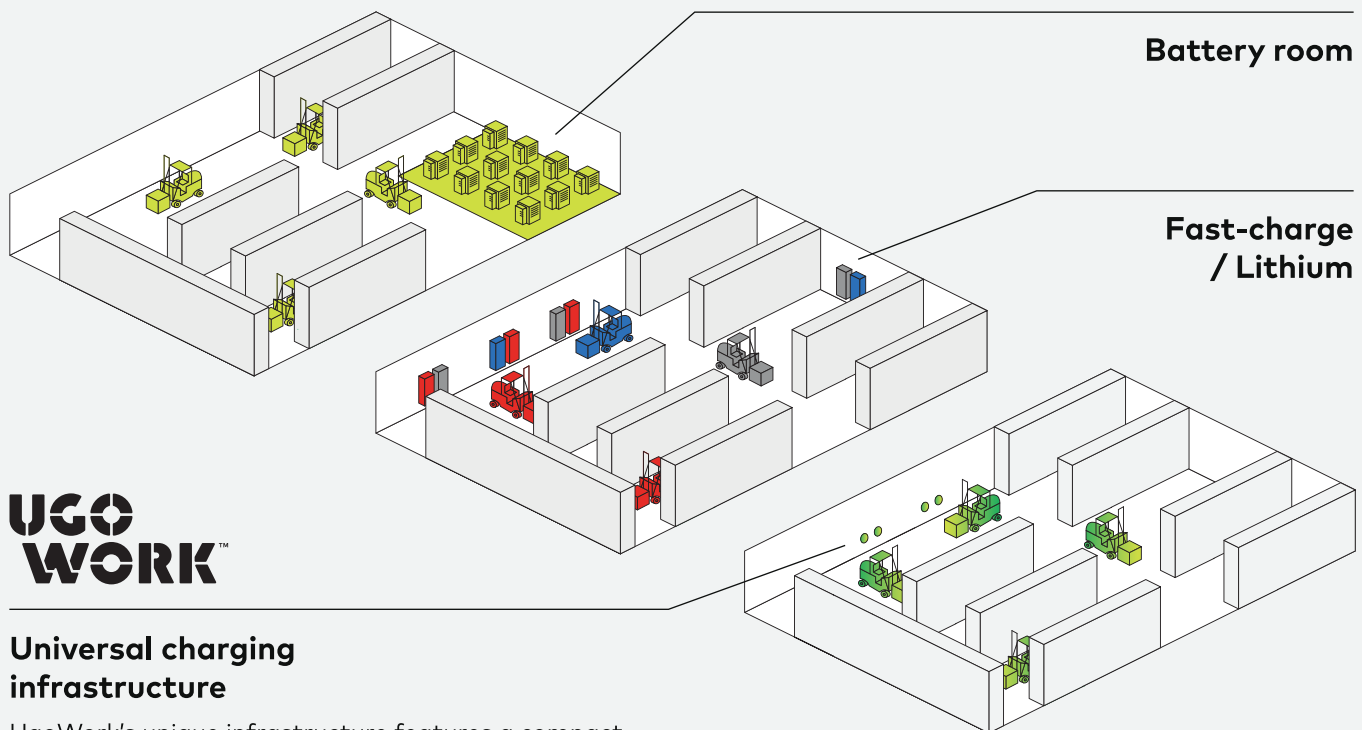
Universal charging station



22A CS22

Product compatibility	All UgoWork battery models	
Input rated nominal voltage	480Y/277 Vac	3 phase, ± 10%
Input current (max.)	22 A	FLA at rated voltage
Output charging current (max.)	22 A	FLA at rated voltage
Power connection type	4W+G	Neutral connection is mandatory
Rated frequency	60 Hz	47 – 63 Hz range
Input wire size	8–10 AWG	
Cable length	9.8 ft (3 m)	Between CS and coupler
Weight	13 kg (29 lbs)	
Dimensions	12 x 10 x 5 in (30.5 x 25.4 x 12.7 cm)	
Operating temperature	-25–50 °C (-13–122 °F)	
Certification	UL 508A	Other ratings available upon request

¹ Technical specifications are based on standard operating conditions and may be subject to changes without prior notice.



Universal charging infrastructure

UgoWork's unique infrastructure features a compact charging station and in-battery chargers to take your team's productivity to a whole new level.



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Energy to keep moving