

Founded in 2018, HyperShell is on a mission to continuously promote human progress. With backgrounds of consumer electronics, robots and EV, HyperShell has been innovating technologies and products in the exoskeleton field and reshaping people's lifestyles.



HyperShell Omega

next-gen powered exoskeleton

HyperShell Omega is the next-gen powered exoskeleton designed for daily walking, traveling, hiking, and other trekking-related scenarios. With advanced technologies and cutting-edge ergonomic design, it is an excellent gear for almost everyone with an active lifestyle.

- [Product Page](#)
- Price Range from \$299 to \$599
- Available on Kickstarter: Feb 28th 2023

Features

- **Feel Light Like Never Before** - the productive power output by the bionic servo M-One is enough to offset the weight of 30kg, and users can feel the unprecedented lightness in walking, running, and mountaineering.
- **Doubling Your Power Output** - In Hyper mode, HyperShell provides 20 times the human power potential, and continuously outputs when running at a top speed of 20KM/h (12MPH) during running/trail running.
- **Intelligent Copiloting** - Take the first step and leave the rest to AI. HyperShell learns how you move in multiple scenarios and calculates the optimal output with zero delay. It seamlessly adjusts added speed from 0 to 10mph per your body's request.

- **Adaptive Motion Recognition** - HyperShell analyzes 9 different postures at 200 times per second. With its AI dynamic adaptive engine, it recognizes and switches between suitable modes without lag. Seamlessly transit between modes and terrains without stopping.
- **Go Farther Beyond Limits** - HyperShell integrates high-density batteries and energy recovery technology to provide an ultra-long battery life of 35km for all-day, high-intensity use. Its swappable design also gets you covered in multi-day hiking or long trips.
- **Sturdy For All Trails** - Using lightweight aircraft alloy frame, HyperShell is 15% lighter with robust frame strength, also IP54 weatherproof at the same time.
- **Compact And Portable** - HyperShell can be easily folded and packed into almost any backpack. The full alloy frame and folding structure make HyperShell incredibly light and portable. In fact, it takes less space and weight than a regular sleeping bag.

Specifications

- Dimensions: Length 510mm, Width 400mm, Height 50mm
- Net Weight: about 1500g without battery
- Maximum step speed: about 15 km/h
- Motor-rated power: 800W
- Integrated range: about 35km
- Operating temperature: -10°C to 40°C
- Storage temperature: -20°C to 50°C
- Weatherproof level: IP54

Team

HyperShell started in 2018 when the core members discovered extraordinary possibilities in simulation research on the interaction of exoskeletons and human bodies. Backed by the data and Y-Combinator China, HyperShell is on a mission to continuously promote human progress. Since its establishment in 2021, HyperShell has been innovating technologies and products in the field of the exoskeleton to reshape people's lifestyles and enable technology to empower life.

Team members have over 10 years of experience in robotics, consumer electronics, and EV. We have created over 20+ hardware products that helped over 100,000 users in 30 different countries worldwide.