

Fauna Sprout Creator Edition

Overview

Sprout is Fauna's first humanoid robotics development kit. It is a complete hardware and software platform for creating capable, safe, and fun applications for everyday human environments. Designed for innovators across robotics, AI, academia, entertainment, retail, and hospitality, Sprout brings bipedal mobility, expressive interaction, and manipulation together in a lightweight, durable, and beautiful package. Its 29-DoF body, natural voice interface, and soft, human-centric design make it ideal for deploying robots in the same environments people live and work.

Paired with a powerful SDK, Sprout gives developers the tools to explore next-generation applications in locomotion and manipulation research, human robot interaction, teleoperation, character-driven experiences, and long-horizon autonomy. From prototyping novel control policies to creating engaging customer-facing interactions, Sprout is built to accelerate how embodied AI is developed, tested, and deployed.



Applications

- **AI model data collection and deployment** for long horizon planning, world understanding, and model evaluation.
- **Locomotion and manipulation research** for reinforcement learning, imitation learning, control, and whole-body coordination.
- **Human-robot interaction and teleoperation** studies, including expressive, voice-driven interfaces.
- **Character-driven experiences** for entertainment, retail, and hospitality environments.
- **Autonomous indoor behaviors** driven by mapping, navigation, and semantic understanding.
- **Education, robotics competitions, and developer training** for hands-on experimentation.

Key Highlights

- **29-DoF humanoid platform:** A highly articulated, human-like robot body designed for advanced locomotion, manipulation, and expressive interaction.
- **NVIDIA Jetson AGX Orin with the Fauna SDK:** Onboard high-performance compute paired with Fauna's software stack enables real-time perception, control, and rapid development of embodied AI applications.
- **Full-body VR teleoperation with Meta Quest 3 (not included):** Intuitive, immersive control lets operators "inhabit" the robot for telepresence, data collection, and human-in-the-loop training.
- **Four-microphone array with high-performance DSP:** Supports robust voice activation, speaker recognition, echo cancellation, and accurate sound-source localization for natural, voice-driven interaction.
- **Stereo camera system:** Provides rich depth perception for teleoperation, navigation, mapping, and spatial understanding of indoor environments.
- **Lightweight and designed with safety in mind for indoor operation:** A soft, compact, and approachable design optimized for labs, offices, homes, and public indoor spaces.
- **Extensible APIs for locomotion, mapping, and embodied AI research:** Developers can build custom behaviors, integrate new models, and explore advanced robotics concepts across mobility, perception, and autonomy.

Core Specifications

| | | | | |
|--|---|---------------------------|-------------------------------|----------------------------------|
| Dimensions | Standing Height | 107 cm | | |
| | Width | 45 cm | | |
| | Depth | 21 cm | | |
| | Arm Length | 48 cm | | |
| Weight | 22.7 kgs | | | |
| Payload | Configuration | Max (kg) (<10s) | Nominal (kg) (<90s) | Rated (kg) (indefinitely) |
| | Forward Raise | 3.7 | 1.75 | 0.7 |
| | Lateral Raise | 5.6 | 2.5 | 0.0* |
| | Bent Elbow | 11.2 | 5.0 | 1.1 |
| <small>* It is not recommended to maintain the Lateral Raise configuration indefinitely, with or without payload. Payloads are per-arm. Note that these are theoretical payloads, not necessarily currently supported by our teleoperation controller.</small> | | | | |
| Construction | Aluminum & Composite frame with padded exterior | | | |
| Compute | NVIDIA Jetson AGX Orin 64GB | | | |
| Storage | 1 TB NVMe SSD | | | |
| Sensing | ZED2i RGB-D stereo camera · 4 x VL53L8CX time of flight obstacle avoidance sensors · 9-axis IMU · 4 x mems microphone array | | | |
| Actuation | 29 degrees of freedom, including (2x) eyebrows | | | |
| Power | 46.8V Nominal DC system · 5000 mAH (standard) or 10,000 mAH (extended run) Li-ion battery (Molicel P50B cells) · Runtime 3 – 3.5 h | | | |
| Connectivity | Wi-Fi 5.2 · Ethernet | | | |
| Audio | Cirrus Logic CS47L35 DSP for ASR, TTS, and beamforming | | | |
| Software | Fauna SDK · Python / C++ API · Foxglove integration | | | |
| Simulation | Compatible with NVIDIA Isaac Sim, Gazebo, and MuJoCo | | | |
| Safety | Multi-layer safety architecture (high-level, low-level, inherent) · E-Stop | | | |
| Environmental | Operating Temperature | 10–30°C | | |
| | Storage Temperature | 5–35°C | | |
| | Humidity (Operating and Storage) | 10%–90% RH noncondensing | | |
| | Indoor use only | | | |
| | IP20 | | | |
| Support & Warranty | 12-month hardware warranty 90-day software warranty 2-year service plan (includes support and repair) | | | |
| Included Accessories | Li-ion battery pack Fauna Charger Controller Documentation | | | |

Learn more or request a demo at sales@faunarobotics.com

www.faunarobotics.com