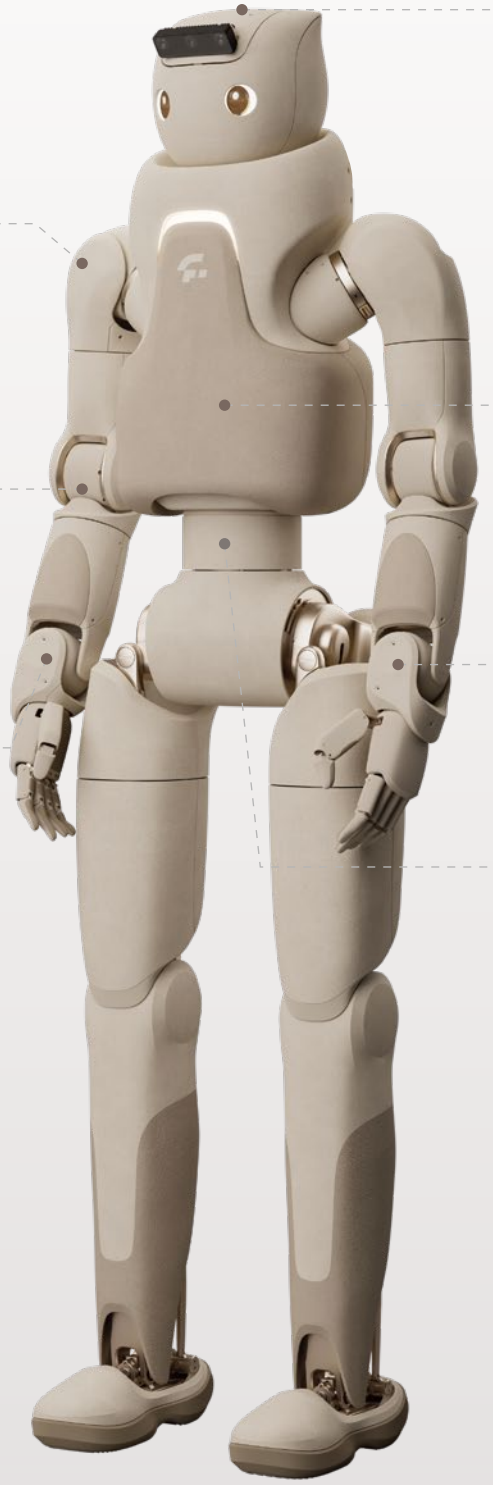
FOURIER

Fourier GR Family Product Catalog

FOURIER GR-3



Height
≈ 165cm

Weight
≈ 71kg

Total DOF
43

Touch Interaction
Head and Torso

Single-Arm Payload
≈ 3kg

Battery Runtime
≈ 3h, Hot-Swappable Batteries

Product Specifications

Basic Spec.	Dimensions	1642mm × 552mm × 292mm (H × L × W)		
	Weight	≈ 71kg	Leg Length (Shin + Thigh)	425mm + 408mm
	Arm Span	1395mm (Up to 1795mm with Dexterous Hands)		
Exterior Materials	Frame Construction	Aluminum Alloy + Engineering Plastics	Soft Exterior Padding	Yes
Joint Spec.	Total Degrees of Freedom	43 (Head: 2; Each Leg: 6; Waist: 3; Each Arm: 7; Each Hand: 6)		
	Peak Joint Torque	≈ 400N·m	Dual Encoders	Supported
	Communication Protocol	Ethernet		
Electrical Spec.	Nominal Voltage	46.8V	Rated Power	≈ 936W
Performance Spec.	Single-Arm Payload	≈ 3kg	Onboard Computing	High-Performance 8-Core CPU
Battery and Power Adapter	Battery Capacity	Dual Batteries: 702Wh + 234Wh	Battery Type	Lithium-Ion Battery
	Battery Weight	Dual Batteries: 3.8kg + 1.3kg	Nominal Battery Voltage	46.8V
	Charging Voltage Limit	54.6V	Battery Runtime	≈ 3h
	Charging Time	≈ 1.5h	Hot-Swappable	Supported
	Adapter Input	90–260V AC 50/60Hz	Adapter Output	54.6V DC 12A
Computing System	Operating System	Ubuntu 22.04	Processor	AMD Ryzen
Perception Sensors	Vision Camera	Stereo Depth Camera	IMU	6-Axis (Accelerometer + Gyroscope)
	Display	Yes, Color Display	Microphone	Yes
	Speaker	Yes	Tactile Sensor Array	Yes (Head and Torso)
Interaction Capabilities	Teleoperation	Optional	Touch Interaction	Supports Touch Sensing and Real-Time Responses on the Head and Torso
	Interactive Lighting	Yes		

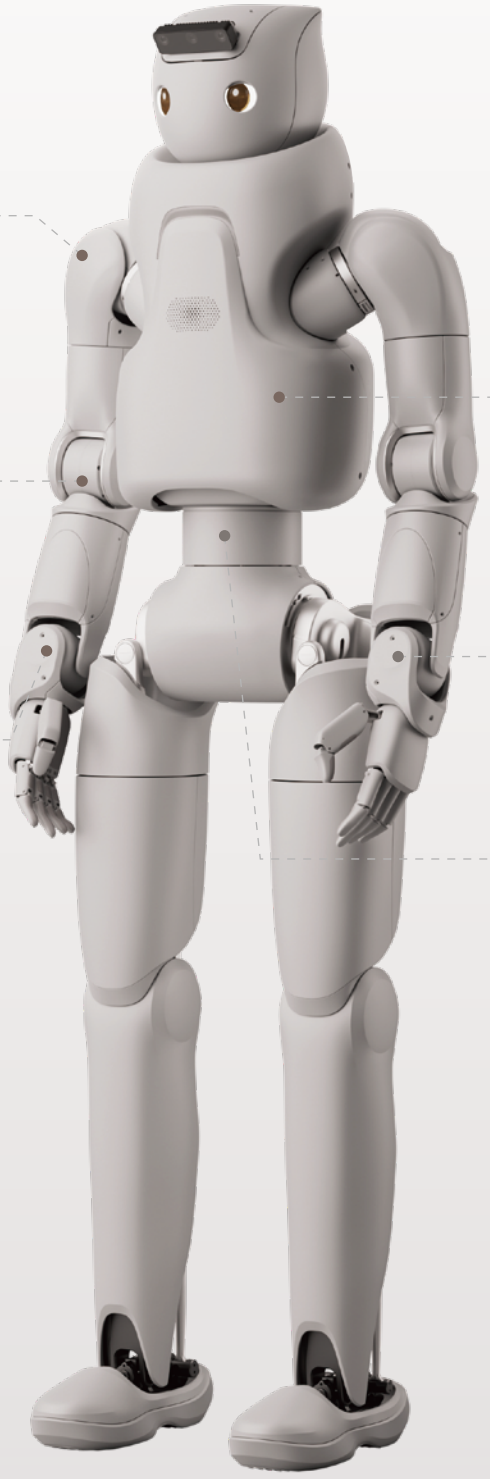
**Appearance and specifications are subject to the actual product.*

FOURIER GR-3C

Height
≈ 165cm

Weight
≈ 71kg

Total DOF
43



Matte Hard Shell
Durable, Pressure-Resistant, and Easy to Maintain

Single-Arm Payload
≈ 3kg

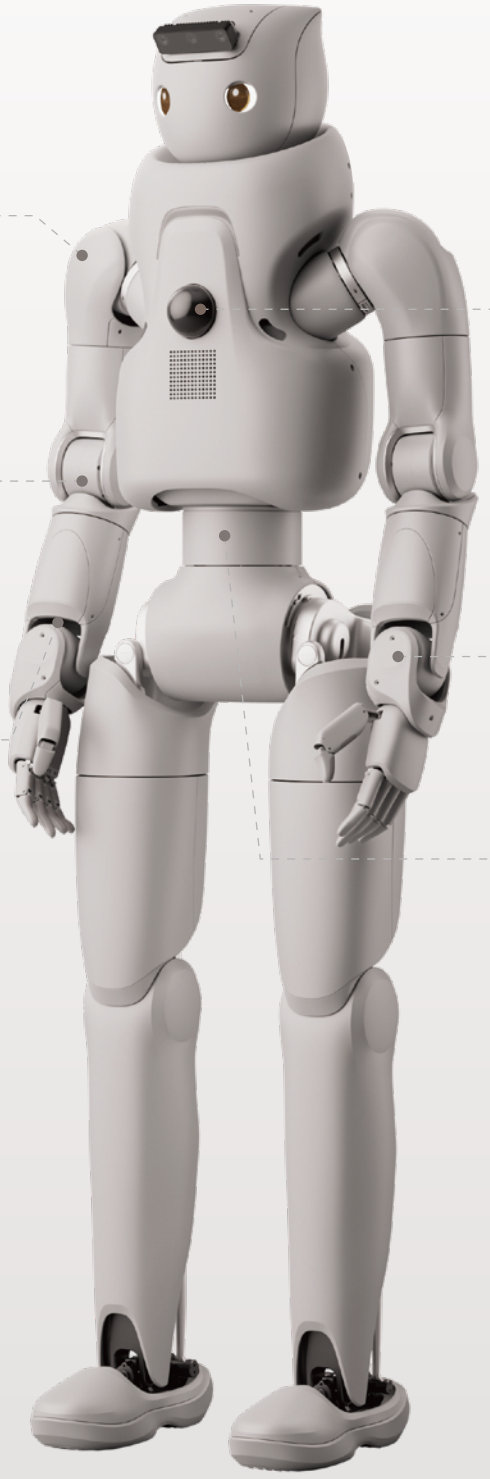
Battery Runtime
≈ 3h, Hot-Swappable Batteries

Product Specifications

Basic Spec.	Dimensions	1642mm × 552mm × 292mm (H × L × W)		
	Weight	≈ 71kg	Leg Length (Shin + Thigh)	425mm + 408mm
	Arm Span	1395mm (Up to 1795mm with Dexterous Hands)		
Exterior Materials	Frame Construction	Aluminum Alloy + Engineering Plastics		
Joint Spec.	Total Degrees of Freedom	43 (Head: 2; Each Leg: 6; Waist: 3; Each Arm: 7; Each Hand: 6)		
	Peak Joint Torque	≈ 400N·m	Dual Encoders	Supported
	Communication Protocol	Ethernet		
Electrical Spec.	Nominal Voltage	46.8V	Rated Power	≈ 936W
Performance Spec.	Single-Arm Payload	≈ 3kg	Onboard Computing	High-Performance 8-Core CPU
Battery and Power Adapter	Battery Capacity	Dual Batteries: 702Wh + 234Wh	Battery Type	Lithium-Ion Battery
	Battery Weight	Dual Batteries: 3.8kg + 1.3kg	Nominal Battery Voltage	46.8V
	Charging Voltage Limit	54.6V	Battery Runtime	≈ 3h
	Charging Time	≈ 1.5h	Hot-Swappable	Supported
	Adapter Input	90–260V AC 50/60Hz	Adapter Output	54.6V DC 12A
Computing System	Operating System	Ubuntu 22.04	Processor	AMD Ryzen
Perception Sensors	Vision Camera	Stereo Depth Camera	IMU	6-Axis (Accelerometer + Gyroscope)
	Display	Yes, Color Display	Microphone	Optional
	Speaker	Yes		
Interaction Capabilities	Teleoperation	Optional	Interactive Lighting	Yes

**Appearance and specifications are subject to the actual product.*

FOURIER GR-3C Ultra



Height
≈ 165cm

Weight
≈ 71kg

Total DOF
43

LiDAR
Real-Time Obstacle Avoidance

Single-Arm Payload
≈ 3kg

Battery Runtime
≈ 3h, Hot-Swappable Batteries

Product Specifications

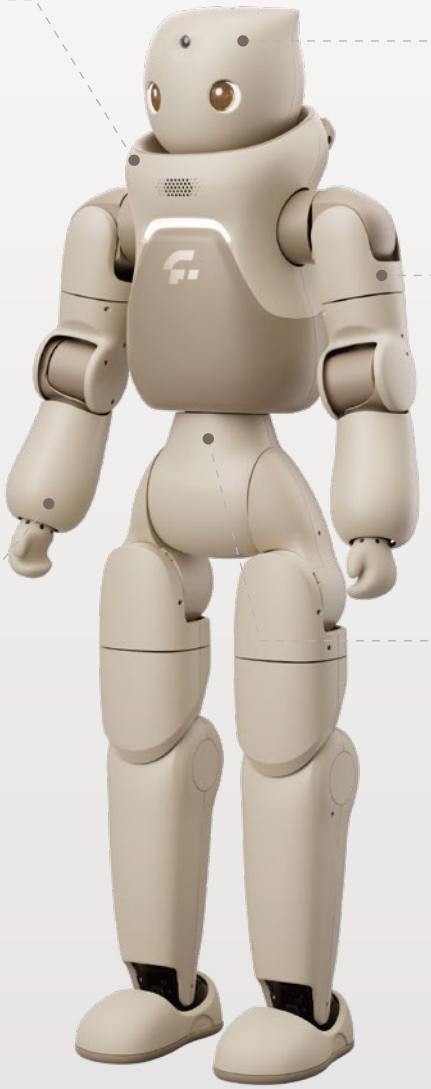
Basic Spec.	Dimensions	1642mm × 552mm × 292mm (H × L × W)		
	Weight	≈ 71kg	Leg Length (Shin + Thigh)	425mm + 408mm
	Arm Span	1395mm (Up to 1795mm with Dexterous Hands)		
Exterior Materials	Frame Construction	Aluminum Alloy + Engineering Plastics		
Joint Spec.	Total Degrees of Freedom	43 (Head: 2; Each Leg: 6; Waist: 3; Each Arm: 7; Each Hand: 6)		
	Peak Joint Torque	≈ 400N·m	Dual Encoders	Supported
	Communication Protocol	Ethernet		
Electrical Spec.	Nominal Voltage	46.8V	Rated Power	≈ 936W
Performance Spec.	Single-Arm Payload	≈ 3kg	Onboard Computing	High-Performance 8-Core CPU
Battery and Power Adapter	Battery Capacity	Dual Batteries: 702Wh + 234Wh	Battery Type	Lithium-Ion Battery
	Battery Weight	Dual Batteries: 3.8kg + 1.3kg	Nominal Battery Voltage	46.8V
	Charging Voltage Limit	54.6V	Battery Runtime	≈ 3h
	Charging Time	≈ 1.5h	Hot-Swappable	Supported
	Adapter Input	90–260V AC 50/60Hz	Adapter Output	54.6V DC 12A
Computing System	Operating System	Ubuntu 22.04	Processor	AMD Ryzen
Perception Sensors	Vision Camera	Stereo Depth Camera	IMU	6-Axis (Accelerometer + Gyroscope)
	Display	Yes, Color Display	Microphone	Optional
	LiDAR	Yes	Speaker	Yes
Interaction Capabilities	Teleoperation	Optional	Interactive Lighting	Yes

**Appearance and specifications are subject to the actual product.*

FOURIER GR Mini

Height
≈ 127cm

Total DOF
25



Touch Interaction
Head

Weight
≈ 43kg

Battery Runtime
≈ 2h

Product Specifications

Basic Spec.	Dimensions	1266mm × 552mm × 302mm (H × L × W)		
	Weight	≈ 43kg	Arm Length	433mm
	Arm Span	1203mm	Leg Length (Shin + Thigh)	290mm + 335mm
Exterior Materials	Frame Construction	Aluminum Alloy + Engineering Plastics		
Joint Spec.	Total Degrees of Freedom	25 (Head: 2; Each Leg: 6; Waist: 1; Each Arm: 5)		
	Peak Joint Torque	≈ 140N·m	Dual Encoders	Supported
	Joint Range of Motion	Hip Joint (P: −122° to +110°, R: −35° to +92°, Y: ±142°); Knee Joint: −2° to +142°		
	Communication Protocol	EtherCAT	Internal Cable Routing Through Hollow Joints	Yes
Electrical Spec.	Nominal Voltage	46.8V	Cooling System	Air Cooling
	System Connectivity	Wi-Fi, Ethernet		
Performance Spec.	Onboard Computing	High-Performance 8-Core CPU		
Battery and Power Adapter	Battery Capacity	463Wh	Battery Type	Lithium-Ion Battery
	Battery Runtime	≈ 2h	Charging Time	< 1h
Perception Sensors	Vision Camera	Monocular Camera	IMU	6-Axis (Accelerometer + Gyroscope)
	Microphone	Yes	Speaker	Yes
	Tactile Sensor Array	Yes (Head)	Lighting Effects	Yes
Interaction Capabilities	Touch Interaction	Supports Touch Sensing and Real-Time Responses on the Head	Interactive Lighting	Yes

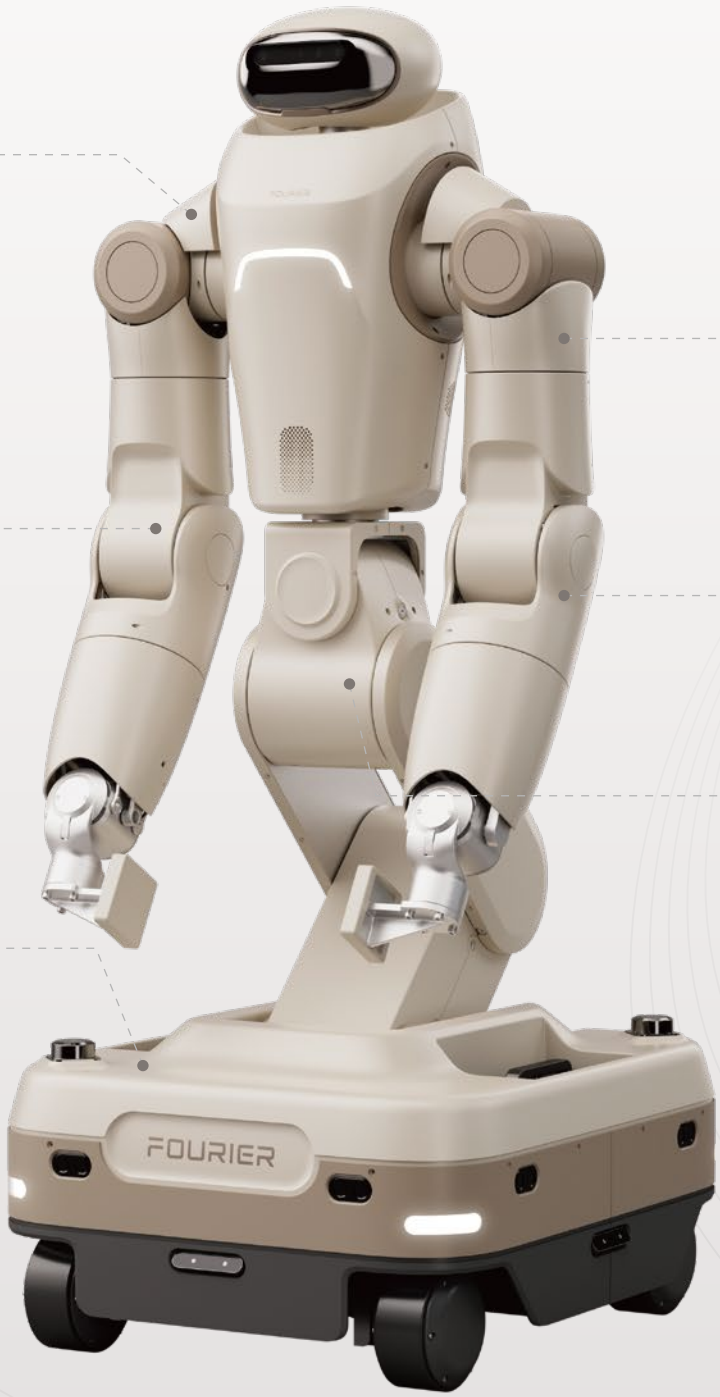
**Appearance and specifications are subject to the actual product.*

FOURIER GRW

Height
1231mm–1695mm

Weight
≈ 240kg

Turning Diameter
≈ 880mm



Arm Span
1966mm
(Excluding End Effectors)

Single-Arm Payload
8kg

Battery Runtime
≈ 4h, Hot-Swappable Batteries

Product Specifications

Basic Spec.	Height	1231mm–1695mm	Length × Width	722mm × 633mm
	Shoulder Width	584mm	Weight	≈ 240kg
	Arm Span	1966mm (Excluding End Effectors)	Turning Diameter	≈ 880mm
Exterior Materials	Frame Construction	Aluminum Alloy + Engineering Plastics	End-Effector Module	Expandable
Joint Spec.	Head Degrees of Freedom	2	Degrees of Freedom per Arm	7
	Waist Degrees of Freedom	3	Lower-Body Degrees of Freedom (Folding Section)	2
	Chassis Configuration	Four-Wheel Drive (4WD)	Peak Joint Torque	≈ 500N·m
	Communication Protocol	EtherCAT		
Electrical Spec.	Nominal Voltage	44.8V	Rated Power	≈ 1300W
	Power-Loss Safety Braking	Yes (Except Chassis)		
Performance Spec.	Average Travel Speed	≈ 0.8m/s	Traversable Slope	Max. 10°
	Onboard Computing	High-Performance 8-Core CPU	Rated Dual-Arm Payload	16kg
Battery and Power Adapter	Battery Capacity	Dual Batteries, 672Wh Each	Battery Type	Lithium-Ion Battery
	Weight per Battery	6.1kg	Nominal Battery Voltage	44.8V
	Charging Voltage Limit	51.1V	Hot-Swappable	Supported
	Battery Runtime	≈ 4h	Charging Time	≈ 2h (0–80% Charge)
	Adapter Input	100–240V AC 50/60Hz	Adapter Output	51.1V DC 7.0A
Computing System	Operating System	Ubuntu 22.04	Processor	AMD Ryzen
Perception Sensors	Head Camera	1 × RGB-D Camera (Structured Light)	Chassis Cameras	4
	Chassis Ultrasonic Sensors	8	Chassis LiDAR Sensors	2
	IMU	6-Axis (Accelerometer + Gyroscope)	Speaker	Yes

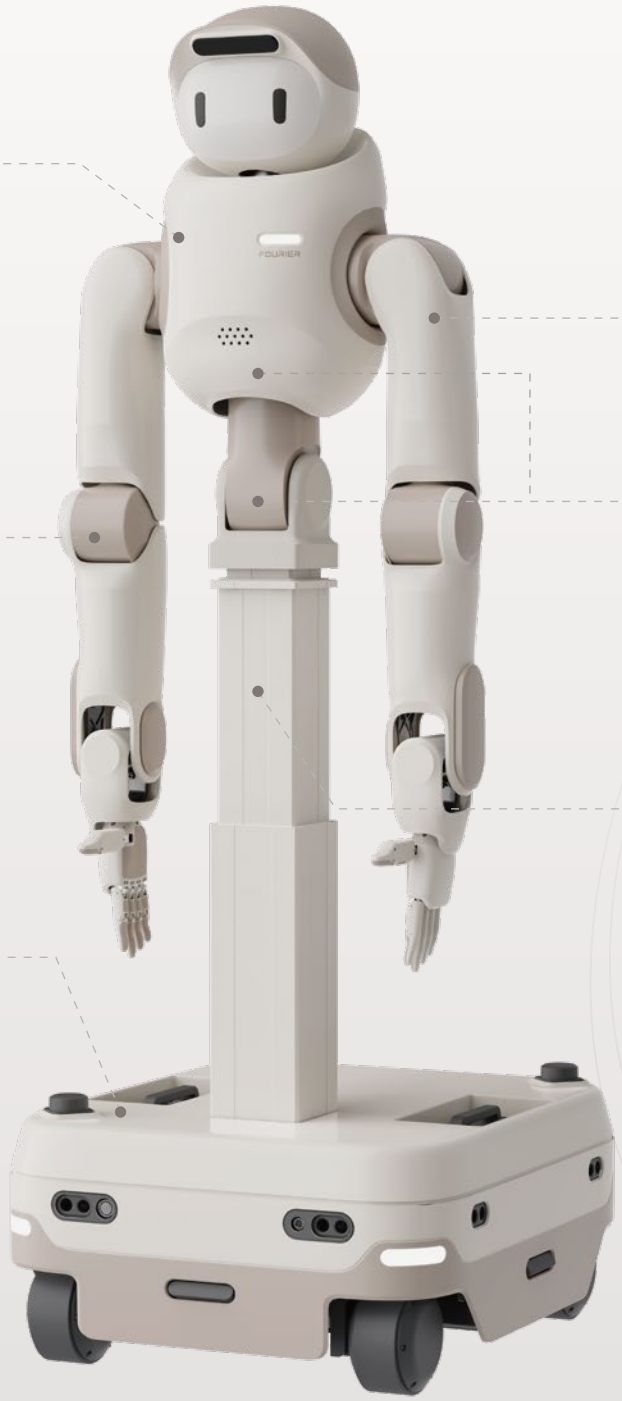
**Appearance and specifications are subject to the actual product.*

FOURIER GRW Lite

Height
1307mm–1907mm

Weight
≈ 120kg

Turning Diameter
≈ 880mm



Arm Span
1768mm
(Excluding End Effectors)

Waist DOF
Pitch and Rotation

Battery Runtime
≈ 4h, Hot-Swappable Batteries

Product Specifications

Basic Spec.	Height	1307mm–1907mm	Length × Width	714mm × 620mm
	Shoulder Width	490mm	Weight	≈ 120kg
	Arm Span	1768mm (Excluding End Effectors)	Turning Diameter	≈ 880mm
Exterior Materials	Frame Construction	Aluminum Alloy + Engineering Plastics	End-Effector Module	Expandable
Joint Spec.	Head Degrees of Freedom	2	Degrees of Freedom per Arm	7
	Waist Degrees of Freedom	2	Lower-Body Degrees of Freedom	1
	Chassis Configuration	Four-Wheel Drive (4WD)	Peak Joint Torque	≈ 140N·m
	Communication Protocol	EtherCAT		
Electrical Spec.	Nominal Voltage	44.8V	Rated Power	≈ 1300W
	Power-Loss Safety Braking	Yes (Waist Pitch Joint Only)		
Performance Spec.	Average Travel Speed	≈ 0.8m/s	Traversable Slope	Max. 10°
	Rated Dual-Arm Payload	3kg		
Battery and Power Adapter	Battery Capacity	Dual Batteries, 672Wh Each	Battery Type	Lithium-Ion Battery
	Weight per Battery	6.1kg	Nominal Battery Voltage	44.8V
	Charging Voltage Limit	51.1V	Hot-Swappable	Supported
	Battery Runtime	≈ 4h	Charging Time	≈ 2h (0–80% Charge)
	Adapter Input	100–240V AC 50/60Hz	Adapter Output	51.1V DC 7.0A
Computing System	Operating System	Ubuntu 24.04	Processor	NVIDIA Jetson Thor
Perception Sensors	Head Camera	1	Chassis Cameras	4
	Chassis Ultrasonic Sensors	8	Chassis LiDAR Sensors	2
	IMU	6-Axis (Accelerometer + Gyroscope)	Speaker	Yes
	Microphone	Yes		
Interaction Capabilities	Teleoperation	Optional	Interactive Lighting	Yes
	Voice Interaction	Voice Output (Actuator Alerts, Low-Battery Announcements, Navigation Audio)		

**Appearance and specifications are subject to the actual product.*

FOURIER GR Nano



Dimensions: 125 × 105 × 95 mm

Material: Ultra-Soft Plush Fabric

Weight: 200 g

Touch Sensing

Nano responds to touch on its forehead with head movements, such as looking up or turning.

Vision

Nano tracks faces in real time, moving its head to follow them.

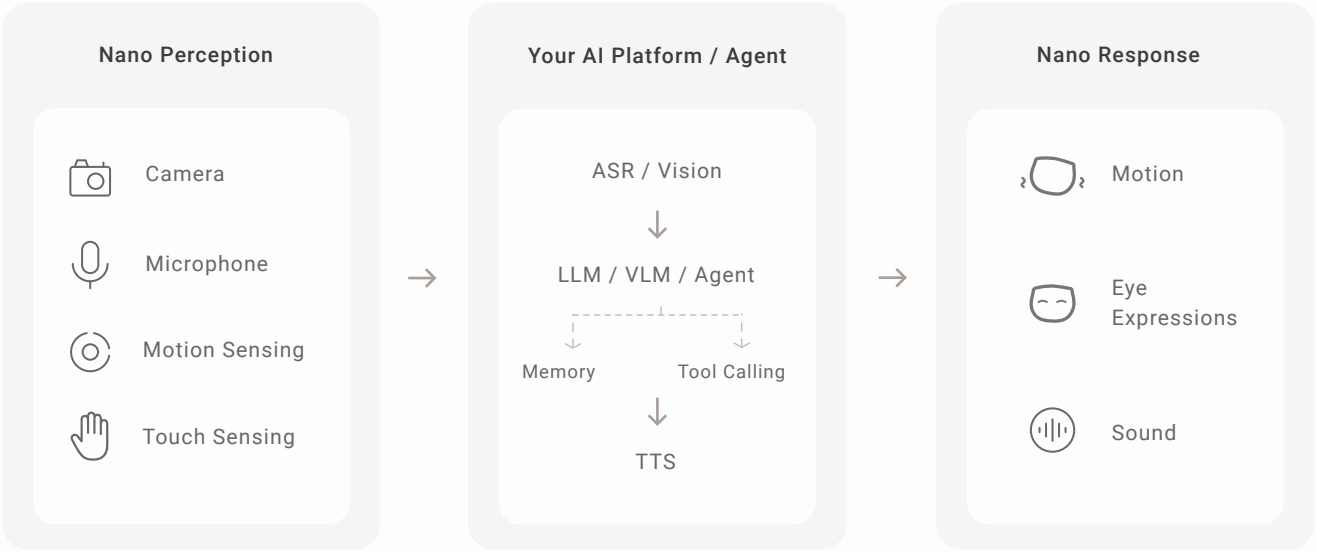
Motion & Orientation Sensing

Nano responds when turned upside down, shaken, set down, or returned to an upright position.

Audio System

Nano detects whether sound is coming from the left or right and turns its head in that direction.

Development Platform Architecture



Applications & Integration for Enterprise Customers

Applications

- AI Agent
- Voice Interaction
- Multimodal Interaction
- Human–Robot Interaction R&D

Integration Boundary

Nano Developer Edition		Your Platform
Perception Input Audio · Vision · Touch · Motion	← Integration →	ASR · TTS · LLM · VLM · Agent
Outputs Speakers · Eye Displays · Head Motion		Business Logic & Backend Systems

Integration Process

Requirements Assessment → Proof of Concept → Interface & Firmware Customization → Project Integration

**Appearance and specifications are subject to the actual product.*

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