RFC

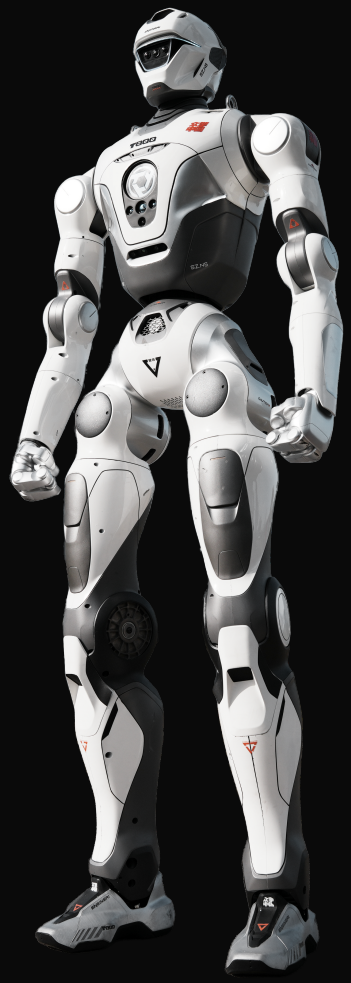
ROBOT FIGHTING CHAMPIONSHIP

BUILT TO FIGHT

RFC T800

FULL-SIZE COMBAT HUMANOID

OFFICIAL FIGHTER PLATFORM OF THE ROBOT FIGHTING CHAMPIONSHIP



ONE SIZE FOR ALL ARENAS

173 cm in height



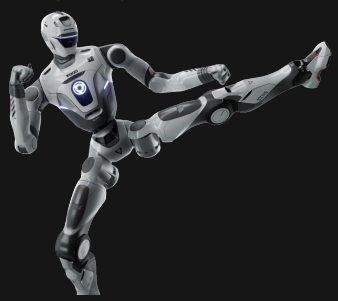
HIGH-DOF JOINT DESIGN

29 DOF throughout the body (excluding the dexterous hand)
Anthropomorphic motion design
Seamless transitions between complex combat movements



INDUSTRY-LEADING EXPLOSIVE POWER

Joint torque of up to 450 N·m

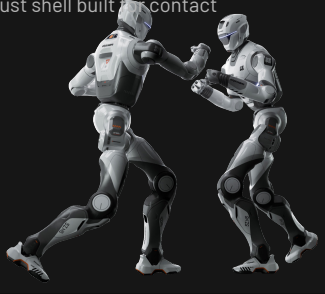


MULTI-MODAL PERCEPTION SYSTEM

In-house miniaturised joint modules, 360° omnidirectional radar sensing and millisecond-level environmental data processing.

ULTIMATE POWER AESTHETICS

Power-technology integration
Robust shell built for contact



ENDURANCE FOR HIGH-INTENSITY BOUTS

Full leg joint active cooling enabling 2 to 3 hours of continuous operation.

ROBOT FIGHTING CHAMPIONSHIP PTE. LTD.

hi@rfc.sg

ROBOT FIGHTING CHAMPIONSHIP

T800 PRODUCT SPECIFICATIONS

	BASIC EDITION	OPEN SOURCE EDITION	MAX EDITION
FINAL PRICE (USD) Robot + Action-packed SDK	**62,675**	**80,000**	**117,080**
ACTION-PACKED SDK Robot Combat Upgrade Software Pack Included in final price (US$8,000 value)	✓ INCLUDED	✓ INCLUDED	✓ INCLUDED
SDK includes	**9** boxing and interactive moves	**3** dances	**5** OTA-enabled dances

FEATURE COMPARISON

	BASIC EDITION	OPEN SOURCE EDITION	MAX EDITION
Open-sourced Secondary development support	–	✓	✓
VR adaptable	–	✓	✓
Policy Builder	–	✓	✓
Standard 8 combat moves	✓	✓	✓
Additional 12 SDK combat moves	✓	✓	✓
Dexterous hands (7 DOF per hand)	–	–	✓
LiDAR + stereoscopic vision	–	✓	✓
AGX Orin 64G AI compute	–	✓	✓
Linear force-control joints	–	✓	✓
5G connectivity	–	–	✓
OTA updates	✓	✓	✓
Handheld remote pilot control	✓	✓	✓

TECHNICAL SPECIFICATIONS

	BASIC EDITION	OPEN SOURCE EDITION	MAX EDITION
Height	173 cm		
Weight	Depending on the edition, the weight may vary (75 kg to 85 kg)		
Total Degrees of Freedom	25	25	32 + 14 (dexterous hands) = 46
Degrees of Freedom per hand	0	0	7
Lower leg + thigh length	91 cm		
Arm length	60 cm		
Degrees of Freedom of the neck	2	2	3
Degrees of Freedom per leg	6		
Degrees of Freedom of the waist	1	1	3
Degrees of Freedom per arm	5	5	7
Fully articulated hollow internal wiring	Yes		
Hardware-supported movement speed	≥ 2.5 m/s		
Perception sensor	Intel Depth Camera	Proprietary system camera (stereoscopic vision + LiDAR)	
Basic computing power (Robot PC)	Intel Atom		
High-performance computing (AI PC)	Orin NX 16G	AGX Orin 64G (computing power customisable upgrade)	
Communication module	Wi-Fi + Bluetooth		Wi-Fi + Bluetooth + 5G
Secondary development	/	Support	
Smart battery (quick-release)	Yes		
Lighting configuration	Headlamps + Chest lamps + Knee lamps		
Microphone	Equipped		
Loudspeaker	Equipped		
Handheld remote control	Equipped		
Joint encoder	Absolute dual encoder		
Joint type	Planetary	Planetary + Linear Force Control	
Maximum torque (N·m)	450 N·m		
Battery performance	Ternary lithium battery: full charge voltage 71.4 V, capacity 20 Ah		
Charging duration	Ternary lithium battery: 2.5 hours		
Battery type	Standard configuration: ternary lithium battery		
Battery life per charge	2 to 3 h		

ENQUIRIES: hi@rfc.sg

Robot Fighting Championship Pte. Ltd. | 10 Anson Road, #11-20 International Plaza, Singapore 079903

FULL-SIZE COMBAT HUMANOID

DISCLAIMER:

The functions and configurations shown do not constitute any commitment to the actual specifications of the delivered robots.
Final configurations and functions are subject to the delivered products. Variations may occur due to business context, model specifications and configurations.
All shall be subject to actual performance. Prices in USD, exclusive of shipping, duties and taxes. Eco-system hardware is sold separately.