## **Arcee-SuperNova**



SuperNova is Arcee Al's flagship model, with all the power of a general use Large Language Model (LLM) but with the efficiency and cost advantages of a Small Language Model (SLM). It empowers businesses with full ownership of the model and of their data, customization tailored to their specific needs, and effortless one-click integration into existing systems while ensuring top-tier security and compliance.

## SuperNova is the Best Alternative to Closed-Source LLMs

SuperNova is our most advanced general use language model. Trained with the most state-of-the-art learning and optimization techniques, SuperNova beats top-performing LLMs, excelling at generalized tasks for which you might currently use solutions like ChatGPT Enterprise, Claude Enterprise, or Cohere. But SuperNova also excels at the following:

- Instruction-following
- Self-critique and reasoning
- Logical thinking and planning breakdown
- RAG integration

#### With SuperNova, you get the most robust, flexible solution on the market, all while:

- → Maintaining strict compliance
- → Integrating AI deeply into your existing systems (VPC/on-prem)
- → Customizing the model on your proprietary data.

All this – at a fraction of the cost of closed-source LLM solutions.



# Unmatched Performance, Easy Updates & Maintenance

**60% Better Benchmarks:** Achieve superior performance with fewer hallucinations and faster responses.

**Affordable Updates:** Regularly update SuperNova with your latest data.



#### **Lower Costs, Higher ROI**

**Up To 75% Cost Reduction:** Benefit from efficient model training & optimization, drastically lowering deployment costs and overall cost.

Rapid ROI: One-click deployment means you'll see a return on your investment faster.



#### Top-Tier Security, Transparency

Uncompromised Security: Protect your data with industry-leading privacy measures.

**Full Data Ownership:** Maintain full transparency and control over the model and your data.

## SuperNova is the ideal solution for:

- Industries with Stringent Security Requirements: Sectors like finance, healthcare, and government that need secure, on-premise AI solutions to ensure data privacy and regulatory compliance.
- Data-Driven Companies: Organizations that require AI models tailored specifically to their proprietary data for tasks like natural language processing, predictive analytics, and customer interaction.
- Businesses Seeking Cost Efficiency: Companies looking to reduce operational costs without compromising on performance, with the ability to run Al models on cost-effective infrastructure.
- Accuracy-Driven Organizations: Companies that rely on precise and reliable AI responses, such as those in customer service and technical support, can benefit from SuperNova's exceptional instruction-following capabilities and high accuracy in generating human-like text.

## How Arcee Al customers use Supernova:

Use SuperNova to integrate GenAl into apps and products, for general chat purposes, and for diverse use cases including:

- Customer Service: Advanced chatbots, virtual assistants, customer onboarding, customer support
- •Software Development: Code generation and quality improvement
- Content Creation: High-quality marketing and documentation
- •Data Analysis: Enhanced interpretation and reporting
- Research and Development: Literature reviews and hypothesis generation
- Legal and Compliance: Contract analysis and regulatory checks
- •Education and Training: Adaptive learning systems.

#### SuperNova... and also, SuperNova-Lite

SuperNova-Lite, the #1 8B-parameter model on the Hugging Face Open LLM Leaderboard, scales down the best of our flagship SuperNova model. The Lite version excels in both benchmark performance and real-world applications, providing the power of large-scale models in a more compact, efficient form ideal for organizations seeking high performance with reduced resource requirements.