



Hanumayamma Innovations and Technologies, Inc.

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Sriya AgriVet Monitor Technical Specification

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Sriya AgriVet Gateway (please see figure 1) is an advanced, ruggedized IoT-enabled system designed for smart agriculture and veterinary monitoring, tailored specifically for dairy and livestock environments. It integrates communication protocols such as Bluetooth Low Energy, Wi-Fi, LoRa, and Cellular to ensure seamless connectivity in remote and high-terrain locations. The device supports real-time monitoring of CO₂, methane, temperature, and humidity through a Light Emitting Diode (LED) display and embedded sensors, complemented by multilingual audio alerts and a user-friendly interface available in 103 languages and dialects. Designed for durability, it operates reliably between -5°C to 50°C and at altitudes ranging from 38 to 1,850 meters, ensuring optimal performance in rural and rugged agricultural settings.

From a sustainability and AI standpoint, the Sriya AgriVet Gateway is engineered to align with Scope 1, 2, and 3 emission reduction strategies by detecting and managing methane emissions from livestock using agentic AI architectures like Retrieval-Augmented Generation (RAG) and Knowledge-Augmented Generation (KAG). The device's integration with Hanumayamma Cloud provides intelligent remote diagnostics, Over the air (OTA) software updates, and predictive analytics for herd health and environmental compliance. Biomedical-grade Class 10 sensors ensure safe, skin-contact monitoring that meets safety standards, while real-time data collection from up to 100 animal-mounted sensors enables precision livestock management.

Supporting end-to-end deployment, the device includes post-sales services such as multilingual customer support, field-replaceable kits, and OTA firmware upgrades. Electrical and mechanical specifications make it suitable for high-impact, industrial-grade environments, with compatibility for solar and A/C power. For business users, the Sriya AgriVet Gateway offers a scalable and compliant solution that enhances productivity, reduces methane emissions, and improves animal welfare, all while supporting environmental, social, and governance (ESG) goals and providing measurable Return on Investment (ROI) through data-driven farm insights.



Figure 1: Sriya AgriVet Monitor

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Hardware

Component	Specification	Engineering Notes
Processor (MCU/MPU)	Quad-Core ARM Cortex-A53 / Embedded RISC-V	Edge AI ready, Raspberry Pi CM4 or equivalent
Memory	8 GB LPDDR4x	Supports real-time sensor data processing & multitasking
Storage	200 GB eMMC / SSD	Local data logging, firmware, AI model storage
Sensors	CO ₂ (NDIR), Methane (Catalytic/IR), Temp & Humidity (SHT35/DHT22)	Industrial accuracy-grade
Display	5" TFT LED, 800x480, 500 nits	Sunlight-readable, rugged
Connectivity	Bluetooth BLE 5.0, WiFi 802.11b/g/n, LoRa (SX1276), Cellular (CAT-M1/NB-IoT)	Redundant network support
Interfaces	I ² C, SPI, UART, GPIO, USB-C, SMA Antenna	For extensibility and debugging
Power	A/C and Rechargeable Li-Ion Battery	10-hour runtime, solar optional
Audio	Mono Speaker, 2W, I2S Audio Codec	Multilingual alerts
Necklace Sensor Support	100 BLE-enabled Sensors	Track individual livestock
Enclosure	IP65, UV-Resistant, Shockproof	Suitable for remote & harsh environments

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Software

Component	Specification	Details for Business Users	Details for Engineering Users
Operating System	Embedded Linux (Yocto/Debian-based)	Reliable system that powers all features	Custom kernel with real-time patches for sensor responsiveness
Firmware	Modular, OTA-upgradable	Enables automatic updates	Firmware written in C/C++ or Rust for hardware safety & performance
Device UI	Touchless interface (button-driven), LED display	Simple usage for field workers	Event-driven UI over DirectFB or lightweight GUI engine
Network Stack	Auto-reconnect, Multi-Protocol switching	Works in low-signal areas	Prioritization of LoRa > Cellular > WiFi, managed via NMCLI
Data Logging	Local storage + optional cloud sync	Offline use supported	SQLite-based logging, encrypted file system (LUKS)
Localization	103 languages and dialects	Multi-language support out-of-the-box	Uses compact NLP models for offline translations (e.g., Whisper.cpp)
Remote Config	Web dashboard or mobile app (optional)	Manage multiple devices easily	RESTful API and MQTT-based telemetry for dashboard integration
Security	Encrypted storage, Authenticated access	Keeps data and access secure	Uses SSL/TLS for comms, Linux PAM for login, optional TPM

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Artificial Intelligence (AI)

Component	Specification	Business Value	Engineering Details
AI Frameworks	TensorFlow Lite, ONNX Runtime, Whisper.cpp, RWKV	Enables real-time insights and voice interaction	Optimized for edge inference with quantized models
RAG (Retrieval-Augmented Generation)	AI pulls from internal knowledge and recent sensor data to answer queries	Context-aware responses and recommendations	Combines vector search + prompt generation (e.g., FAISS + GPT-J)
KAG (Knowledge-Augmented Generation)	Uses curated local knowledge base + reasoning algorithms	Offline decision-making, safety actions	YAML/JSON-based rule inference engine, updated via OTA
Voice Interface	TTS and STT in 103 languages and dialects	Speak/listen to device in local language	Uses compressed audio models and dynamic language switching
Anomaly Detection	ML models monitor livestock/environment anomalies	Alerts for heat stress, gas leaks, etc.	Isolation Forest or LSTM-based time-series models
Edge Inference Engine	Supports multi-modal model execution locally	No internet needed for insights	Auto-scheduling models using ONNX runtime scheduler + quantization
AI Model Updates	Over-the-air (OTA) model update support	Keeps AI smart & updated	Secure container delivery of TFLite/ONNX models
Personalization Layer	Learns local conditions, adapts thresholds	Custom to each farm's conditions	Meta-learning routines adjust sensitivity ranges over time



Hanumayamma ESG Small Language Models (SLM)

Hanumayamma Small Language Models (SLMs) ensure Cost-Effective, Efficient, and Edge-Ready AI. Small Language Models (SLMs) , AI models designed to perform well on simpler tasks with minimal infrastructure requirements. Unlike their larger counterparts, SLMs are optimized for deployment in environments with limited resources, making them particularly suitable for edge computing, cost-sensitive applications, and privacy-conscious use cases.

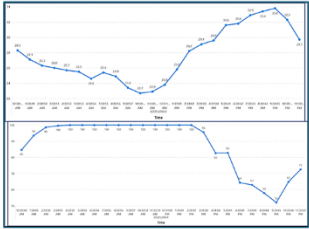
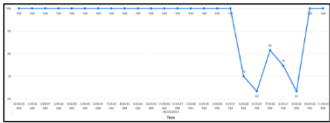
Key Benefits of SLMs

- **Cost Efficiency**
 - SLMs offer significant savings on compute and storage. Their smaller size means:
 - Reduced training and inference costs.
 - Deployment on mid-range or older GPUs.
 - Lower infrastructure investment—ideal for startups, research, and edge applications.
- **Low Compute Requirements**
 - Can run on consumer-grade GPUs.
 - Do not require high-end or latest NVIDIA GPUs (often scarce due to supply-chain delays).
 - Easily deployable on-device or on-premises—no need to send sensitive data to the cloud.
- **Privacy and Security**
 - On-device inference ensures sensitive data stays local.
 - Minimizes the risk of data being logged, stored, or mishandled by third-party cloud providers.
- **Edge Compatibility:** Due to their compact size, SLMs can be integrated into:
 - Mobile devices and smartphones
 - Factory floor sensors and smart cameras
 - Vehicles and PCs without internet access
 - Environmental monitoring devices

This supports low-latency inference and increased privacy, especially in remote or disconnected settings.

For globally distributed and disconnected edge devices, especially those operating in environments with intermittent or no network connectivity and limited memory, processing, and compute capabilities, it is both practical and sustainable to pre-package semantic embeddings that enable communication with farmers through text-to-voice in local languages. This approach not only enhances accessibility but also contributes to reduced greenhouse gas (GHG) emissions by minimizing reliance on cloud-based inference.



Sensor Signature	Clinical Condition	Query Embedding	Recommendation
	Temperature Drift	[-0.0404926f, - 0.0243801f, - 0.1043372f, - 0.0575184f, - 0.0384188f, - 0.0181450f, - 0.0959997f,]	Cattle are likely to experience heat stress when the Heat Index exceeds 27°C. Therefore, the cattle would be under moderate to severe heat stress from 4:00 AM onwards, with the highest stress levels occurring around 10:00 AM.
	Humidity & Rumination Count	[0.0128309f, - 0.0489042f, - 0.0067126f, - 0.0277795f, - 0.0485573f, - 0.0458481f, - 0.0482101f,]	Drastic changes in rumination count implements feed management change and need to watch for cattle health.

In the example below, a clinical outcome query is embedded and labeled in advance. The edge device uses these embeddings to interpret sensor insights and translate them into actionable clinical recommendations, which are then delivered to farmers audibly in their native language. This bridges the last mile of AI, bringing real-time, context-aware support to underserved regions—fulfilling the vision of democratizing AI for the benefit of humanity. The pre-canned queries are instrumental to democratize meaning recommendations that are actionable for small farmers.



Deployment machine learning models that can be recommended on local language addresses many ESG Goals: (please see figure 2)



Figure 2: Hanumayamma ML and ESG Goal Mapping

Deploy farmer understandable & local language model fulfills action that can advance following UN Goals (please see figure 2)

- Goal 1 – No Poverty: Empowers rural farmers with AI-driven insights, enabling better decision-making and income stability.
- Goal 8 – Decent Work and Economic Growth: Enhances productivity in agriculture through localized automation, boosting rural employment and economic activity.
- Goal 10 – Reduced Inequalities: Brings AI capabilities to underserved communities, narrowing the digital and knowledge divide.
- Goal 9 – Industry, Innovation and Infrastructure: Enables smart rural infrastructure through edge AI, fostering innovation without dependency on urban networks.
- Goal 11 – Sustainable Cities and Communities: Supports resilient rural ecosystems with AI tools that strengthen local livelihoods and community services.



- Goal 13 – Climate Action:
Reduces reliance on cloud compute by processing locally, lowering energy use and carbon footprint in precision farming.

Hanumayamma Cloud

Component	Specification	Business Value	Engineering Details
Cloud Architecture	Hybrid cloud platform with edge integration	Remote access and insights, even with poor connectivity	Built on Kubernetes (K8s) + Azure/GCP; supports MQTT, REST APIs
Device Management	Remote firmware upgrades, health monitoring, diagnostics	Centralized control over multiple devices	Fleet control panel, OTA via HTTPS
Data Lake	Sensor & AI log storage, queryable archives	Enables analytics, audits, historical reporting	Parquet + Delta Lake + MLflow integration
Farm Analytics Dashboard	Custom dashboards for each user/farm/operator	Helps decision-making at farm level	Hanumayamma Dairy Analytics & Hanumayamma Mobile App
Security & Access	Role-based access control (RBAC), device identity certificates	Keeps farm data private and controlled	OAuth2, JWT, Mutual TLS
API Gateway	REST & WebSocket APIs for integration with farm ERP or mobile apps	Seamless data sync with other systems	Swagger/OpenAPI-enabled, rate-limited and secured
Language Adaptability	Syncs regional speech packs and TTS/STT libraries	Customizable language capabilities	Pulls Whisper, Vosk, or Google Edge TTS models depending on locale

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Text to Speech

Component	Specification	Business Value	Engineering Details
Languages Supported	103 spoken languages including regional dialects (Hindi, Telugu, Swahili, etc.)	Accessible to diverse populations	Uses compact open-source models like Coqui TTS, Google TTS, or NVIDIA Riva TTS
Voice Quality	Natural-sounding, low-latency output	Clear and understandable audio instructions	Uses neural TTS synthesis, multi-speaker support
Deployment	Edge-based with cloud fallback	Works offline, speaks alerts or guidance	On-device model cache + optional stream from Hanumayamma Cloud
Speed Control	Variable speech rate	Custom pacing for user preferences	Controlled via SSML tags or API params
Custom Vocabulary	Farm-specific terms and animal IDs	Personalized speech output	Dynamic lexicon injection supported

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Speech to Text

Component	Specification	Business Value	Engineering Details
Languages Supported	103 spoken languages with dialect sensitivity	Field workers can speak commands in local language	Whisper.cpp, Vosk, and Kaldi-based lightweight speech models
Accuracy	≥92% in normal farm conditions	Understands commands reliably	Noise reduction preprocessing + context-aware parsing
Deployment	On-device, real-time	Offline operability, no data leak	Models run on ARM Cortex-A53 with quantized inference
Wake Word/Trigger	"Sriya" or configurable	Easy voice activation	Local wake word engine using Porcupine or Snowboy
Command Engine	Edge NLP parser + fallback to cloud model	Works without internet, syncs commands	Intents + actions mapped to YAML config or on-device logic tree
Customization	Support for farm-specific command training	Adapts to specific farm vocabulary	Continuous learning enabled via user corrections

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Electrical

Component	Specification	Business Value	Engineering Notes
Power Input	100V–240V A/C (50–60 Hz) / 12V–24V DC	Compatible with global power sources	Wide input range for various farm power conditions
Battery Type	Rechargeable Lithium-Ion, 10,000–20,000 mAh	Operates during power outages	Supports solar charging (optional module)
Battery Backup	8–10 hours (active monitoring mode)	Prevents data loss and downtime	Smart battery management system (BMS)
Power Protection	Overvoltage, Overcurrent, Reverse Polarity, Surge Protection	Safe in unstable grid conditions	Conforms to IEC 61000- 4-5 (Surge Immunity)
ESD Protection	±8kV Contact, ±15kV Air Discharge	Electrostatic discharge safe	IEC 61000-4-2 compliant
Thermal Protection	Automatic thermal shutdown (≥70°C internal)	Device longevity and safety	On-board temperature sensors for thermal monitoring

Please see figure 2.

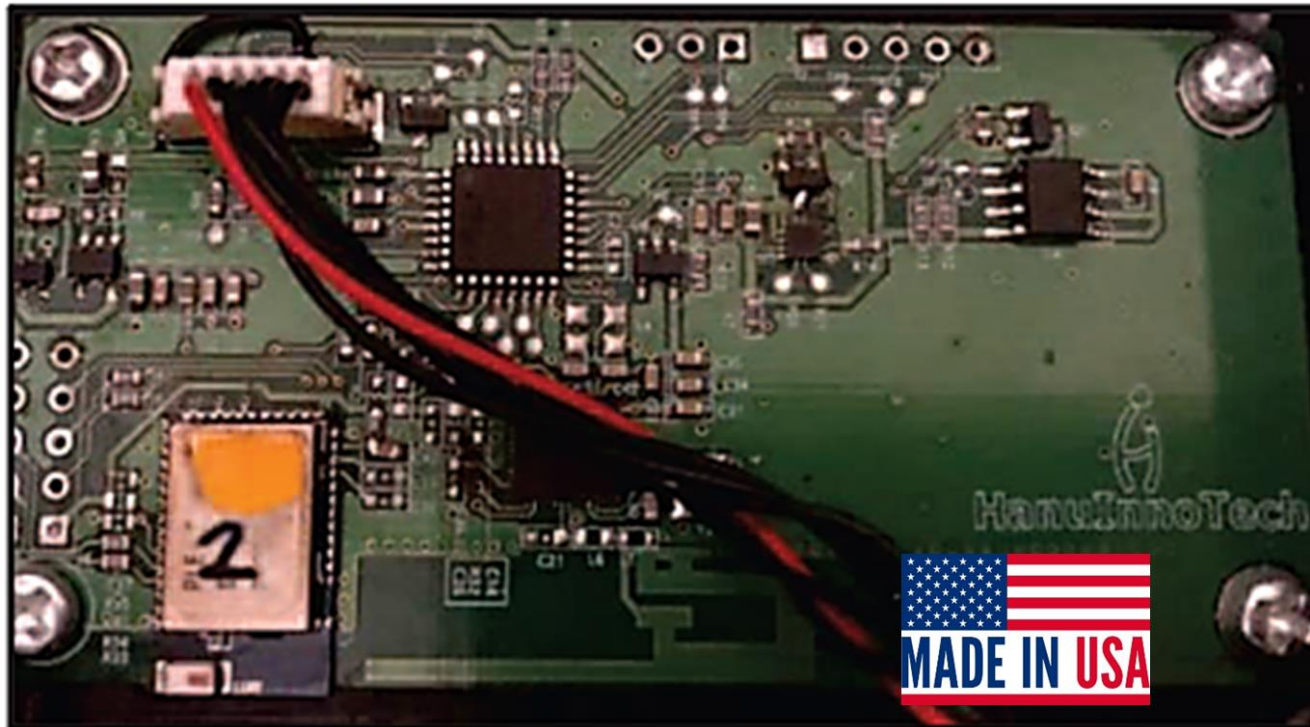


Figure 3: Electronic Circuit with AI ROM

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Mechanical

Component	Specification	Business Value	Engineering Notes
Enclosure Rating	IP65/IP66 – Dust tight, water-resistant	Withstands rain, dust, and animal contact	Suitable for outdoor installations
Material	Industrial Polycarbonate or Aluminum Alloy (powder coated)	UV, corrosion, and chemical resistant	V0 flame-retardant certified, RoHS & REACH compliant
Shock & Vibration	MIL-STD-810H (Transit & Operational)	Withstands machinery vibration, rough handling	Designed for mounting on uneven or mobile surfaces
Mounting Options	Pole, Wall, or Flat Surface with Anti-Vibration Feet	Flexible installation in any farm setup	Bracket and U-bolt support with gimbal leveling
Ventilation	Pressure equalization valve with hydrophobic membrane	Prevents condensation & dust intrusion	Gore-Tex-style breathable membrane
Operating Temperature	-5°C to +50°C (23°F to 122°F)	Suited to most agricultural climates	Electronics conformally coated for humidity resistance
Ingress Guards	Insect/mud flap protectors on ports	Long-term usability in animal areas	Shielded connectors and lockable cable glands

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Gateway Case / Field Gateway

Component	Specification	Business Value	Engineering Notes
Gateway Function	Field data aggregation, device control, LoRa uplink, cloud sync	Central hub for sensor & monitor connectivity	Acts as MQTT Broker, optional local inference fallback
Connectivity Ports	2x SMA for LoRa Antennas, 1x RJ45 (Ethernet), 1x USB 3.0, 1x SIM Slot, 1x HDMI	Network flexibility	Rugged IP67-rated external antenna options
Processor	ARM Cortex-A72 / Embedded x86 with TPM 2.0	Runs local dashboard and backup control	Raspberry Pi Compute Module 4 or Intel Elkhart Lake-based SoC
Ingress Protection	IP66 NEMA 4X – Sealed against water and dust	Operates safely in barns or exposed outdoors	Enclosure includes watertight cable access ports
Internal Storage	256 GB SSD with secure partitions	Backup logs and offline model updates	Optionally mirrored to Hanumayamma Cloud
Field UI	LED Indicators for Network, Power, Sync, and Faults	Quick field diagnosis	Field-resettable via pinhole or remote command
Expansion Capability	M.2 slot (4G/5G module), GPIO Breakouts	Scalable to future sensor formats	Supports edge inference modules or local AI co-processing
Temperature Range	-10°C to +60°C	Broader than device specs for external use	Passive cooling with heat spreader & airflow vents
Security Features	Tamper detection switch, Encrypted storage, Locked firmware boot	Prevents physical and cyber tampering	Chain-of-trust boot using U-Boot + TPM 2.0

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Biomedical Specification for Veterinary Use

Component	Specification	Business Value	Engineering Notes
Device Classification	Class 10 Veterinary – Non-invasive, continuous animal monitoring	Aligns with global veterinary compliance norms	Follows ISO 10993-1 for biocompatibility of medical devices
Skin Contact Compliance	Materials ISO 10993-5 (Cytotoxicity), ISO 10993-10 (Irritation and Sensitization) certified	Safe for prolonged skin contact	Hypoallergenic silicone or medical-grade TPU used in skin-contact regions
Sensor Attachment	Adjustable cow collar or leg-strap with ergonomic, anti-chafe design	Comfortable for 24x7 use without injury	Elastic textile-based harness system with anti-microbial coating
Temperature Calibration	$\pm 0.2^{\circ}\text{C}$ accuracy with thermal insulation to avoid ambient bias	Accurate health alerts and stress indicators	Contact thermistor + compensating ambient probe design
Humidity and CO ₂ Sensing	Positioned to avoid contamination by animal sweat or fur moisture	Long sensor life and precise readings	Filter membranes and hydrophobic barriers for sensors
Disinfection Protocol	Chemical-resistant housing supports alcohol, iodine, and veterinary disinfectants	Simplifies cleaning and reuse across animals	Surface tested per ASTM D543 chemical resistance for disinfectants
Animal Bioethics Compliance	Designed in compliance with OIE (World Organisation for Animal Health) animal welfare guidelines	Ethical handling and monitoring practices	Monitoring does not interfere with feeding, resting, or milking behavior
Sensor Life Span	≥ 12 months under 24/7 usage conditions	Reduces maintenance costs	Replaceable sensor modules with snap-fit mechanism
Safety Failover	Auto-disconnect at thermal or electrical fault detection	Prevents harm from overheating or malfunction	Monitored by local microcontroller with watchdog timers



Vibration/Noise Sensitivity	Below animal stress response threshold (dB < 50)	Avoids behavioral disruption	All moving/mechanical components < 50 dB; audio alerts excluded from wearable sensors
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Please see figure 3.



Figure 4: Cow Necklace Sensor



Post Sales and Customer Support

Component	Specification	Business Value	Engineering Notes
Warranty and Coverage	1-year standard warranty; extended options available (up to 3 years)	Protects investment and ensures product longevity	Covers hardware defects, environmental wear, and connectivity issues
Installation and Onboarding	On-site or remote setup with system calibration and user training	Reduces onboarding time and improves install accuracy	Includes environmental calibration and rural network setup
Customer Support Channels	24/7 multilingual support via phone, email, WhatsApp, and ticket portal	Enhances user experience and accessibility	CRM integrated with device monitoring
Remote Diagnostics	Cloud-based monitoring for early issue detection and troubleshooting	Reduces downtime and speeds up support	Integrated with Hanumayamma Cloud telemetry
Spare Parts and Maintenance	Field-replaceable kits; certified service centers for repairs	Minimizes total cost of ownership	Includes CO2 sensors, battery packs, antenna modules
Training and Knowledge Base	Guides in 103 languages; in-app tutorials and video support	Improves self-service capabilities on rural farms	Designed for farmer literacy levels and limited bandwidth
Firmware & Software Updates	Over-the-air (OTA) updates for firmware and AI model patches	Keeps system secure and optimized	Uses secure fallback update protocols
SLA and Escalation	Tiered SLA: Critical < 4 hrs, Normal < 24 hrs	Ensures accountability and timely resolution	Escalation paths based on technical and operational severity

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Languages: 103 languages and dialects

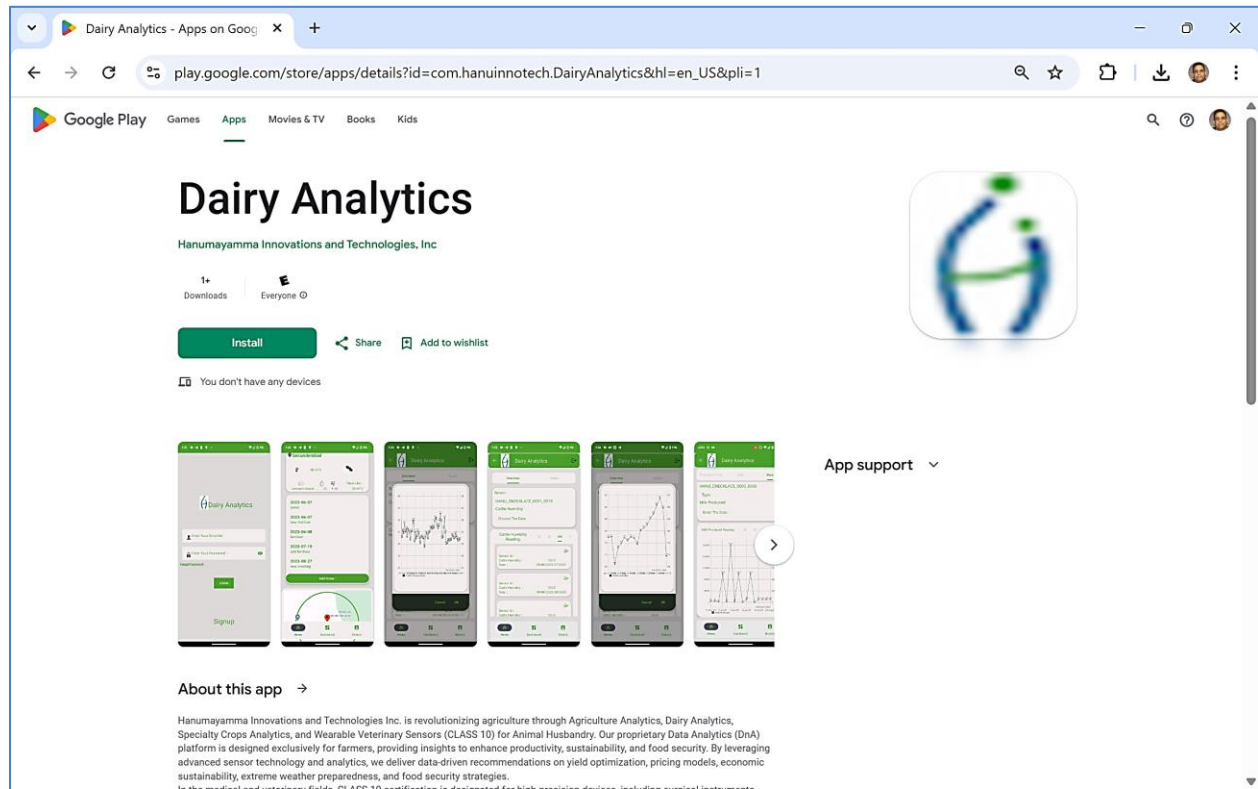
Afrikaans	Dutch	Italian	Mongolian	Swahili
Albanian	English	Japanese	(Cyrillic)	Swedish
Amharic	Estonian	Kannada	Mongolian	Tahitian
Arabic	Fijian	Kazakh	(Traditional)	Tamil
Armenian	Filipino	Khmer	Myanmar	Tatar
Assamese	Finnish	Klingon	Nepali	Telugu
Azerbaijani	French	Klingon (plqaD)	Norwegian	Thai
Bangla	French (Canada)	Korean	Odia	Tibetan
Bashkir	Georgian	Kurdish (Central)	Pashto	Tigrinya
Bosnian (Latin)	German	Kurdish	Persian	Tongan
Bulgarian	Greek	(Northern)	Polish	Turkish
Cantonese	Gujarati	Kyrgyz	Portuguese	Turkmen
(Traditional)	Haitian Creole	Lao	(Brazil)	Ukrainian
Catalan	Hebrew	Latvian	Portuguese	Urdu
Chinese (Literary)	Hindi	Lithuanian	(Portugal)	Uyghur
Chinese	Hmong Daw	Macedonian	Punjabi	Uzbek (Latin)
Simplified	Hungarian	Malagasy	Queretaro Otomi	Vietnamese
Chinese	Icelandic	Malay	Romanian	Welsh
(Traditional)	Indonesian	Malayalam	Russian	Yucatec
Croatian	Inuktitut	Maltese	Samoan	Maya
Czech	Irish	Maori	Serbian (Cyrillic)	
Danish		Marathi	Serbian (Latin)	
Dari			Slovak	
Dhivehi			Slovenian	
			Spanish	

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Mobile App -

https://play.google.com/store/apps/details?id=com.hanuinnotech.DairyAnalytics&hl=en_US&pli=1



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About: Hanumayamma Innovations and Technologies, Inc.

Hanumayamma Innovations and Technologies Inc. is a world-renowned company that prides itself on creating innovative products that serve the agricultural industry. Our groundbreaking solutions, including Agriculture Analytics, Dairy Analytics, Specialty Crops Analytics, and a Wearable Veterinary Sensor (CLASS 10) specifically designed for animal husbandry, have revolutionized the industry. Additionally, our Data Analytics (DnA) platform is exclusively built for farmers across the world, providing actionable recommendations on Yield Analytics, pricing models, economic sustainability, extreme weather recommendations, and food security.

Our Data Science and Analytics platform delivers unparalleled insights related to Crop Yields, Commodity pricing, Fertilizer Use, Organic Specialty Crops, Profit maximization, and exclusive recommendations for small farmers. At the heart of our platform is the goal of ensuring food security by integrating economic and energy linkage models using crops, macroeconomics, supply chain, and pricing. Our platform includes heuristics at the farm level and small farm manufacturer level, delivering linear heuristics to optimize the maximum yield at the farm level.

We are committed to providing exceptional service and products to farmers across the globe. Our innovative solutions have disrupted the agricultural industry, and we are excited to continue revolutionizing it.

At Hanumayamma, we take pride in being designers, developers, and manufacturers of advanced climate-smart sensors. Our sensor algorithms are built using CMIP6 (Coupled Model Intercomparison Project Phase 6) Shared Socio-economic Pathways (SSP) climate change scenarios, ensuring that our sensors are equipped to withstand weather and environmental pressures. Our Dairy Sensor is extensible to capture CO₂, Methane, and provide carbon engineering at Dairy Farms worldwide.

Small and marginal dairy farmers are a crucial part of the global farming community. There are approximately 570 million farms worldwide, with the majority being small farms, as per the Food and Agriculture Organization (FAO). The International Farm Comparison Network (IFCN) estimates that there are around 133 million dairy farms globally. Despite being a significant source of income for small dairy farmers, they often face challenges regarding cattle productivity and health issues. Interestingly, cattle rumination counts could be the solution to these issues, not only for small farmers but also for the world at large. We take pride in democratizing advanced data science to small and marginal farmers worldwide.

Our algorithms address Methane emissions and global climate change by overlying cattle activity data, rumination data, and ambient weather data to provide exclusive recommendations to small farmers to reduce methane emissions. Livestock, including dairy cattle, contributes around 14.5% of global greenhouse gas emissions. With 70% and above small dairy farmers across the world, we are disrupters that tackle climate change at its origin. Cattle rumination count is also related to methane emissions,

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as cows release methane gas during the digestive process, especially during rumination. Methane is a potent greenhouse gas that contributes to climate change. I am really thrilled to let you know that Hanumayamma has successfully deployed sensors in Jammu and Kashmir under the auspices of the Governor of Kashmir, with an immediate market of \$92.5 million USD. This success puts Hanumayamma at the cusp of breaking into massive expansion worldwide to solve dairy productivity, reduce methane emissions, and improve global climate mandates for countries across the world.

Our holistic Climate Smart Analytics and Carbon Engineering capabilities make us a future-ready company with a vision for the year 2100. Since our inception, we have been pioneers in the adoption and development of new software architectures, climate models, pricing models, mathematical models, heuristic models, tools, business processes, requirements management techniques, IT strategies, and performance improvement and management techniques. Our standardized architecture, tools, and processes cut expenses by promoting predictable results and minimal coding work, enabling us to deliver exceptional products and services to our clients.

At our organization, we place a strong emphasis on fostering creativity and encouraging our employees to develop new capabilities. Through our organizational mindset that rewards novel ideas, we strive to improve agricultural productivity across the world. Our highly skilled employees and creative management team are dedicated to meeting the evolving business demands of our customers.

Our corporate operating guidelines are designed to promote a culture of innovation, where employees are empowered to explore new possibilities and push the boundaries of what is possible. We are committed to providing an environment that supports us.



Thank you.

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