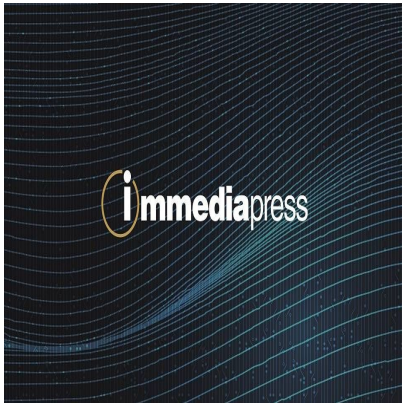




Generative Bionics to build Europe's largest Physical AI Data Factory and advance European humanoid sovereignty with AMD AI infrastructure

Descrizione

COMUNICATO STAMPA - CONTENUTO PROMOZIONALE

Strategic plan to build three-node Physical AI Data Factory network starting with new 5,000-square-metre hub in Italy to connect real-world robot learning, digital-twin simulation and AMD Helios's infrastructure, accelerating industrial humanoid deployments on the continent.

Key Highlights

MILAN, Oct. 21, 2026 /PRNewswire/ - Generative Bionics, a deep-tech company developing humanoid robots for industrial applications, today announced at CES Unveiled Milan its plan to build a proprietary, multi-site Physical AI Data Factory designed to move humanoid robotics from laboratory demonstrations to reliable industrial deployment and to advance European humanoid sovereignty, ensuring that the data, models and know-how behind Europe's industrial humanoids are generated, trained and validated on the continent.

The first 5,000-square-metre hub, planned for Italy and scheduled to be operational by Q4 2027, will be followed by a second facility elsewhere in Europe and a third serving global markets. Together, the three facilities will reproduce real industrial environments, generate high-fidelity physical data and connect that data with large-scale digital-twin simulation.

Large language models learn from vast amounts of information available online. Humanoid robots have no comparable source of data on how to act in the physical world. The Data Factory will create it by collecting data as GENE.01 performs industrial tasks and expanding those experiences through digital-twin simulations powered by AMD compute.

Building on the companies' strategic technology collaboration, AMD will be Generative Bionics' AI infrastructure partner and the Data Factory network will be powered by AMD Helios's. Its rack-scale architecture will provide the compute foundation to process physical and synthetic data, train

Physical AI models and run thousands of digital-twin scenario variations in parallel.

The Data Factory will connect real-world robot operations, simulation and AI development in a continuous real-to-sim-to-real cycle. It will allow Generative Bionics to configure and validate GENE.01 for specific industrial environments before customer deployment, then feed data from deployed fleets into future training cycles.

Physical AI Data Factory for Industrial Deployment

Industrial humanoids must learn from the conditions they will encounter at work. This requires data that captures contact, force, motion, proximity, temperature, task constraints and human interaction in realistic operating environments. For GENE.01, the dataset will include vision and motion data as well as signals captured through its full-body multimodal skin.

At 5,000 square metres, the first Data Factory hub is set to become Europe's largest Physical AI training facility for humanoid robots. It will reproduce environments selected with industrial partners and allow fleets of GENE.01 robots to perform tasks continuously in real-world conditions. These operations will generate high-fidelity physical data for training World Action Models and validating the complete robot system, including perception, control, safety behaviour and task execution, before deployment at customer sites.

Each physical environment and robot configuration will also be recreated as a digital twin. The same tasks can then be repeated across thousands of variations in layout, objects, materials, operating conditions and failure modes that would be impractical to reproduce physically. Models trained and tested in simulation will be deployed back to the robots for validation, while data from physical operations will feed the next training cycle.

AMD Helios's Infrastructure for Physical AI

As part of the planned collaboration, Generative Bionics intends to leverage AMD high-performance AI computing infrastructure to support the development of its Physical AI Data Factory network. The infrastructure is expected to provide the scalable compute capabilities needed for AI model training, processing physical and synthetic data and running digital-twin simulations. Generative Bionics will co-locate robotics, AI and data-engineering teams with the infrastructure to manage the pipeline from raw multimodal robot data to AI-ready datasets, validated models and deployment on robot fleets. The Data Factory will therefore connect physical environments, data engineering, simulation, model training and fleet deployment across a shared multi-site infrastructure.

"We are replicating the world, physically and digitally, to train humanoid robots at scale before they ever enter it," said Daniele Pucci, CEO of Generative Bionics. "The Physical AI Data Factory is how we do it: fleets of GENE.01 learn from real industrial work, we stress-test those skills across thousands of digital-twin variations on AMD compute, and we return validated World Action Models to the field. This is the infrastructure that enables the Action Intelligence layer of Physical AI in real customer environments. With AMD at our side since day one, on board GENE.01 and now at the heart of the Data Factory, we are building this network here in Europe, so that the data, the models and the infrastructure behind our industrial humanoids are developed and operated on the continent."

“Physical AI represents an exciting opportunity to bring the power of AI into the real world, creating new possibilities for automation and industrial innovation,” said Keith Strier, SVP, Global AI Markets at AMD. “With AMD Helios™ powering Italy’s first Physical AI Data Factory, we are providing scalable, high-performance computing infrastructure needed to turn that potential into reality. Our collaboration with Generative Bionics marks an important step in advancing European AI and industrial sovereignty, enabling the development and deployment of next-generation intelligent robotics applications while strengthening Europe’s capacity to innovate.”

About Generative Bionics

Generative Bionics is an Italian deep-tech company specialising in the development of humanoid robots powered by Physical AI. It combines advanced robotics, artificial intelligence, biomechanics and design to build humanoid platforms engineered to operate safely and reliably in complex industrial environments, while keeping people at the centre of the development process. Its solutions help improve safety, ergonomics and operational continuity, and are designed to integrate into existing production processes without requiring dedicated infrastructure. Generative Bionics raised ~70 million in a seed round led by CDP Venture Capital, with participation from AMD Ventures, Duferco, Eni Next, RoboIT and Tether, to support the development of a new generation of human-centred Physical AI for industrial applications.

Media Contacts

Ruder Finn: RFGenerativeBionics@RuderFinn.com Generative Bionics Press Office: press@gbionics.ai

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