

# Gemini 5

*Real-time based management system*



# Introducing Gemini 5

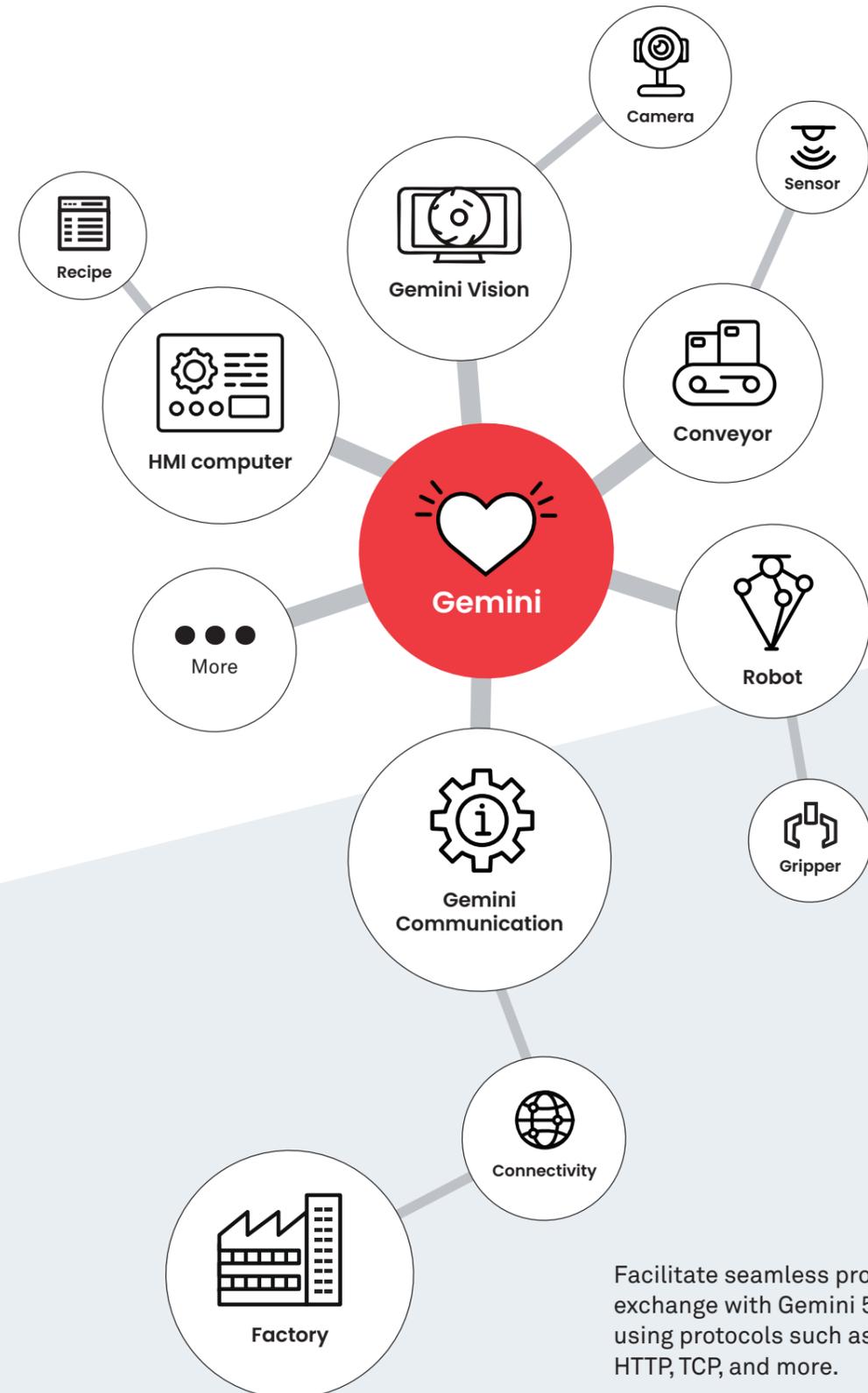


*The Demarex real-time operating system optimizes perfectly your delta robots application productivity. Our controller placed right at the heart of the machine ensures an unparalleled accuracy and precision in synchronizing the actions required for the perfect handling of your products. Experience the seamless synergy that elevates the excellence of your products handling process. All these in a user-friendly interface.*

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Seamless data exchange with Gemini 5

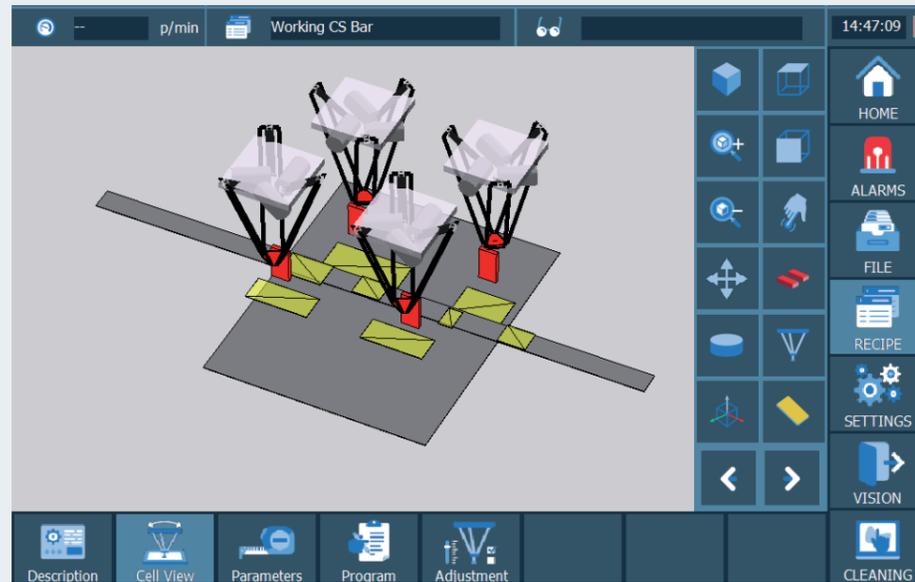
## Line management system



Facilitate seamless production data exchange with Gemini 5 Communication using protocols such as OPC UA, MQTT, HTTP, TCP, and more.

## Technical specification

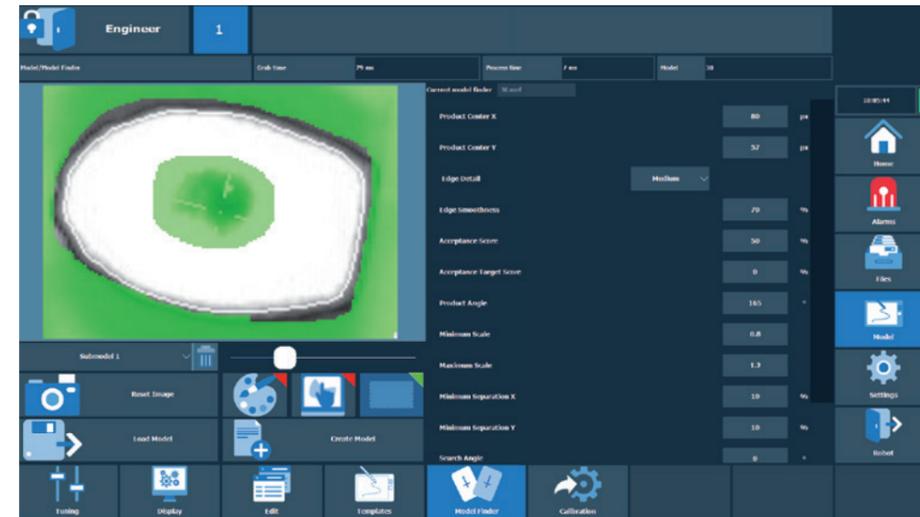
# Gemini 5



<b>Continuous evolution</b>	<ul style="list-style-type: none"> <li>Dedicated to enhancing hardware and software platforms since 2002</li> </ul>
<b>User-friendly innovation</b>	<ul style="list-style-type: none"> <li>Maximizing user-friendliness and minimizing changeover times</li> </ul>
<b>Pinnacle of technology</b>	<ul style="list-style-type: none"> <li>Latest software controlling Delta robotic machines, encompassing all Gemini 4.0 features</li> <li>Engineered for fifth-gen hardware platform (G5)</li> <li>Industry-standard components, linked via EtherCAT Fieldbus</li> </ul>
<b>Flexible application management</b>	<ul style="list-style-type: none"> <li>G5 hardware: Exceptionally flexible and standardized</li> <li>Supports granting different user rights for operator inputs through the HMI</li> </ul>
<b>Real-time 3D visualization</b>	<ul style="list-style-type: none"> <li>Provides real-time 3D visualization of robot behavior</li> </ul>
<b>Simulation capabilities</b>	<ul style="list-style-type: none"> <li>Conduct simulations directly on the HMI revealing the precise real-world product's manipulation</li> </ul>
<b>Cutting-edge technology</b>	<ul style="list-style-type: none"> <li>Representing 30 years of Demarex expertise</li> <li>User-friendly interface prioritizes intuitiveness and simplicity</li> </ul>
<b>Easy revive</b>	<ul style="list-style-type: none"> <li>Recipe-backups galore, hardware hocus-pocus, and a one click wonder</li> </ul>
<b>User-centric design</b>	<ul style="list-style-type: none"> <li>Tailor your experience with the ability to integrate extra controls</li> </ul>

## Revolutionizing quality control with ease

# Gemini Vision



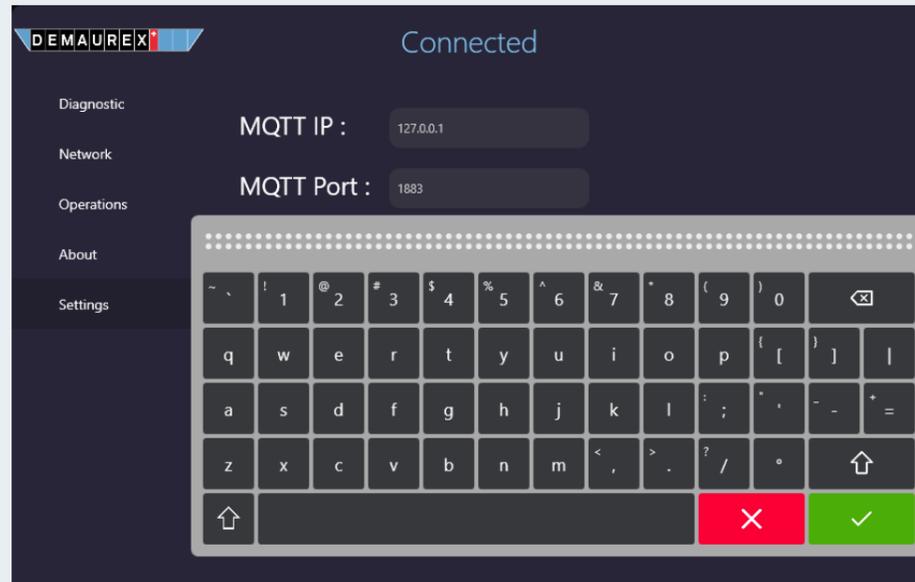
See the future of quality control:

## Effortless. Intelligent. Adaptive.

<b>Purposeful innovation</b>	<ul style="list-style-type: none"> <li>Developed internally to replace previous applications</li> <li>Designed to seamlessly integrate with Gemini 5</li> </ul>
<b>Key requirements met</b>	<ul style="list-style-type: none"> <li>Easy Setup: Facilitates a wide range of quality controls effortlessly</li> <li>HMI Control: Fully controllable from the HMI computer for enhanced accessibility</li> <li>User-Friendly Maintenance: Simplifies updates, maintenance, debugging, and adaptations</li> <li>Advanced 3D Treatment: Incorporates cutting-edge 3D processing capabilities</li> </ul>
<b>Enhanced vision models</b>	<ul style="list-style-type: none"> <li>Restructured for improved user-friendliness</li> <li>Maintains the same communication standard for adaptability to machines predating Gemini 5</li> </ul>

Streamlined connectivity for seamless operations

# Gemini Communication



### Gateway efficiency

- Gateway software built on the Gemini Communication application
- Contains all necessary data for server or client creation and execution operations

### Intuitive control with Gemini Communication HMI

- Designed as the brain for updates, addition of operations, and network expansions
- Configuration updates in Gemini Communication HMI eliminate the need for restart upon machine restart

### Mqtt broker integration

- Facilitates communication between Gemini Communication and Gemini Communication HMI
- Allows simultaneous openings of Gemini Communication HMI on the machine network, enhancing accessibility (e.g., on your PC connected to the machine network or Ewon)

### User-led sensor customization

- With Gemini 5, you have the freedom to easily add and configure proximity sensors, ensuring your system evolves with your needs.

## Innovate with Demarex

# The robotic advantage

Since 1995, Demarex has led the charge in robotics, introducing the Delta robot and evolving into a top-tier pick & place system manufacturer. From handling packaged products to intricate packaging elements, we offer cutting-edge robotic cells and integrated cartoning systems.

Part of the Rotzinger Group since 2018, Demarex boasts a 28-year legacy, with real-time based management at the core. Thousands of our robots worldwide, specially in the USA, showcase the efficiency and precision that define Demarex.

Embark on a journey with Demarex – where innovation meets reliability, and the future of robotics unfolds. Welcome to a world where precision is not just a promise; it's our expertise in motion.



Embark on a journey:  
Get to know Demarex now



Click or scan

# Core competences

Demaurex manufactures and controls all the key robot components.

### Machine Vision

- Camera
- Optics
- Lighting



### Flow Management

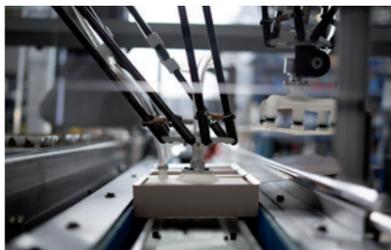
Control and balance of the infeed and the outfeed

### Cell Control Software

Precision management for industrial automation



### Delta Robots



### End Effectors

- Design
- Air management
- Product behaviour
- Application knowledge

### Standard Cells

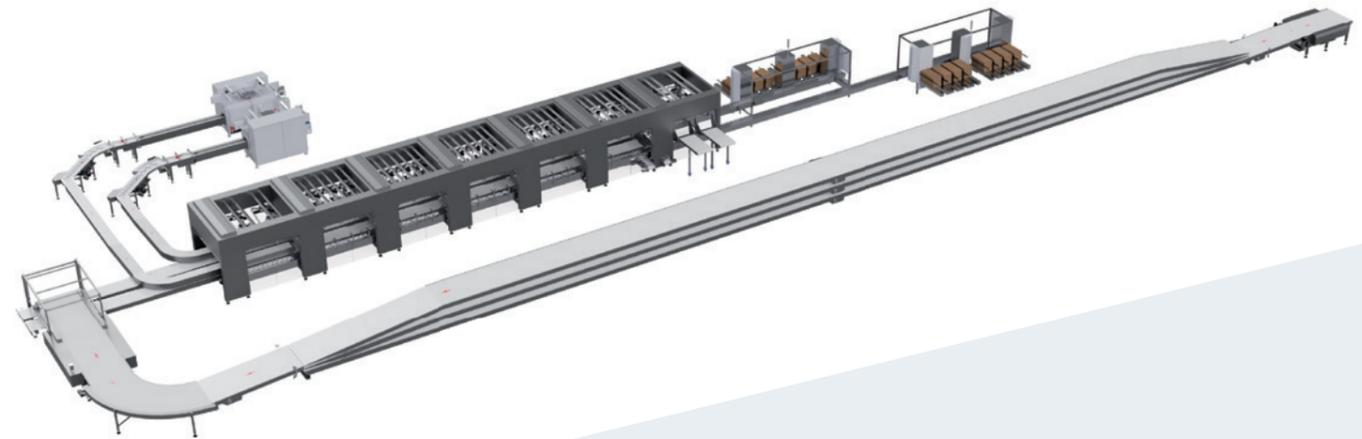
Four standard platforms



# Covered functions

Discover the power of Gemini across multiple functions.

*Our machine line control platform, offers a range of powerful functions that enhance efficiency and performance. Whether you are in the food industry, confectionery, or packaging, Gemini has you covered.*



### RLM line management

Optimize resource allocation, monitor throughput, and ensure seamless coordination across multiple lines.

### Denester solutions

Enhance precision, speed, and reliability in handling delicate products.

### Box forming and closing excellence

From intricate shapes to consistent patterns, our platform ensures excellence in product formation and closing.

### Robotic operations

Full-scale control over robotic elements in your workflow.

### Advanced gripping

Multi-pick control with Intelligent grouping.

# We are here to care

*By investing in Gemini 5 from the Demarex, you benefit from our fast, uncomplicated, and highly professional service. This applies not only in the short term, but over the entire service life of your system. We love to communicate fast and reliably, by phone, email or simply by using the QR code on the right.*



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## Life cycle service

The way to continuous improvement and maximum performance and availability throughout the life of your system.

## Helpline and remote & on-site support

We support you 24 hours a day with our telephone hotline and remote support. In addition, our worldwide service team is happy to support you.

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## Inspection & maintenance

Gain more safety with regular maintenance. We ensure high productivity and a long service life for your system.

## Spare & wear parts

We guarantee our customers the supply of high-quality and reliable original parts.

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## Condition analysis

We analyze and check your system in every detail. We identify possibilities to increase performance.

## Training & advice

Our knowledge - your profit. Together, we will exploit the full potential of your system.

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Contact us.