

The development tools are and will always be free. A **fully functional 2-hour demo version** is provided for various platforms for free. For actual pricing of target licenses see our web page or contact us. REXYGEN is developed and maintained by REX Controls s.r.o, Czech Republic.

[www.rexcontrols.com](http://www.rexcontrols.com)

REXYGEN for Windows and Linux

[www.rexygen.com](http://www.rexygen.com)

# REXYGEN

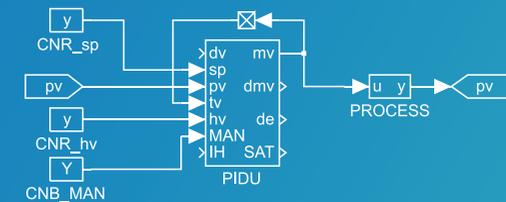
## Essential Tool for Automation

REXYGEN is a highly customizable real-time control software that merges advanced algorithms with simplicity.

REXYGEN turns your hardware device into real-time automation controller, communication gateway, data logger or single-purpose specialized device.

REXYGEN has been developed for 25 years.

[www.rexygen.com](http://www.rexygen.com) / [info@rexygen.com](mailto:info@rexygen.com)

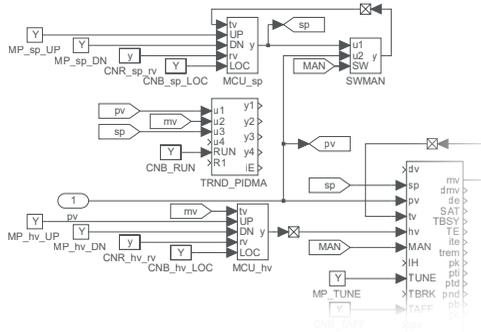


Just like oxygen in nature, REXYGEN is the essence of life for your devices and machines in the world of automation.



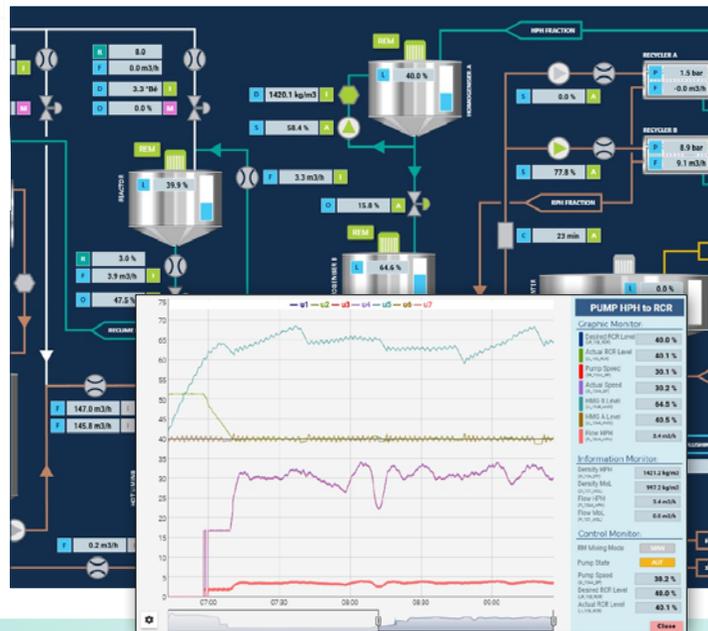
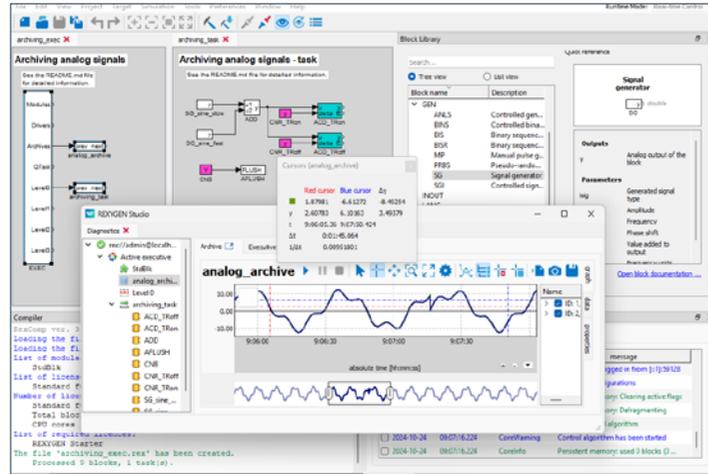
REXYGEN is an essential tool for automatic control of processes, machines, robots and mechatronic devices. Its advantages will be appreciated especially when developing advanced control algorithms for complex systems in the rapid prototyping phase.

REXYGEN Studio is the main development tool of REXYGEN ecosystem. It allows you to develop your algorithms, configure input/output signals, compile your project and transfer it to any device powered by REXYGEN Runtime. Ranging from simple algorithms to large-scale industrial control systems, from simple logic operations and timers to signal filtering, PID control and beyond, the engineer's needs are covered. Detailed diagnostics using either live or archived data is always available to fine-tune your projects.



## Development Tools

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## REXYGEN Runtime

REXYGEN Runtime is the cornerstone of an automation device. Running on top of the operating system, it coordinates the execution of all algorithms. It also provides access to input and output signals of the platform through the modular system of drivers.

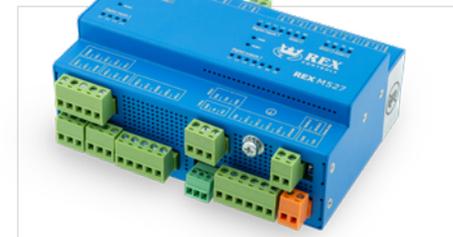


## Function Blocks

Results of research and development in control and automation are integrated in function blocks. Today, we have more than 500 of them. Function blocks run at native code speed on the control device.

## Communication Protocols

Modbus TCP, Modbus RTU, EtherCAT, CAN and CANopen, OPC DA and OPC UA, MQTT, MAVLink and others are natively supported industrial and IoT protocols. Communication with Omron and Siemens PLCs is provided. Direct connection to SQL databases is available.



## Supported Platforms

REXYGEN has been ported to various operating systems or even bare metal hardware. Currently, we are also focusing on GNU/Linux with real-time preemption patch which proves to be a solid base even for advanced solutions.

REXYGEN Runtime runs on various hardware platforms from the smallest ones to high-performance industrial PCs. Weidmüller M3000/M4000, Monarco HAT, REX M527, Unipi Patron and Iris, and others, are natively supported.



## Simple Human-Machine Interface

REXYGEN contains a built-in webserver to provide Human-Machine Interface, turning the automation device into an all-in-one solution. The HMI for desktop, tablet or smartphone can be automatically generated or manually designed. The framework relies on HTML5 and works in all common browsers on Windows, macOS, Linux, iOS and Android.

