Technical specification · v1.0 · 20 October 2026

AI energy-peak management for production

AI energy-peak management forecasts tomorrow's load for each large consumer in your plant from the production plan, past metering and the weather, next to the day-ahead power price. It works out which loads can move, such as preheating an oven, filling the compressed-air receiver or a batch press run, builds tomorrow's schedule within your production limits and shows what it saves. During the day it warns when the 15-minute average power is heading over your limit.

Pilot	Build from	Licence a month
€7,200	€32,000	€1,200

Purpose	Forecasts a production site's electrical load and the day-ahead power price, schedules flexible loads and storage to lower peaks and cost within production limits, and warns before a demand limit is passed.
AI area	Machine learning: time-series forecasting of load and price, and optimisation of the load schedule.
Production process	Production planning: scheduling of energy-intensive process steps (ovens, presses, compressors, chillers) within the production plan.
Inputs	15-minute or hourly metering for the site and its sub-meters; states of ovens, presses and compressors from the PLC; the production plan and deadlines; Nord Pool day-ahead prices; the weather forecast; your tariff and power limit.
Outputs	Next-day load forecast for each consumer and the site, with a range; tomorrow's schedule and its cost against a normal day; peak alerts; optional setpoints or on/off signals to the PLC after approval; a monthly energy report.
Models and approach	Gradient-boosted decision trees forecast the load, with the production plan, calendar and weather as features, retrained weekly on new data. A mixed-integer optimiser builds the schedule, with temperatures, pressures, deadlines and the power limit as hard constraints. A real-time check compares the 15-minute average with the limit.
Accuracy validation	Forecast error (MAPE and peak error) on held-out weeks of your own data; savings measured against a baseline of comparable days before implementation, from your metering, and reported every month.
Hardware	None to start with the main meter's data; for each consumer separately, DIN-rail energy meters with Modbus and a gateway; optional PLC outputs or relays for switching.

Integrations	Meters over Modbus TCP or RTU, M-Bus or pulse outputs; PLC and SCADA over OPC UA or Modbus TCP; MQTT; Nord Pool prices; MES or ERP (Rivilė, B1, Business Central, Odoo) through APIs or import files; batteries and building management systems; CSV and the REST API; alerts to Microsoft Teams, email or SMS.
Hosting	Two options: our cloud on servers in the EU, or on-premises on a server at your plant, with nothing leaving the plant but service metrics. Daily backups kept for 30 days; TLS in transit, encryption at rest.
Languages	Interface in Lithuanian and English.
Limits	Up to 50 metered loads per site. It plans what your process allows to move and does not change process recipes. Automatic switching only for the loads you approve, and always through your PLC.
Access	Sign-in with Microsoft Entra ID or Google, or local accounts for shared screens on the shop floor. Roles: operator, lead (quality, maintenance or production), administrator. Activity log of every confirmation and change.
Human oversight	The production lead approves every schedule; automatic switching can be turned off at any time and never overrides a safety function.
Support	Business days 8:00–17:00 Vilnius time, remote; critical faults answered within 4 business hours; availability target 99.5% a month for the cloud part.
Delivered as	A standard product under licence, configured for your line, with its models adapted to your data. It is not software or an AI model developed to your order.