



GP ONE Green – Overview

GP ONE Green is the specific software for monitoring the **energy consumption** and the **CO₂** of machine tools, industrial plants, production lines, compressors, pumps and other machinery, offering users the possibility of analyzing data to improve operational efficiency and support sustainability initiatives.



MAIN FUNCTIONS:

- **Energy Monitoring** - Real-time tracking of machine energy consumption.
- **CO₂ Emission Calculation** - Estimation of CO₂ emissions based on energy usage.
- **Production Efficiency Analysis** - Correlation between energy consumption and production performance.
- **Integration with MES-ERP Systems** - Seamless data exchange with manufacturing and enterprise management systems via OPC UA server.
- **Custom Dashboards & Reports** - Visualization of energy data through interactive dashboards.
- **Machine Connectivity & Data Logging** - Integration with CNC machines and data storage for analysis and multi-protocol integration.

MAIN HARDWARE COMPONENTS:

- **Industrial Router** - Ensures secure and reliable connectivity between CNC machines and the GP ONE Green platform.
 - **Energy Meter (Series MID)** - Measures the electrical consumption of connected machines with high accuracy.
 - **Current Transformers (CTs)** - Capture electrical current data from machine power lines for energy monitoring.
 - **PC Box** - Industrial-grade computer for data processing, storage, and communication with the GP ONE Green platform.
 - **Optional SIM Card Integration** - A SIM card can be added in the router to ensure remote connectivity in locations.
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GP ONE Green – Suggested Energy Saving functions

Features not included

- Programming of automatic shutdown of lighting
- Standby mode for CNC monitor
- Control of chip conveyor belt or auger (*if provided in the machine*)
- Programmable fairing washing (*if available*)
- Timed management of the fume extractor (*if available*)
- Automatic shutdown *in case of doors open for more than 2 min*
- Automatic shutdown *of the main services*
- Automatic shutdown of the machine tool (*with dedicated hardware kit*)

Note: *The development of the saving functions on the machine is responsibility of the client.*
