Technical Specifications

- Supply voltage: 5 V DC
- Max power consumption: 1W
- Operating temperature: 0°C to +40°C
- Protection class: IP20 - Indoor use only
- Wireless: IEEE 802.11 b/g/n 2.4 GHz

Important Safety Information

- Indoor use only.
- Install and operate the device only in a dry location.
- Protect the device from moisture, water, condensation, and rain.
- Do not expose the device to direct sunlight or excessive heat.
- Operate only with a regulated 5 V DC power supply.
- Do not cover the enclosure during operation. Ensure adequate ventilation.
- When closing the enclosure, ensure that the ventilation slots are positioned directly above the chip.
- Keep out of reach of children.
- Do not open the enclosure while the deviceit is connected to power.
- Do not manipulate, alter, or try to repair the device.

Before proceeding, ensure that the device is correctly assembled. Verify that the circuit board is properly seated inside the enclosure, the lid is installed in the correct orientation, and the power cable is securely connected.

1) insert chip

2) close lid

3) plug in 5V power cable

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1. Start the device

Power the Autarkus Energy Manager and wait until the setup access point is available. If the device has no valid Wi-Fi configuration, it opens the local

setup network automatically.

Setup access point:

- Wi-Fi name: **Autarkus-Setup**
- Setup page: http://192.168.4.1
- Password: **autarkus**

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2. Connect the device to Wi-Fi

Open http://192.168.4.1 while connected to Autarkus-Setup.

On the Wi-Fi setup page:

- Tap "Scan Wi-Fi".
- Select the local 2.4 GHz Wi-Fi network, or enter the SSID manually.
- Enter the Wi-Fi password.
- Confirm the connection.

Only 2.4 GHz Wi-Fi networks are supported. After a successful connection, the setup access point is closed automatically and the device becomes reachable in the local network.

Main local address: http://autarkus.local

If mDNS is not available on the client device, use the IP address shown by the setup page after the Wi-Fi connection succeeds.

3. Create the local admin password

Open http://autarkus.local. On first use, the app asks for a local admin password.

Important:

- The password must have at least 8 characters.
- The app runs locally only.
- The admin password cannot be recovered. If it is lost, a factory reset is
- required and all settings must be entered again.

4. Accept the safety disclaimer

Before automatic mode and switching commands are enabled, the safety disclaimer must be confirmed in the web interface. Until this is done, the app remains locked for automation and external switching commands.

5. Choose and configure the power data source

Open the dashboard and go to the data source / meter configuration area.

Supported data sources:

- Shelly 3EM / Shelly 3EM Pro
- IR reader head with Tasmota smart meter script
- Energy Live
- Fronius Symo Gen24

Shelly 3EM / 3EM Pro:

- Search automatically on the local network, or enter the IPv4 address manually.
- Enter username and password if the Shelly requires authentication.
- Save only after the test succeeds.

IR reader head:

- Search automatically for the Tasmota reader head, or enter its IP address.
- Select the smart meter type.
- Enter the required smart meter key when needed.
- The app uploads the matching script to the Tasmota reader head.

Energy Live:

- Enter the access number / meter ID.
- Enter the URL prefix and suffix.
- Enter the Energy Live API key.
- Save and check the connection result.

Fronius Symo Gen24:

- Search automatically, or enter the inverter IPv4 address manually.
- The app tests the Fronius API endpoint directly.
- If the app reports that the API is disabled, enable the local API on the inverter first.

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6. Add and configure loads

Loads are shown as load tiles on the dashboard. The app supports up to 10 loads.

Each load can be connected to a Shelly switching device.

For each load:

- Set a clear name.
- Enter the rated power in kW.
- Optionally set a minimum runtime in minutes.
- Assign a Shelly switching device by automatic search or manual IP entry.
- Save the configuration.

The same Shelly device must not be assigned to more than one load.

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7. Use automatic and manual mode

Automatic mode:

- The app switches loads based on available surplus power.
- Loads are switched according to their configured order.
- A load is switched on only when enough surplus power is available.
- A load is switched off when grid draw is detected, unless its minimum runtime is still active.
- The weekly schedule can limit when each load is allowed to run automatically.

Manual mode:

- Manual mode disables automatic control for that load.
- The load can then be switched on or off directly from its tile.
- Returning to automatic mode lets the app evaluate the load again based on the current surplus and schedule.

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8. Schedule and statistics

Each load has schedule and statistics controls.

Schedule:

- Configure allowed operating hours for each weekday.
- Disabled schedule slots prevent automatic switching during those times.

Statistics:

- View runtime,
- sessions,
- energy usage,

- CO2 estimate,
- and savings.

The average electricity price in Settings is used for euro savings.

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9. Reboot and Factory Reset

Use a paper clip or a SIM card eject tool to access the two recessed buttons through the openings in the enclosure lid, located below the sun symbol.

Reboot

- Briefly press the right-hand button to restart the device.

Factory Reset

- Press and hold the left-hand button for 10 seconds.
- This restores the factory settings and deletes all stored configuration data, including Wi-Fi settings and the local administrator password.
- After the reset, the device restarts in Setup Access Point mode.

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10. Settings and maintenance

The Settings area provides:

- Language selection
- Theme selection
- Switch-on delay
- Average electricity price
- Wi-Fi settings
- Admin password change
- Reboot
- Factory reset

Factory reset

- Deletes local configuration and stored credentials.
- Restarts the device in setup access point mode.
- Use this only when the device must be recommissioned.

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11. Firmware and package updates

Product updates are installed with an update.pkg package through the local web interface.

During updates:

- Keep the device powered.
- Do not close the browser until the upload has completed.
- Wait for the device to reboot and return to http://autarkus.local.

autarkus.com