



PAMEL

USER MANUAL

PRW5

Smoking process controller

Wi-Fi • Local web control • PAMEL Cloud

Documentation and support

<https://serwer.pamel.pl/>

pamel@pamel.pl

+48 453 343 360

ul. Urodzajna 5E, 42-300 Myszków



PRW5_MAN_EN | Version 1.1 | 2026-10-10

How to use this manual

This manual has two parts. The first guides you step by step without requiring technical knowledge. The second explains settings, control modes, inputs, outputs, diagnostics and safety functions.

The screenshots show the actual interface. Its Polish or English labels are explained in the text.

To...	Go to...
start the controller for the first time	Quick start - 10 minutes
use it without Internet access	Local panel - FREE
control it over the Internet	Cloud / PRO AI - PAID
change a program or stage	Programs and process logic
tune the temperature controller	Advanced section - temperature control
check probes/outputs	Testing and diagnostics
resolve a problem	Before contacting service

IMPORTANT

Closing the local or Cloud page does not stop the process. The controller runs the process. Use STOP to stop it.

Manual overview

PART A	PART B
01 Quick start for beginners	02 Safety and operating principle
03 Connections and first start	04 Local panel - every screen
05 PAMEL Cloud / CLOUDAI - every screen	06 Programs and process stages
07 Settings and temperature control	08 Alarms, testing and diagnostics
09 Advanced section	11 Before contacting service
10–13 Maintenance, support and data	Warranty terms

1. Quick start for beginners - 10 minutes

PURPOSE

This section guides you safely from switching on to running your first program. If the electrical installation is not ready, follow the Connections section first.

1. Switch on the controller	All process outputs start in a safe state. Check the probes before starting heating.
2. Connect a phone or computer	Connect to PRW5_PAMEL (no password) and open 192.168.4.1. This is local access; Internet is not required.
3. Open URUCHOMIENIE (Setup)	Assign the KOMORA (chamber) probe. If using a product probe, assign MIĘSO (meat). Warm each tip with your hand to identify the correct sensor.
4. Set up home Wi-Fi - optional	Home Wi-Fi is required for Cloud functions. PRW5_PAMEL remains available after connection.
5. Run TEST	With the process stopped, test connected components one at a time. The controller limits each test duration.
6. Select a PROGRAM	In PROGRAMY (Programs), select a category and product, then click ZAŁADUJ PROGRAM (Load program). Selecting a card alone does not start the process.
7. Click START	In the wizard, choose drying, ignition, the timing method and automatic stopping at the product temperature.
8. Respond to pauses / STOP	After a stage, the controller may wait for you. Follow the screen instructions and confirm the transition. If unsure, use STOP. After an alarm, remove its cause, acknowledge it and deliberately restart the program.

2. Safety and operating principle

Purpose of PRW5

PRW5 controls the smoking process. It manages preparation and smoking stages, reads probe temperatures, controls heating, fans, the smoke generator and lighting, and guides you through the process. The process runs in the controller; the web interface is its operating panel.

Essential safety rules

DANGER

Mains wiring and outputs present electric shock and fire hazards. Installation and alterations must be performed by a person with the knowledge and qualifications required for the installation.

WARNING

Do not bypass the chamber probe or safety functions, or force outputs outside TEST. Remote START does not bypass local checks: the controller starts only after checking the required safety conditions.

NOTICE

START requires the KOMORA probe. If the active program uses product temperature, a valid MIĘSO probe is also required.

- Process outputs are off after a cold start or reset.
- The chamber fire alarm threshold is 124°C.
- The fire alarm can be cleared only below 100°C with a valid probe reading.
- After a critical alarm, the process does not resume automatically; a new START is required.
- During pauses between stages, process outputs are off. Lighting may remain in the state selected by the user.
- Do not remove hot probes or expose probe cables to mechanical damage or direct flame.
- Do not install the controller where it is exposed to flooding, condensation or heavy dust.

3. Connections and first start

Functional overview

SENSORS / INPUTS	PRW5	OUTPUTS / INDICATORS
CHAMBER - DS18B20 MEAT - DS18B20 MEAT 2 - DS18B20 MEAT 3 - DS18B20 SMOKE INPUT (OPTIONAL) DOOR INPUT (OPTIONAL) THERMOSTAT INPUT (OPTIONAL)	control / logic	HEATER HEATER FAN DRYING FAN SMOKE 230 V SMOKE 12 V LIGHTING BUZZER - AUDIBLE INDICATOR
HARDWARE VERSION Connector appearance and position may vary between PRW5 versions. Follow the markings on your device and the diagram for that version.		

IMPORTANT: BUZZER is a built-in audible indicator, not an external load. SMOKE, DOOR and THERMOSTAT inputs are optional; enable only inputs with a sensor or contact connected.

Technical data - operating parameters

Parameter	Value / range
PRW5 probe roles	4: CHAMBER, MEAT, MEAT 2, MEAT 3
Probe type	DS18B20
Probe reading validation range	-55...150°C
Stage temperature setpoint range	20...120°C
Product temperature	0...95°C; 0 = no target
Stage time	1...5000 min
Fan	0...20; 0 = OFF; 1≈40%, 20=100%
Smoke generator	0...20
Manual power	0...100%
Fire alarm	124°C CHAMBER
Clearing the fire alarm	below 100°C + valid probe
Local AP network	PRW5_PAMEL, no password, 192.168.4.1

Electrical parameters and installation

Parameter	Rule
Power supply	Use the supply voltage and type shown on the specific PRW5 device.
Heater output	Do not exceed the ratings specified for your controller version.
Auxiliary outputs	Select loads according to the markings and documentation for your version.
Connectors	Follow the enclosure labels and the diagram for your version. Do not connect equipment using internal electronics pin numbers.
Installation	Mains connections must be made by a person with the knowledge and qualifications required for the installation.

First start - step by step

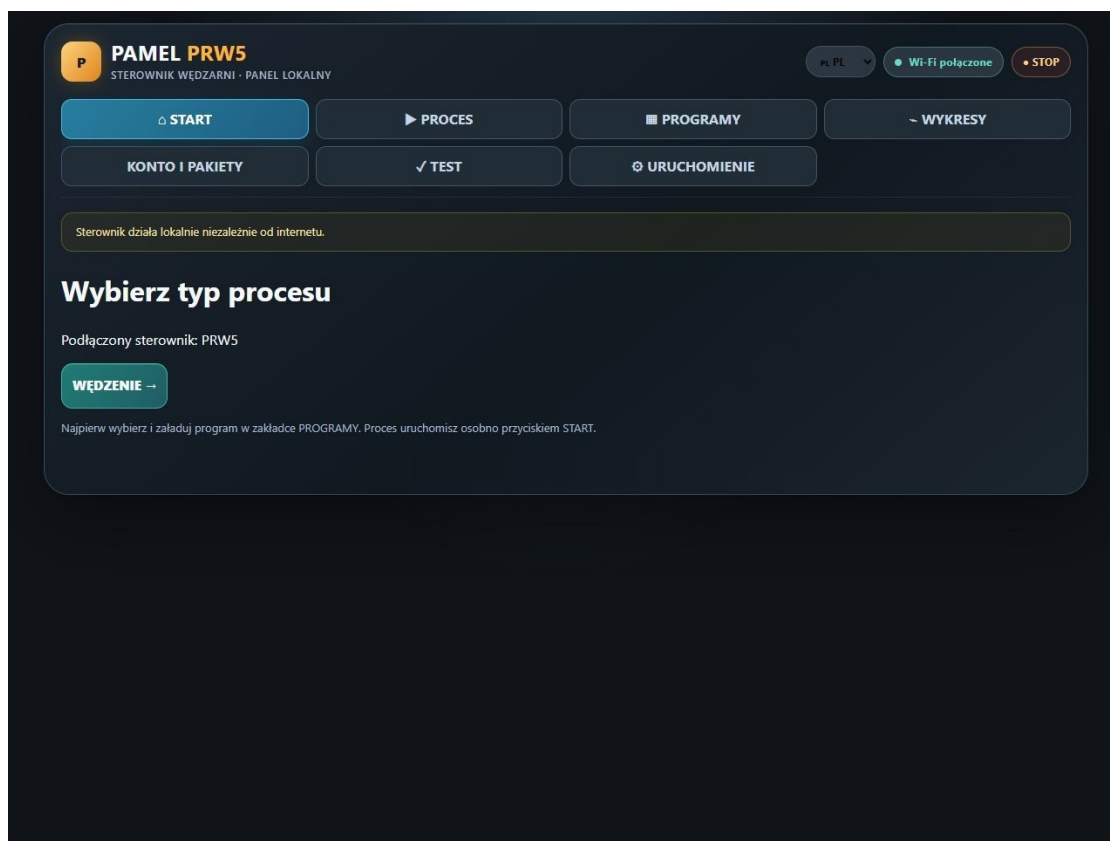
1. Before applying power, check installation and connections. Mains loads require suitable protection and cables rated for their load.
2. Switch on PRW5 without starting the process. It starts in STOP.
3. Connect your phone/computer to PRW5_PAMEL. No AP password. Open 192.168.4.1.
4. Open URUCHOMIENIE (Setup). Wait for automatic probe detection. Warm each tip individually with your hand and assign roles.
5. Check that KOMORA measures the chamber and MIĘSO measures inside the product. One probe cannot have two roles.
6. SMOKE, DOOR and THERMOSTAT inputs are optional. Enable only those with a suitable sensor/contact connected. Leave unused inputs disabled.
7. **Local PRW5 operation is free and requires no subscription. For PAMEL Cloud services, including paid CLOUD PRO AI, select your home Wi-Fi, enter its password and save. PRW5_PAMEL remains active in parallel.**
8. Open TEST and check used outputs and indicators individually. Test the heater, fans, smoke and lighting as actuators, and the buzzer separately as an audible indicator.
9. Load a program in PROGRAMY. Check its settings, return to PROCES and use START.
10. Observe the first full process with the installation empty or safely prepared, following the commissioning procedure for the heater and smoke generator.

GOOD PRACTICE

Do not leave the installation unattended during its first check. A web acknowledgement confirms command acceptance, not the load current or temperature.

4.1 Local panel - START

LOCAL = FREE. START is the entry point for local operation. The entire local PRW5 panel works without a subscription or active Cloud package; local operation needs no Internet.



4.1 Local panel - START

What you see and can do

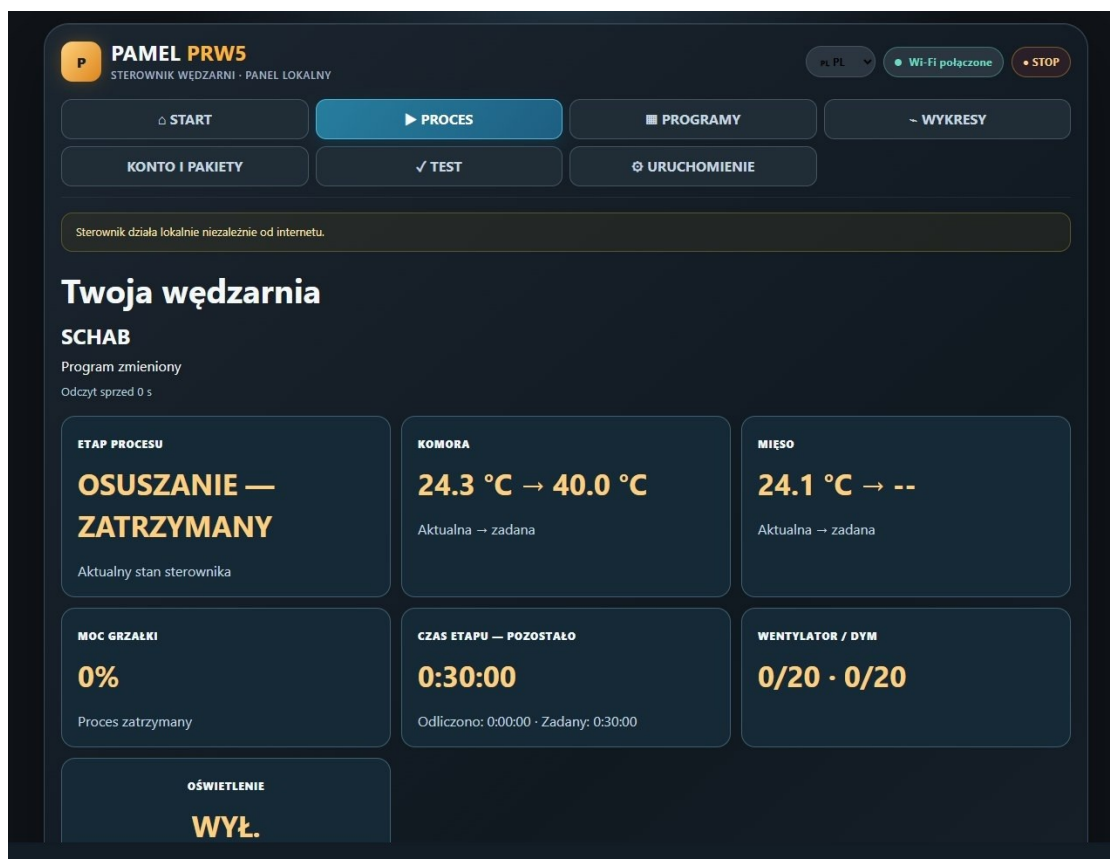
- The top bar shows model, language, Wi-Fi and device status.
- The local menu has seven entries: START, PROCES (Process), PROGRAMY (Programs), WYKRESY (Charts), KONTO I PAKIETY (Account and packages), TEST and URUCHOMIENIE (Setup).
- WĘDZENIE (Smoking) opens the current process.
- **LOCAL = FREE.** The local panel and basic PRW5 control need no subscription or active Cloud package.

REMEMBER

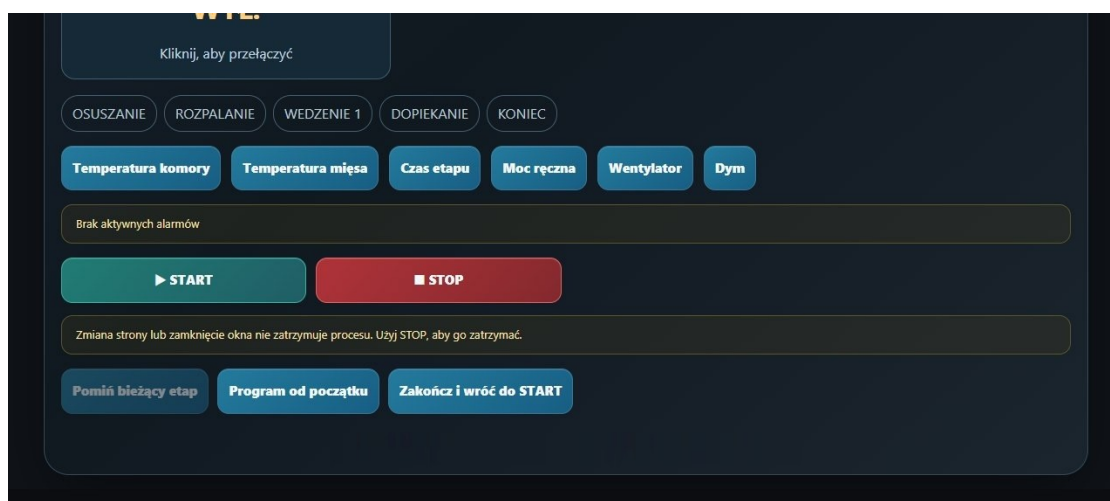
Changing tabs or closing the browser does not stop the program.

4.2 Local panel - PROCES (Process)

The main operating screen shows the actual controller state, current stage and values needed during smoking.



4.2 Local panel - Process - view 1



4.2 Local panel - Process - view 2

What you see and can do

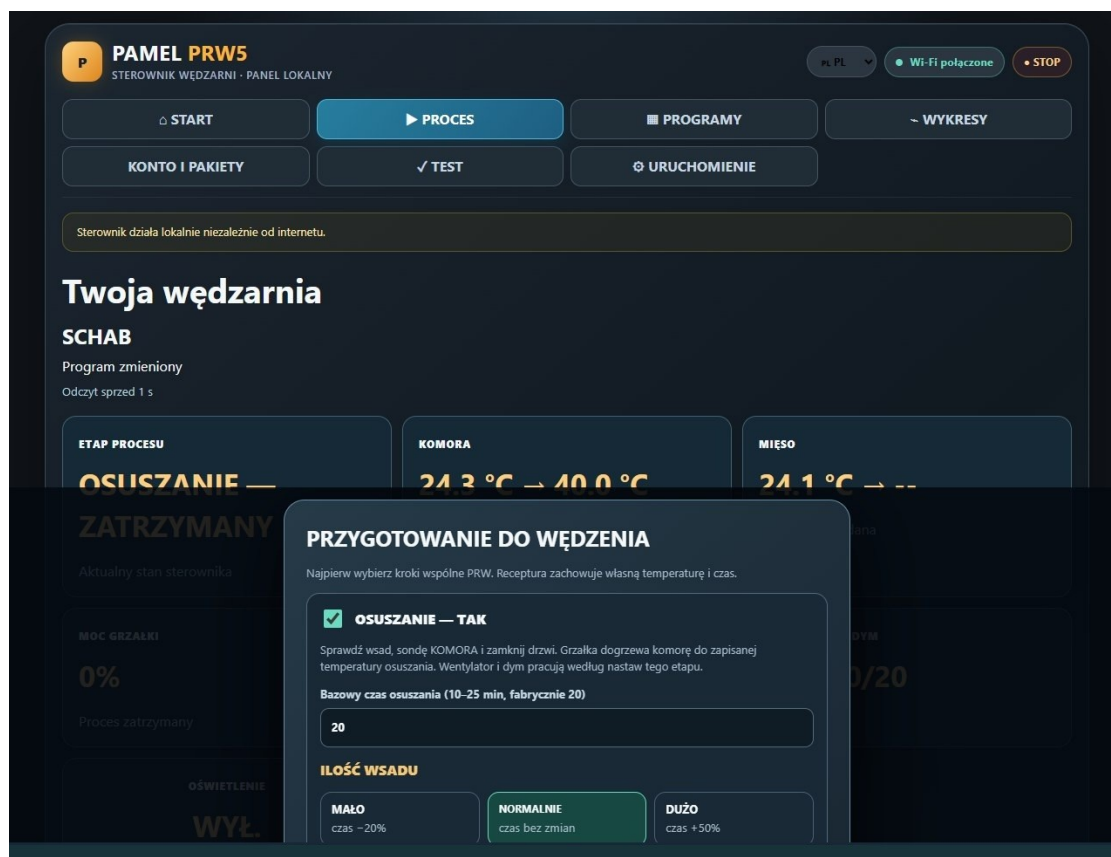
- **PROCESS STAGE:** stage name and state (running / waiting / stopped / alarm).
- **CHAMBER:** current temperature and setpoint.
- **MEAT:** current temperature and product target, if enabled.
- **HEATER POWER:** current output demand and reason for heating/switching off.
- **STAGE TIME:** remaining, elapsed and set time; while waiting it may show "Not started".
- **FAN / SMOKE:** current levels 0–20.
- **LIGHTING:** separate ON/OFF tile.
- The stage timeline shows completed, current, waiting and skipped stages.
- Quick buttons edit the current/waiting stage without resetting elapsed time.
- Skip current stage is a separate action requiring confirmation.

PAUSE BETWEEN STAGES

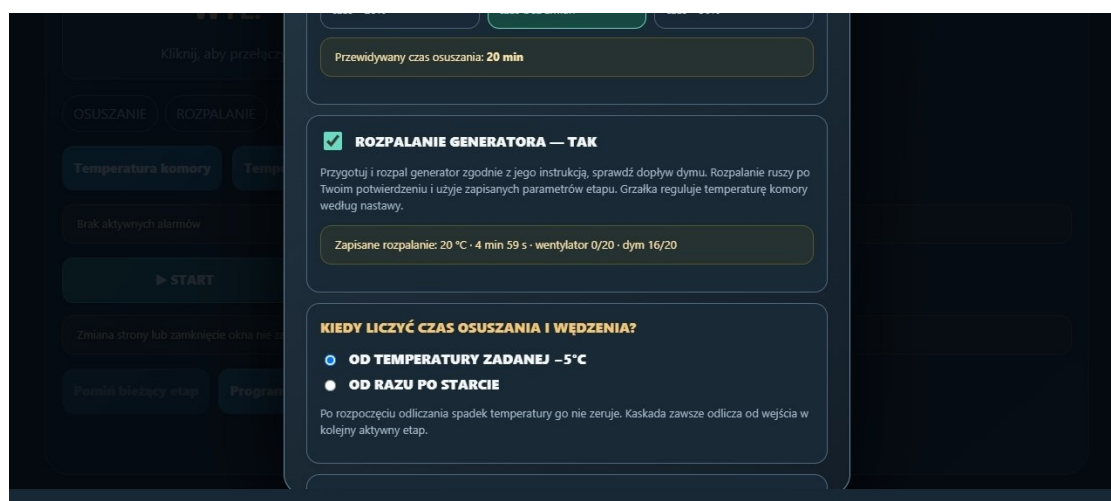
While waiting for confirmation, the heater, drying fan and both smoke outputs are off. The screen distinguishes the completed and waiting stages.

4.3 START wizard - preparing to smoke

Before starting a standard program, PRW5 opens a preparation wizard. Select the preparation stages to use.



4.3 START wizard - view 1



4.3 START wizard - view 2

What you see and can do

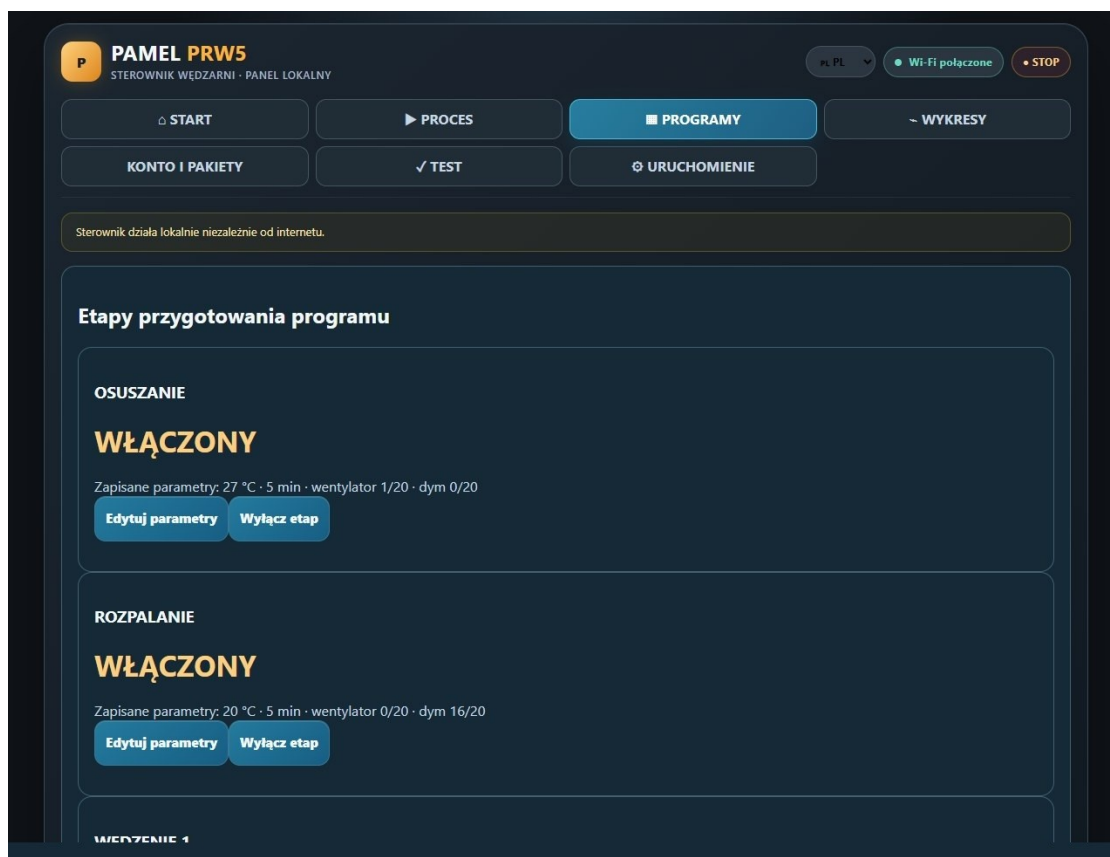
- DRYING: enable/disable. Base time 10–25 min; factory setting 20 min.
- Load size: SMALL reduces calculated time by 20%, NORMAL leaves it unchanged, LARGE increases it by 50%.
- Drying heats the chamber to its setpoint. It is not a fan-only stage.
- GENERATOR IGNITION: a separate, optional stage with editable settings.
- Timing: immediately or after reaching temperature; temperature-based timing starts at setpoint –5°C.
- Once timing starts, a later temperature drop does not reset it.
- Product-temperature AUTOSTOP can be disabled if no product probe is used.

CASCADE

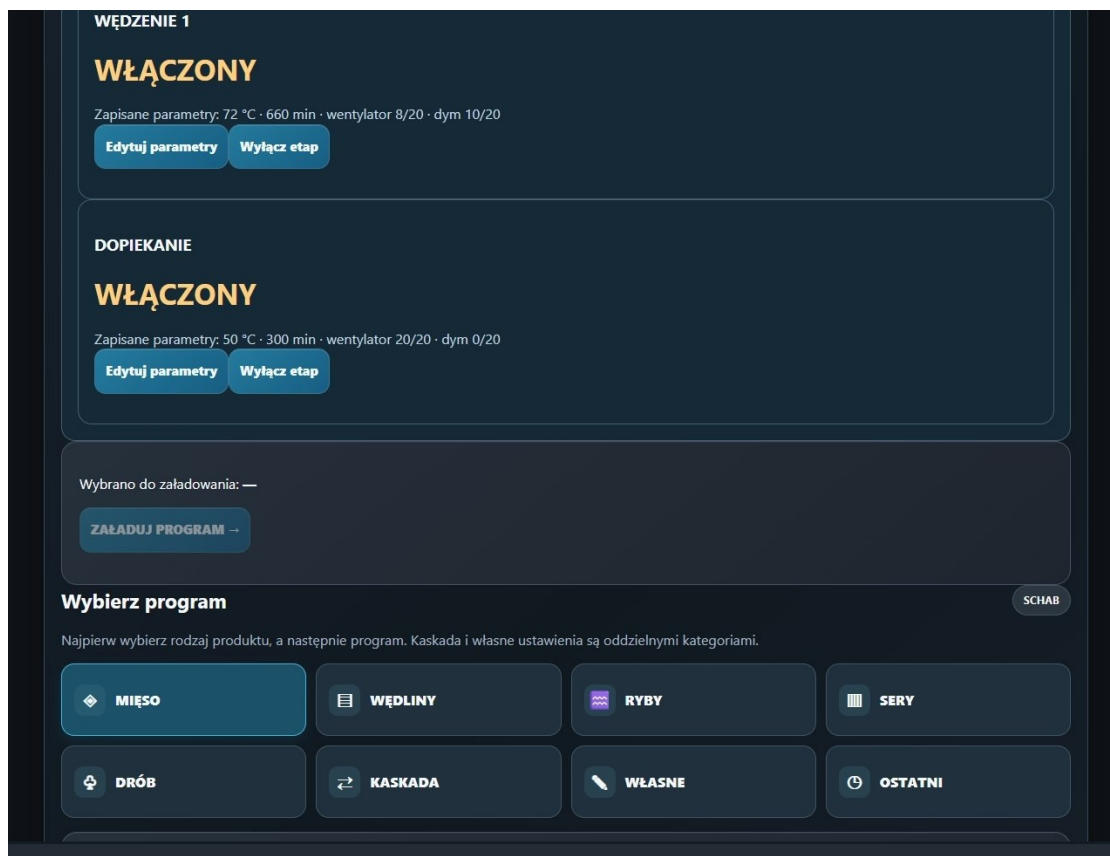
CASCADE has five independent stages and does not use the same preparation wizard. Stages with time 0 are skipped.

4.4 Local panel - PROGRAMY (Programs)

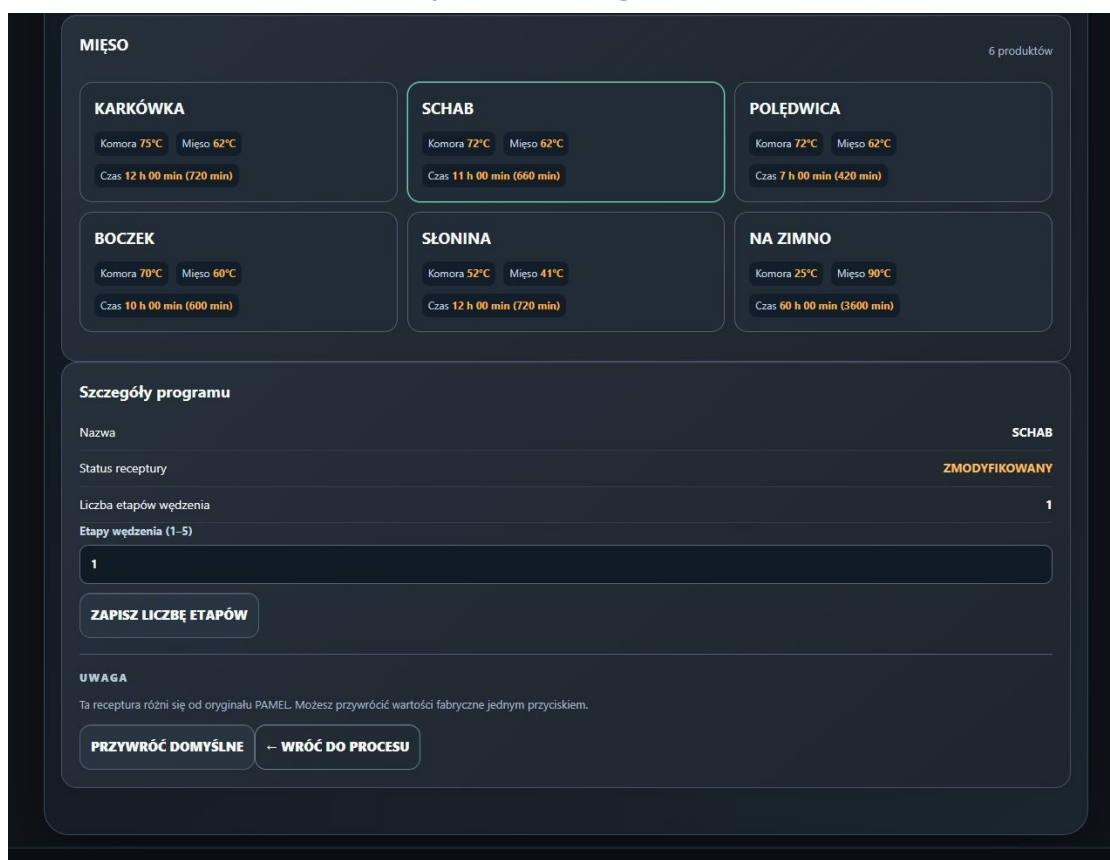
PROGRAMY separates program selection from starting, protecting against accidental START.



4.4 Local panel - Programs - view 1



4.4 Local panel - Programs - view 2



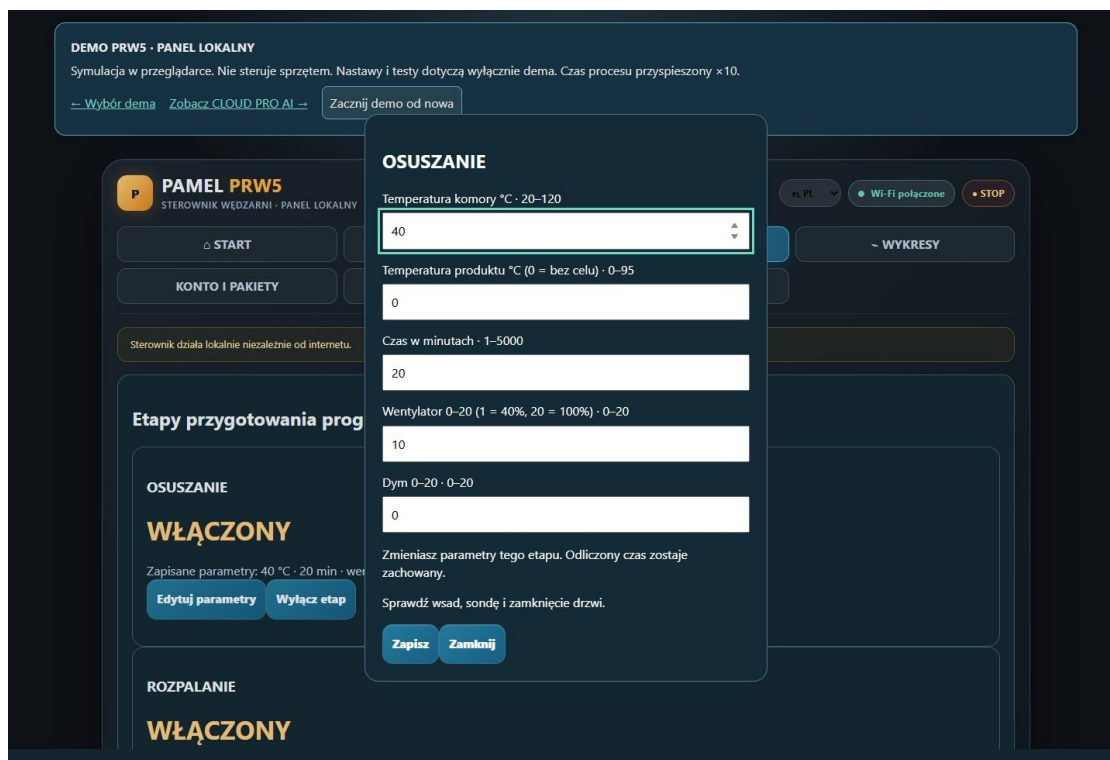
4.4 Local panel - Programs - view 3

What you see and can do

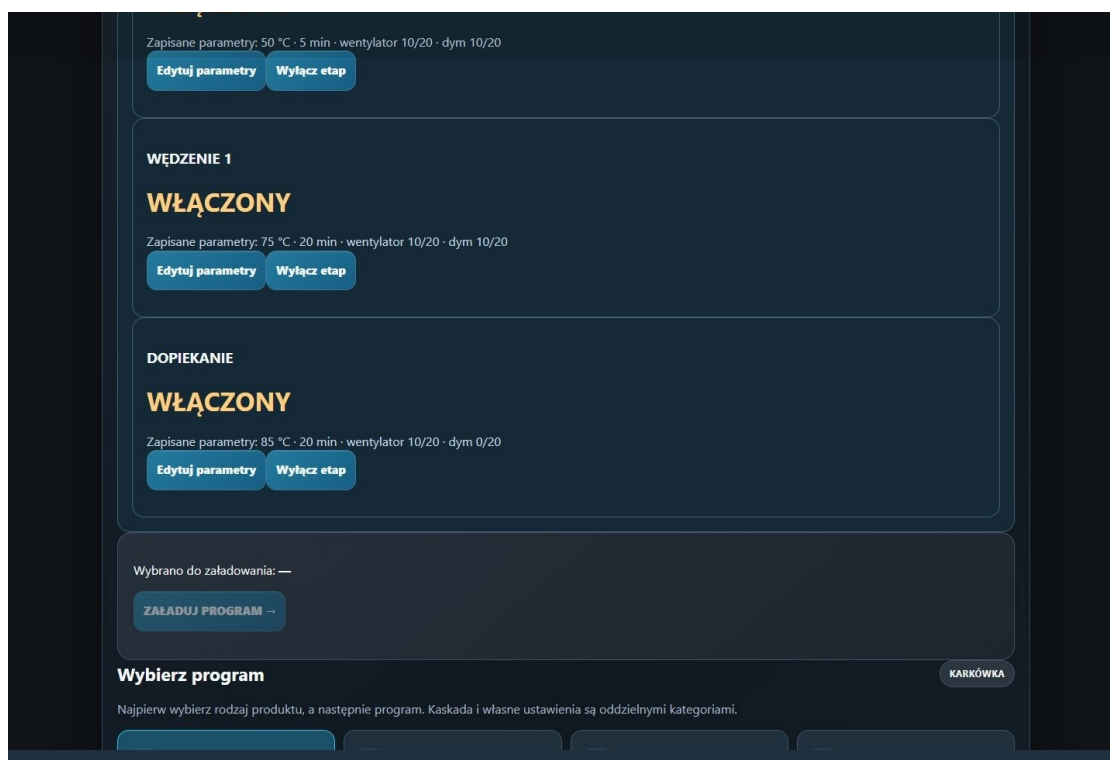
- Factory categories: meat, sausages, fish, cheese and poultry; also CASCADE, CUSTOM and LAST.
- Clicking a card only selects a program.
- ZAŁADUJ PROGRAM (Load program) saves your selection to the controller. After acknowledgement, the panel opens Process; START remains separate.
- Factory presets are PAMEL reference settings. Editing saves a user version and marks it MODIFIED.
- PRZYWRÓĆ DOMYŚLNE (Restore defaults) removes user changes and restores the original PAMEL preset.
- Select 1–5 smoking stages. CASCADE always has five.
- Each stage has independent settings and an enable/disable switch. Disabling retains its settings.
- Do not toggle an active or waiting stage ON/OFF; use the Process controls.

4.5 Stage settings editor

The same editor serves preparation and smoking stages. Changing settings during operation does not reset elapsed time.



4.5 Stage settings editor - view 1



4.5 Stage settings editor - view 2

MIĘSO 6 produktów

KARKÓWKA
Komora 75°C Mięso 62°C
Czas 12 h 00 min (720 min)

SCHAB
Komora 72°C Mięso 62°C
Czas 11 h 00 min (660 min)

POLĘDWICA
Komora 72°C Mięso 62°C
Czas 7 h 00 min (420 min)

BOCZEK
Komora 70°C Mięso 60°C
Czas 10 h 00 min (600 min)

ŚLONINA
Komora 52°C Mięso 41°C
Czas 12 h 00 min (720 min)

NA ZIMNO
Komora 25°C Mięso 90°C
Czas 60 h 00 min (3600 min)

Szczegóły programu

Nazwa **KARKÓWKA**

Status receptury **ORYGINAL PAMEL**

Liczba etapów wędzenia **1**

Etap wędzenia (1–5)

1

ZAPISZ LICZBĘ ETAPÓW

UWAGA
To oryginalna receptura PAMEL. Każda zmiana parametrów zostanie wyraźnie oznaczona.

PRZYWRÓĆ DOMYŚLNE **WRÓĆ DO PROCESU**

4.5 Stage settings editor - view 3

What you see and can do

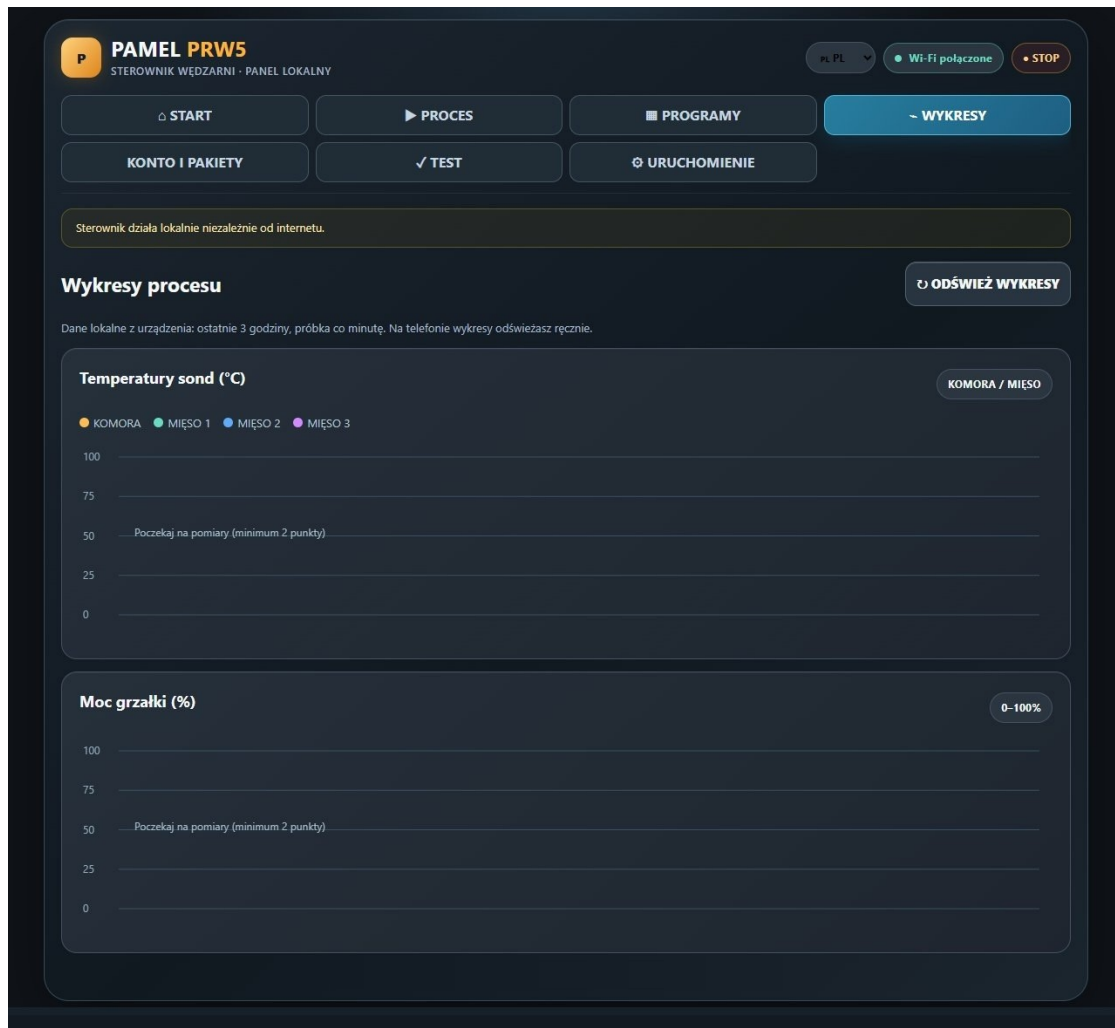
- Chamber temperature: 20–120°C.
- Product temperature: 0–95°C; 0 means no product target.
- Time: 1–5000 min.
- Fan: 0–20; level 1 is approximately 40% minimum output, level 20 = 100%.
- Smoke: 0–20.
- The controller acknowledges saving. On error, the form stays open for correction.

EDITING DURING OPERATION

Permitted settings can be edited while running or waiting for the next stage. Limits and safety checks still apply.

4.6 Local panel - WYKRESY (Charts)

Local charts show history stored in the controller without requiring a Cloud account.



4.6 Local panel - WYKRESY (Charts)

What you see and can do

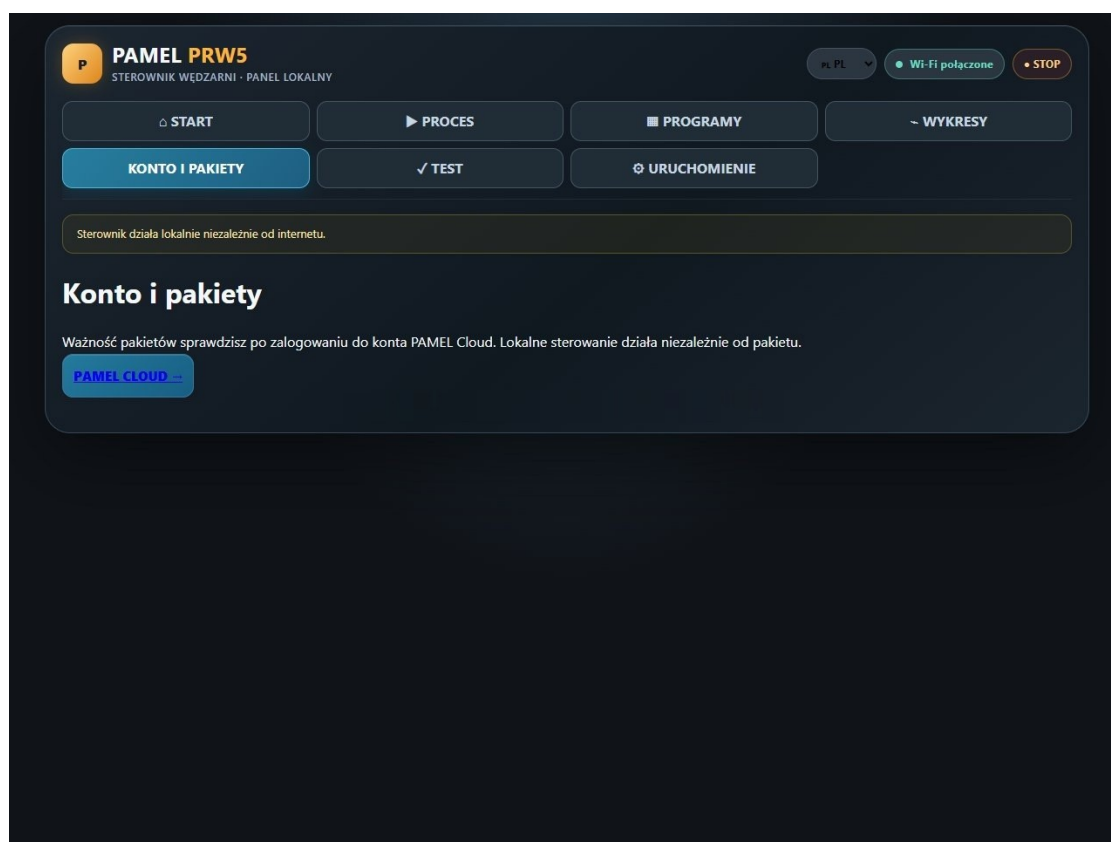
- Local history covers the last 3 hours.
- A sample is stored every minute.
- The temperature chart shows CHAMBER, MEAT 1, MEAT 2 and MEAT 3.
- A separate chart shows heater power.
- On a phone, use the button to refresh charts manually.

DIFFERENCE FROM CLOUD

Cloud history is a separate server function. Local charts need neither a subscription nor the server.

4.7 Local panel - KONTO I PAKIETY (Account and packages)

This tab only links to the online service. It does not block local control.



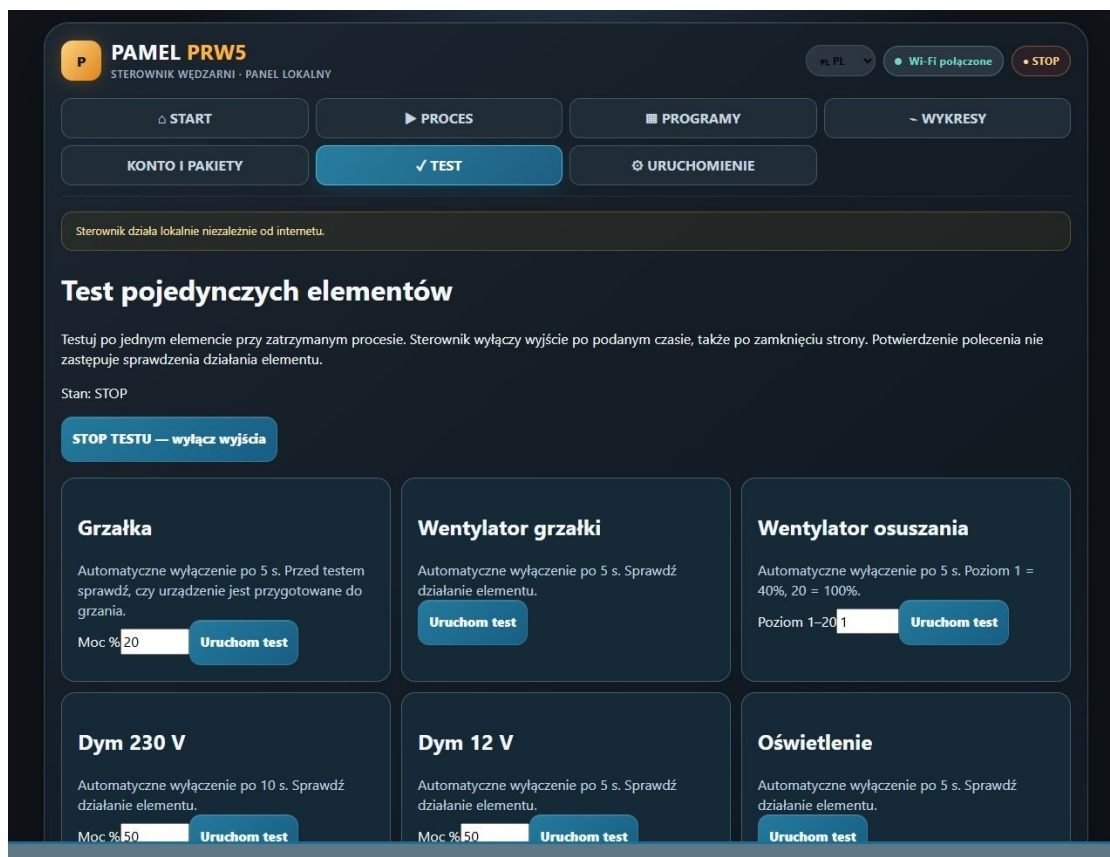
4.7 Local panel - KONTO I PAKIETY (Account and packages)

What you see and can do

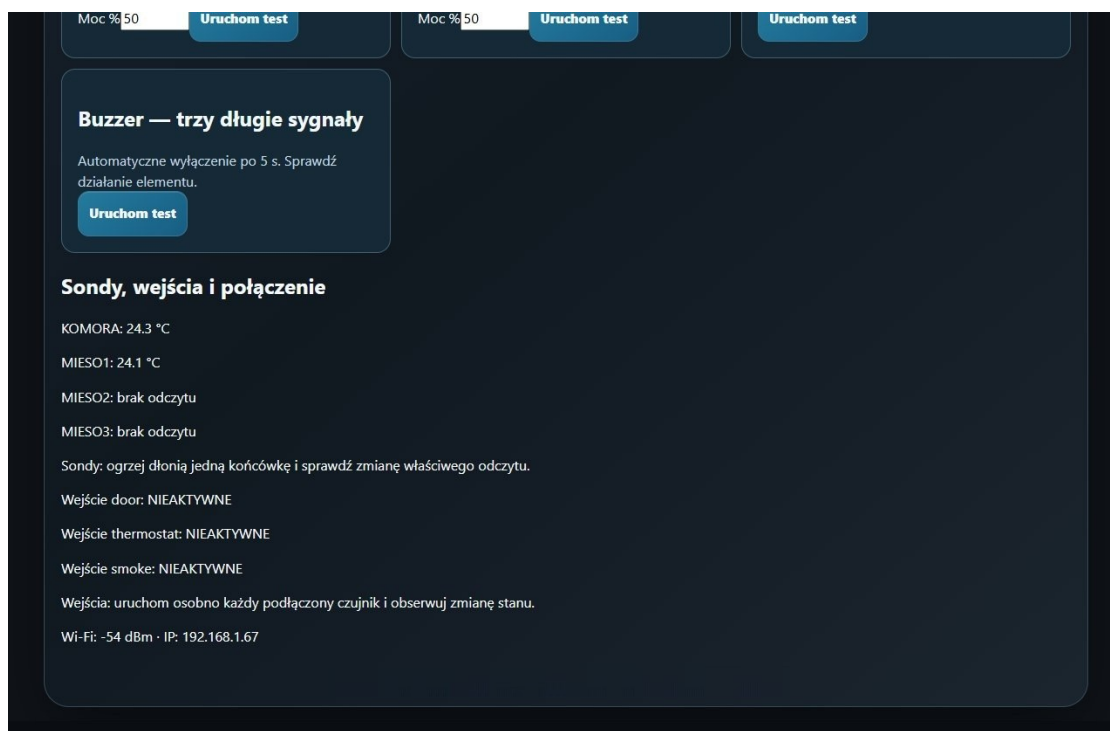
- It explains that package validity is checked after signing into PAMEL Cloud.
- PAMEL CLOUD opens the online account panel.
- No Cloud package is needed for the local panel or the process running in the controller.

4.8 Local panel - TEST

TEST briefly checks individual components before starting a process.



4.8 Local panel - TEST - view 1



4.8 Local panel - TEST - view 2

What you see and can do

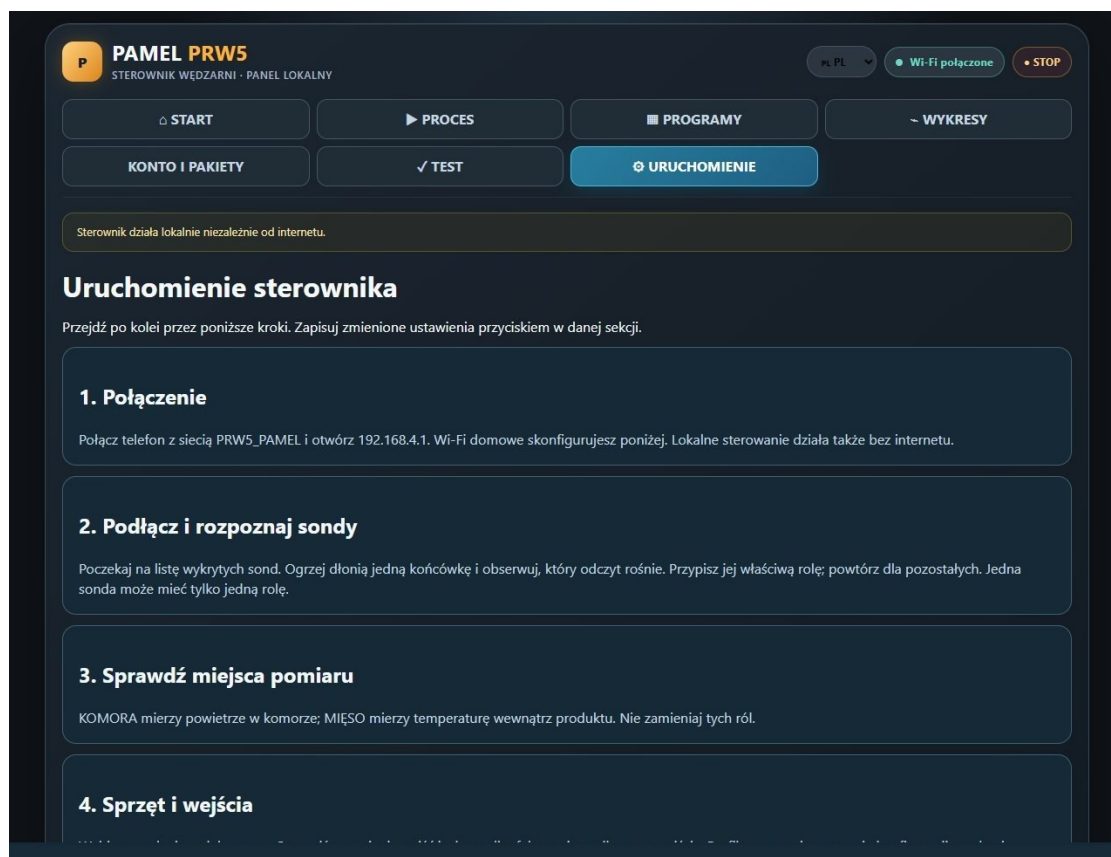
- Tests are available only with the process stopped (STOP/FINISHED) and no active alarm.
- Only one component is tested at a time.
- Heater: max. 5 s; requires correctly assigned probes, with CHAMBER present and below the safety limit.
- Heater fan: short timed test.
- Drying fan: level 1–20, automatic switch-off.
- SMOKE 230 V and SMOKE 12 V are tested separately.
- Lighting and buzzer have separate tests.
- STOP TESTU (Stop test) immediately switches test outputs off.
- Test acknowledgement does not replace checking the physical load.

SAFETY

START is rejected during a test. The controller enforces the test limit, not the browser.

4.9 Local panel - URUCHOMIENIE (Setup)

Setup contains network, regulator, probe, input, Cloud and statistics settings.



4.9 Local panel - Setup - view 1

Wybierz markę i model sprzętu. Sprawdź ustawienia wyjść i włącz tylko faktycznie podłączone wejścia. Profil sprzętu nie zastępuje konfiguracji sond ani regulatora.

5. Wybierz program

Otwórz Programy, wybierz pozycję i sprawdź temperatury oraz czasy. „Program zmieniony” oznacza własne poprawki. Na stronie PROCES zobaczysz rzeczywiście wybrany program.

6. Pierwszy proces

Przed START sprawdź odczyty i komunikaty gotowości. Po START obserwuj etap, moc i czas. Gdy sterownik czeka, wykonaj opisany krok i potwierdź. Zamknięcie strony nie zatrzymuje procesu — służy do tego STOP.

✓ Połączenie lokalne · Sondy przypisane i obecne: 2 · ✓ Brak alarmów

Mój sprzęt

Marka Wybierz markę Sprzęt Wybierz sprzęt Zapisz w sterowniku

Uruchomienie — ustawienia urządzenia

Dostęp lokalny

Sieć AP PRW5_PAMEL

Hasło AP BRAK

AP PRW5_PAMEL jest stale aktywny i działa równolegle z domową siecią Wi-Fi.

POTWIERDŹ ALARM

Domowa sieć Wi-Fi

Status POŁĄCZONO Z TP-Link 9028

Adres IP 192.168.1.67

Zasięg ■■■■ BARDZO DOBRY · -53 dBm

szukaj sieci

4.9 Local panel - Setup - view 2

Regulator mocy

Tryb AUTO P (zalecany)

Moc ręczna (%) 50,0

Moc minimalna (%) 0,0

Moc maksymalna (%) 100,0

Kp np. 30.00 30,00

Ki np. 0.0200 0,0000

Kd np. 5.00 0,00

ZAPISZ REGULATOR

Sondy DS18B20

Przypisanie po numerze ROM jest trwałe. Bez sondy KOMORA START jest blokowany. Ustawienia można wykonać lokalnie lub z CLOUDAI.

Podłącz sondy i poczekaj kilka sekund. Wykrywanie działa automatycznie, również bez internetu. Ogrzej jedną końcówkę dłonią, aby rozpoznać ją po temperaturze, a następnie wybierz jej rolę. Zapis jest trwały.

Wykryte sondy: 2

KOMORA · OK 289D19109223067C · 24.31°C

MIESO1 · OK 28C70660642506D0 · 24.12°C

MIESO2 · NIEPRZYPISANA — NIEPRZYPISANA —

MIESO3 · NIEPRZYPISANA — NIEPRZYPISANA —

ODŚWIEŻ LISTĘ

Wejścia

Włącz tylko wejścia, które są rzeczywiście podłączone. Wyłączone wejście jest ignorowane.

☐ WEJŚCIE DYM

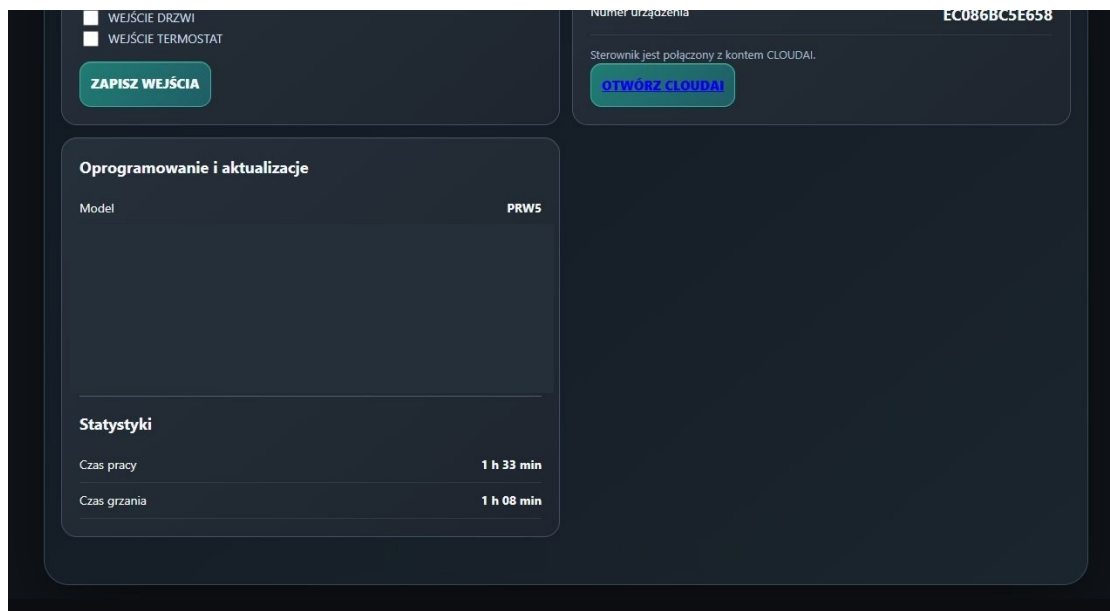
☐ WEJŚCIE DRZWI

CLOUDAI

Stan ONLINE

Numer urządzenia EC086BC5E658

4.9 Local panel - Setup - view 3



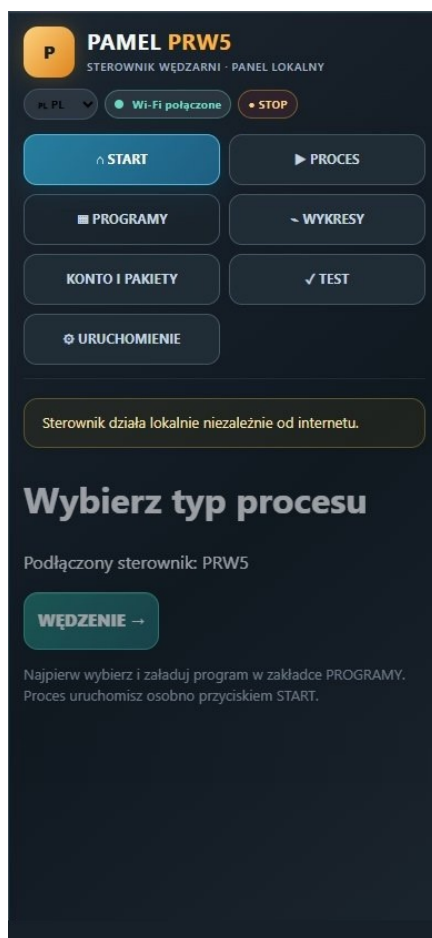
4.9 Local panel - Setup - view 4

What you see and can do

- Guide steps 1–6 cover connection, probes, measurement locations, equipment/inputs, program and first process.
- MÓJ SPRZĘT (My equipment) stores an installation profile; it does not automatically change the regulator or probes.
- Local access: PRW5_PAMEL, no password.
- Home Wi-Fi: network scan, SSID, password, signal strength and IP address.
- Regulator: MANUAL, AUTO P, AUTO PI, AUTO PID and pMin/pMax/Kp/Ki/Kd.
- Probes: roles are stored by unique ID; disconnected probes retain their roles.
- SMOKE/DOOR/THERMOSTAT inputs are optional and disabled by default.
- CLOUDAI: connection status and device number.
- Statistics: total operating time and active heating time.

4.10 Local panel on a phone

The responsive panel keeps all menu entries available on a phone, using narrower columns.



4.10 Local panel on a phone

What you see and can do

- No app installation is needed; use a browser.
- The complete phone screen should not require horizontal scrolling.
- Functions are identical to the computer version; only layout changes.

5. PAMEL Cloud / CLOUDAI - remote operation

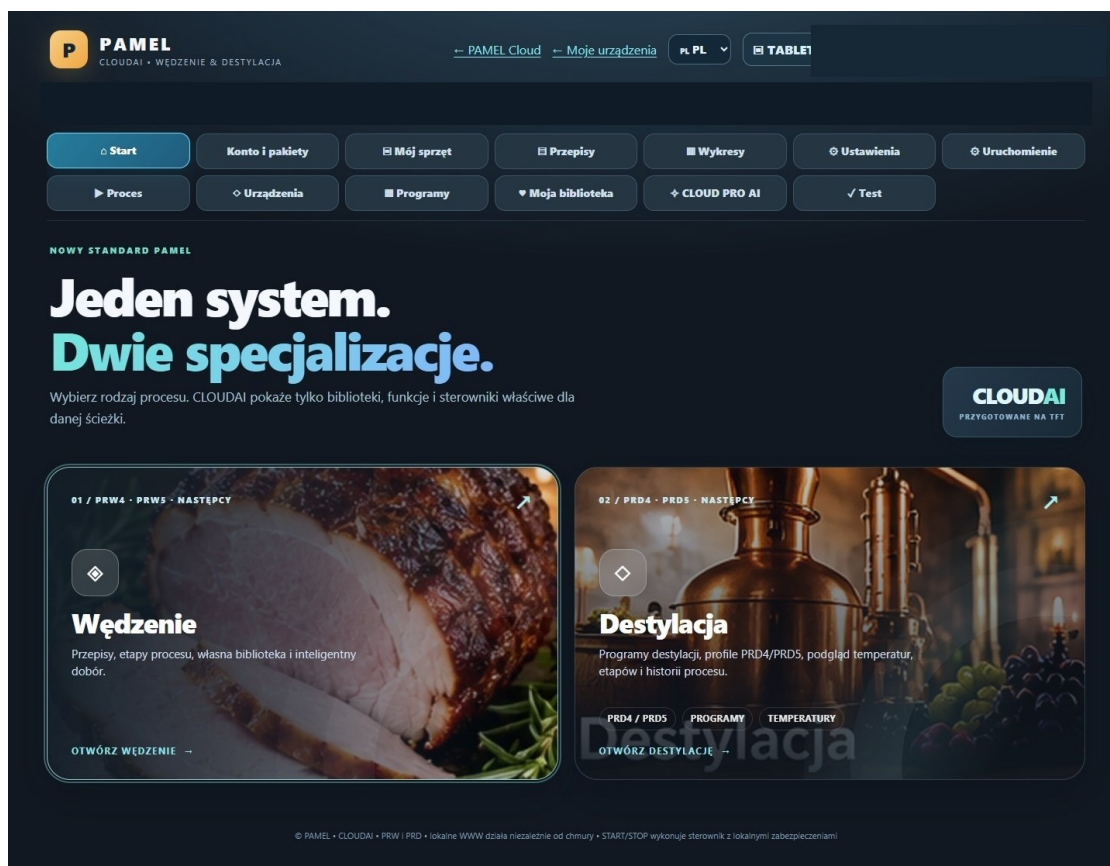
TWO INDEPENDENT ACCESS METHODS

Local web access works on the local network without a server or subscription. PAMEL Cloud/CLOUDAI is an online service requiring Internet access, an account and functions included in your package.

Function	Local	Cloud / Internet
START / STOP	yes	yes, when online and permitted by account rights
Process after closing the page	continues	continues
Smoking programs	yes	yes
Stage editing	yes	yes, if supported
History	3 h locally	up to 7 days after recording starts, depending on service functions
AI	no	PRO AI
Account / packages	not required	required for account services
Final START safety checks	PRW5 controller	PRW5 controller - Cloud does not bypass safety checks

5.1 CLOUDAI - START

Cloud Start separates two applications. For PRW5 select WĘDZENIE (Smoking); PRD functions are hidden.



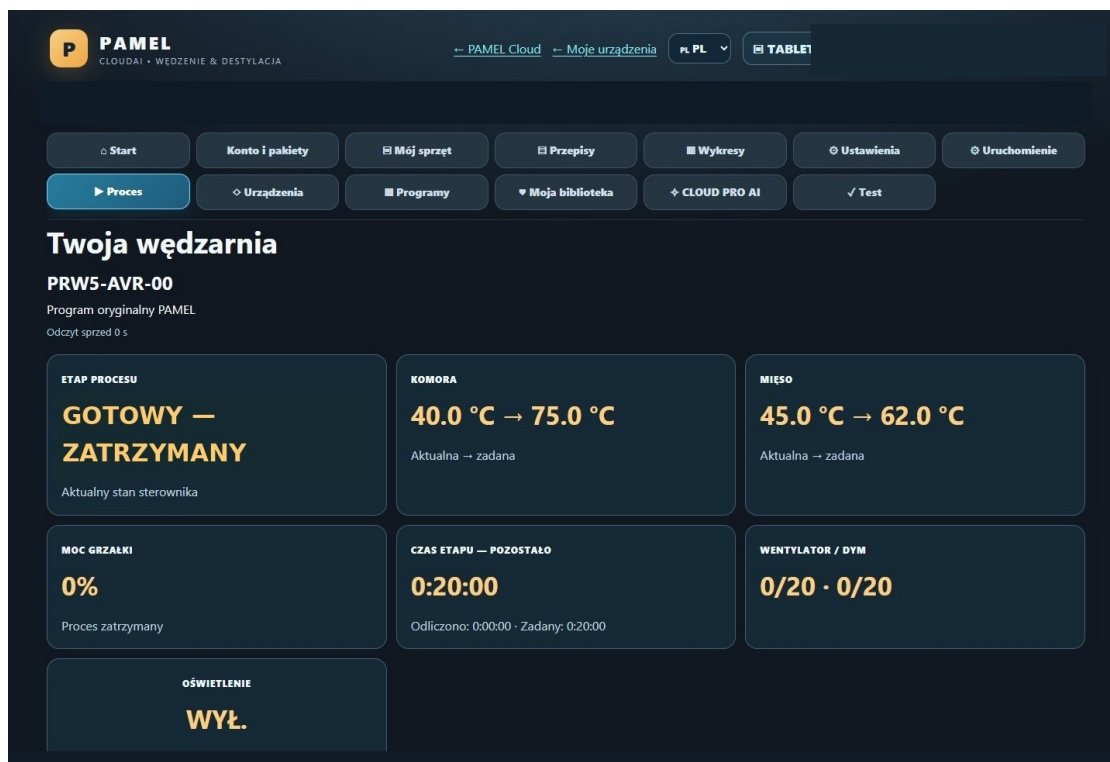
5.1 CLOUDAI - START

What you see and can do

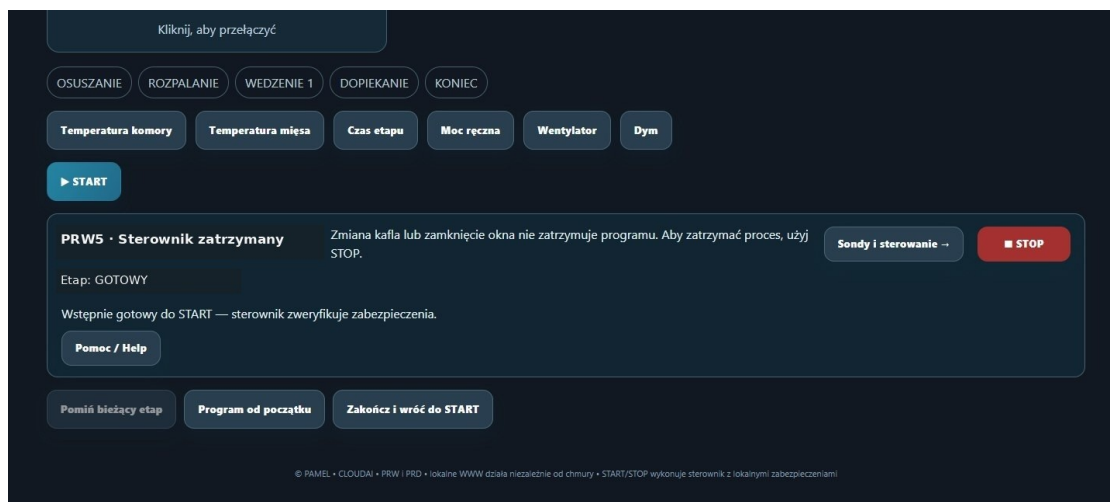
- WĘDZENIE opens PRW libraries and functions.
- DESTYLACJA (Distillation) is a separate path for PRD devices.
- Cloud appearance may vary with the active package and account permissions.

5.2 CLOUDAI - PROCES (Process)

The remote process screen follows the same stage logic as the local panel, with data received through the server.



5.2 CLOUDAI - Process - view 1



5.2 CLOUDAI - Process - view 2

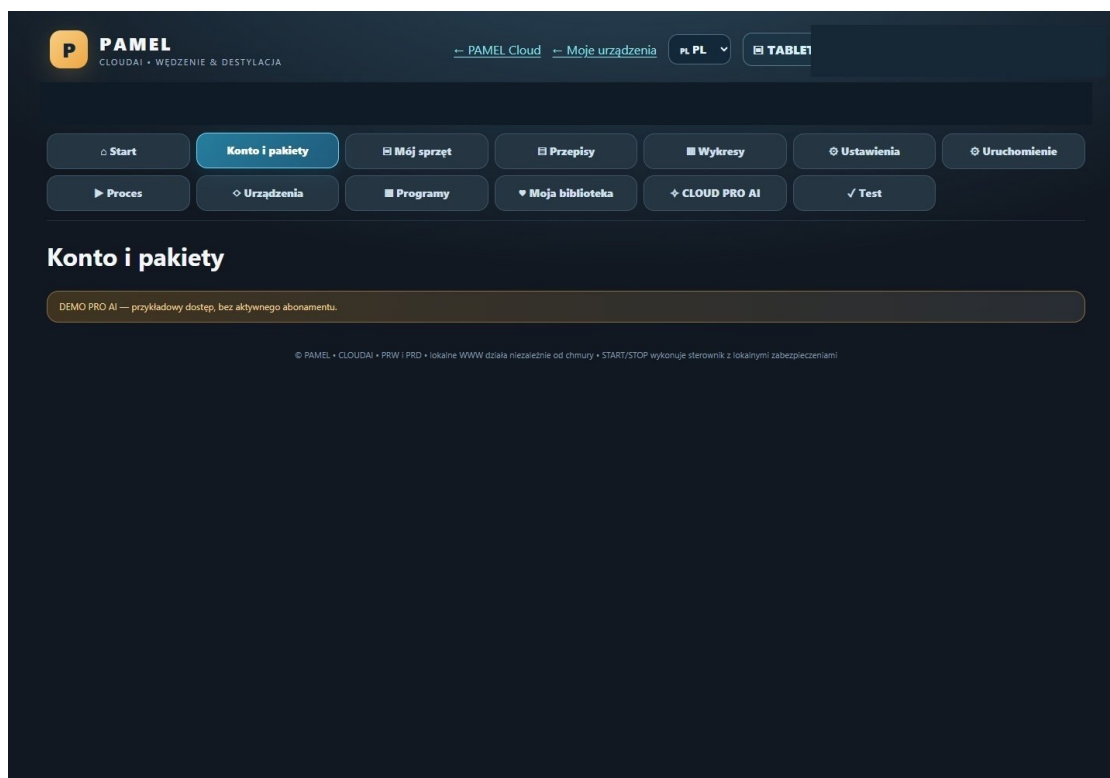
What you see and can do

- It displays stage, temperatures, power, time, fan/smoke and lighting.
- STOP is a direct command; the panel confirms stopping after the controller accepts it.
- For outdated device data, Cloud marks the device offline or indicates that the reading is not current.
- Changing tabs or closing the browser does not send STOP.
- Cloud START is a request. The controller checks probes, state, alarms and safety conditions before starting.

5.3 CLOUDAI - KONTO I PAKIETY (Account and packages)

LOCAL = FREE. Local phone/computer control needs no fee or subscription.

CLOUD PRO AI = PAID. PRO AI functions at serwer.pamel.pl require an active paid package. Current prices and scope appear in PAMEL Cloud. Without a paid package, local control remains available.



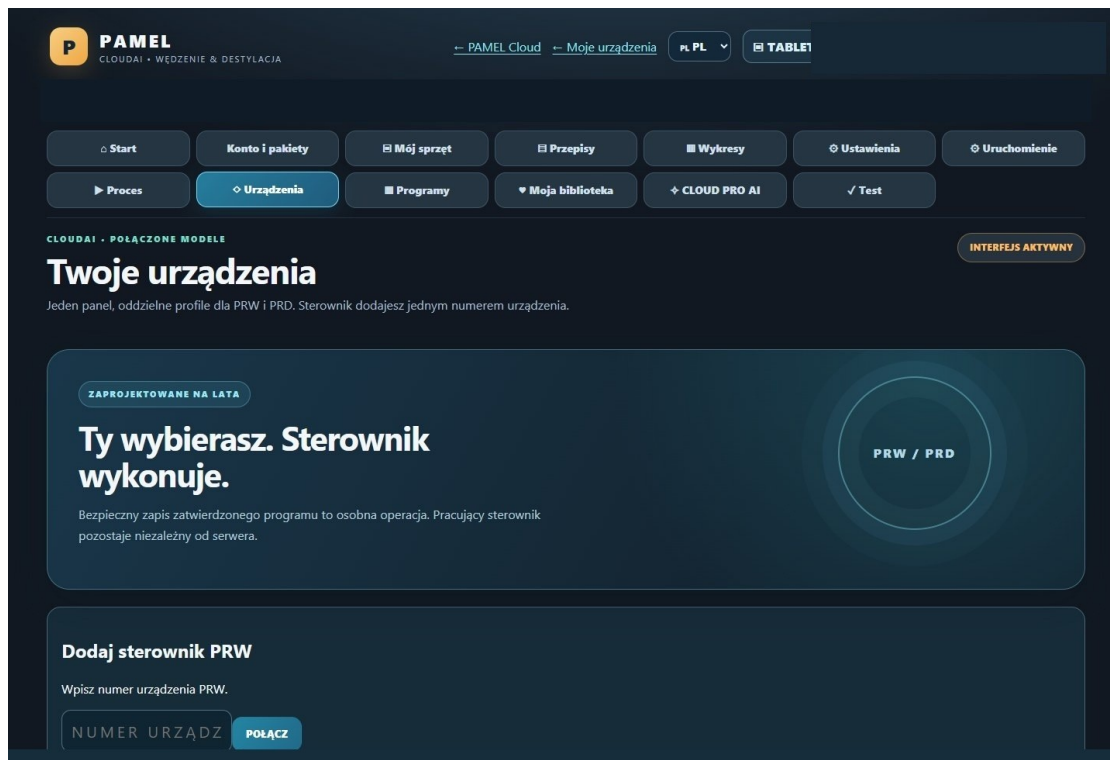
5.3 CLOUDAI - KONTO I PAKIETY (Account and packages)

What you see and can do

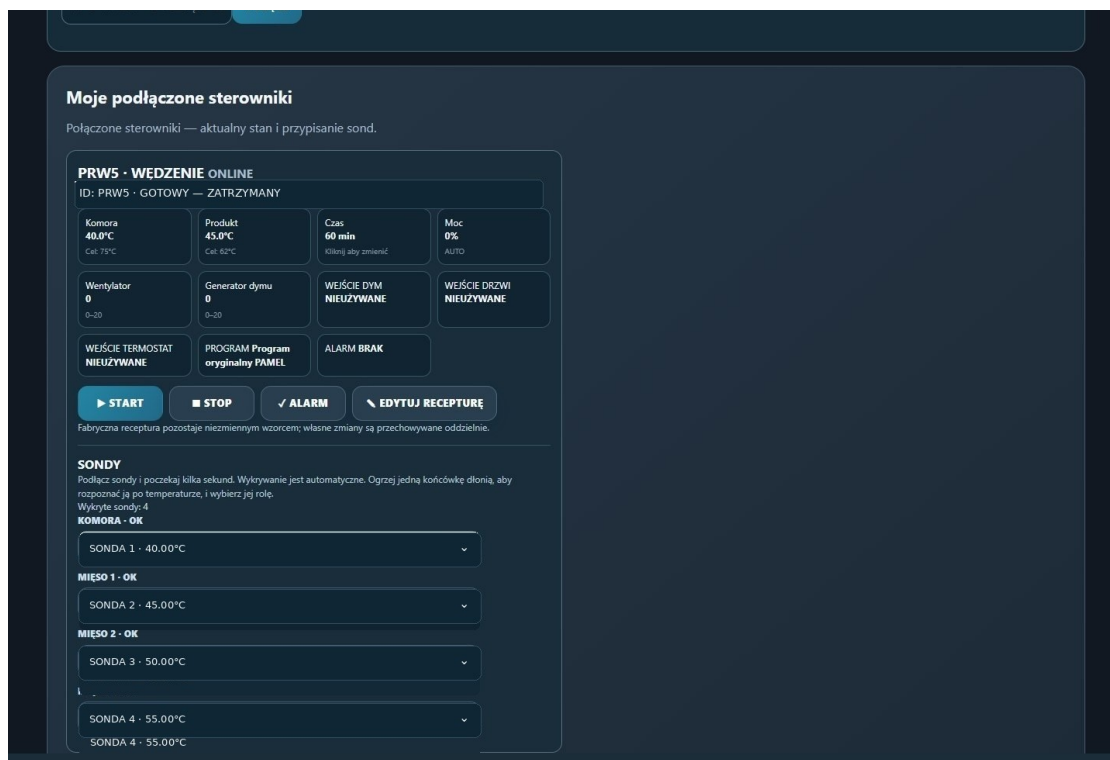
- **CLOUD PRO AI** requires the appropriate active paid package. Other **PAMEL Cloud** functions depend on the selected plan and current offer.
- Terms, prices and services may change. Refer to your account and serwer.pamel.pl for applicable information.
- PAMEL Cloud services follow the current plan and terms. Local PRW5 operation remains independent.

5.4 CLOUDAI - URZĄDZENIA (Devices)

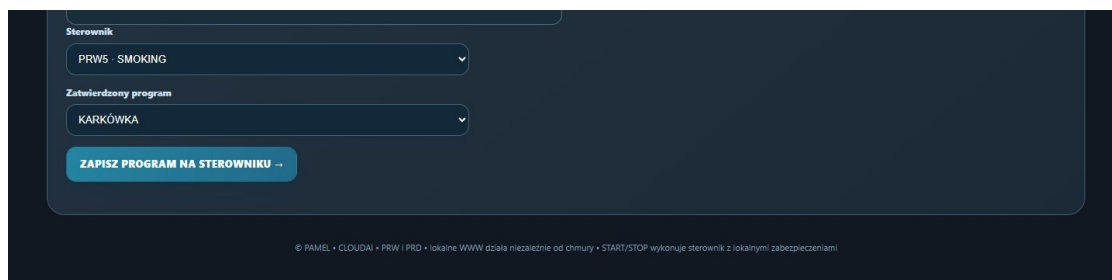
Add a device using its single device number. Its model and family are recognised automatically after connection.



5.4 CLOUDAI - Devices - view 1



5.4 CLOUDAI - Devices - view 2



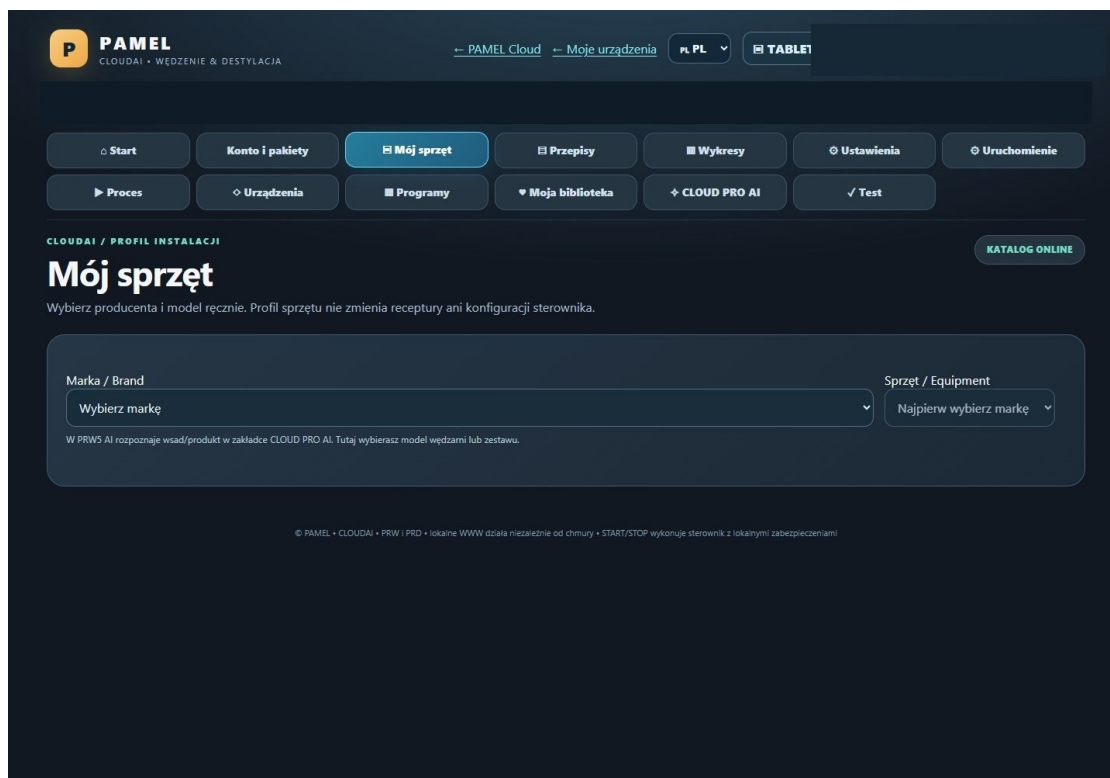
5.4 CLOUDAI - Devices - view 3

What you see and can do

- Enter the PRW5 number and select POŁĄCZ (Connect).
- The list shows devices assigned to your account and their status.
- Saving an approved program to the controller is a separate action.
- Do not replace an occupied device/slot without an explicit user action.
- Removing a device from an account does not prevent independent local operation.

5.5 CLOUDAI - MÓJ SPRZĘT (My equipment)

The equipment profile describes the smoker used with PRW5. It provides supporting information for the assistant.



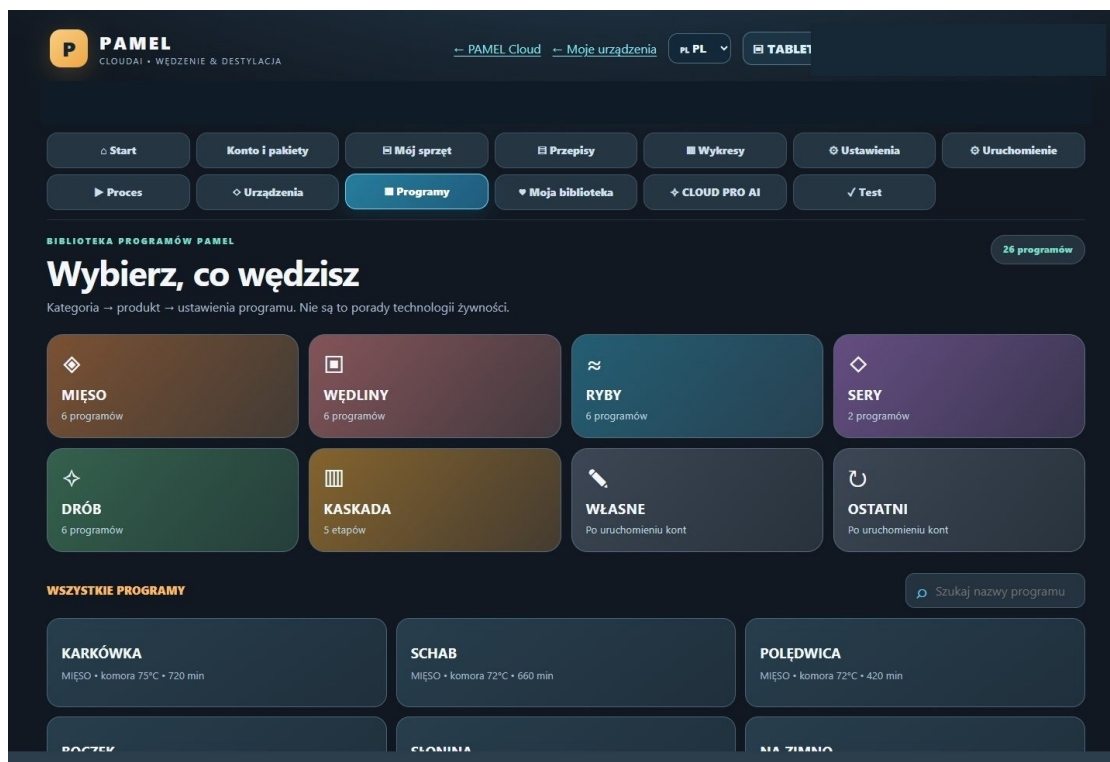
5.5 CLOUDAI - MÓJ SPRZĘT (My equipment)

What you see and can do

- Select make and model manually.
- The profile does not automatically change regulator settings, probes, power or program.
- The Cloud equipment catalogue can be updated without changing controller settings.

5.6 CLOUDAI - PROGRAMY (Programs)

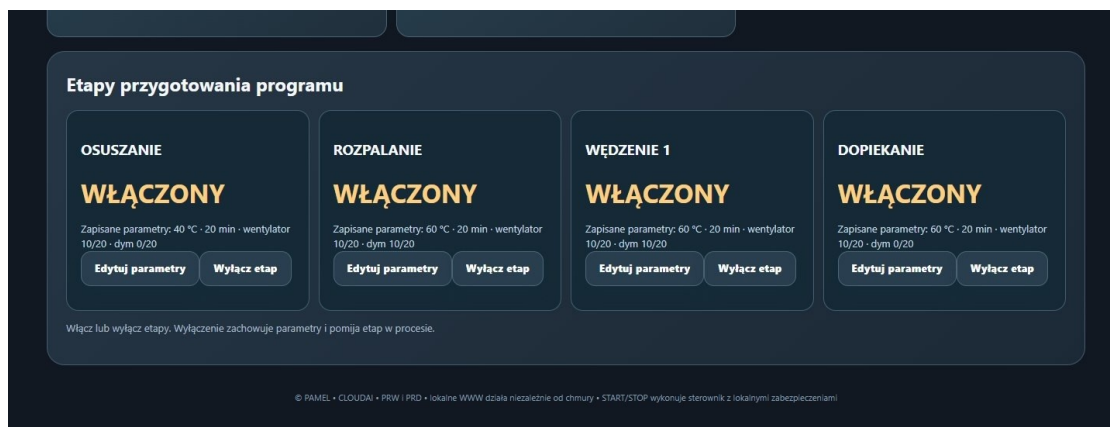
Cloud shows the controlled PRW5 program catalogue and stage settings.



5.6 CLOUDAI - Programs - view 1

BOCZEK MIĘSO • komora 70°C • 600 min	ŚŁONINA MIĘSO • komora 52°C • 720 min	NA ZIMNO MIĘSO • komora 25°C • 3600 min
TRADYCYJNA WĘDLINY • komora 78°C • 180 min	PARÓWKA WĘDLINY • komora 78°C • 180 min	DZICZYŻNA WĘDLINY • komora 78°C • 420 min
DROBIOWE WĘDLINY • komora 65°C • 360 min	WIEPRZOWE WĘDLINY • komora 75°C • 420 min	NA ZIMNO WĘDLINY • komora 25°C • 1500 min
WĘGORZ RYBY • komora 70°C • 300 min	ŁOSOŚ RYBY • komora 70°C • 360 min	KARP RYBY • komora 70°C • 360 min
MAKRELA RYBY • komora 70°C • 300 min	PSTRĄG RYBY • komora 70°C • 300 min	NA ZIMNO RYBY • komora 25°C • 840 min
NA GORĄCO SERY • komora 80°C • 240 min	NA ZIMNO SERY • komora 25°C • 300 min	KURCZAK DRÓB • komora 75°C • 360 min
INDYK DRÓB • komora 75°C • 420 min	KACZKA DRÓB • komora 75°C • 360 min	PIERŚ Z KURY DRÓB • komora 75°C • 360 min
PIERŚ Z INDYKA DRÓB • komora 75°C • 420 min	PIERŚ Z KACZKI DRÓB • komora 75°C • 360 min	

5.6 CLOUDAI - Programs - view 2



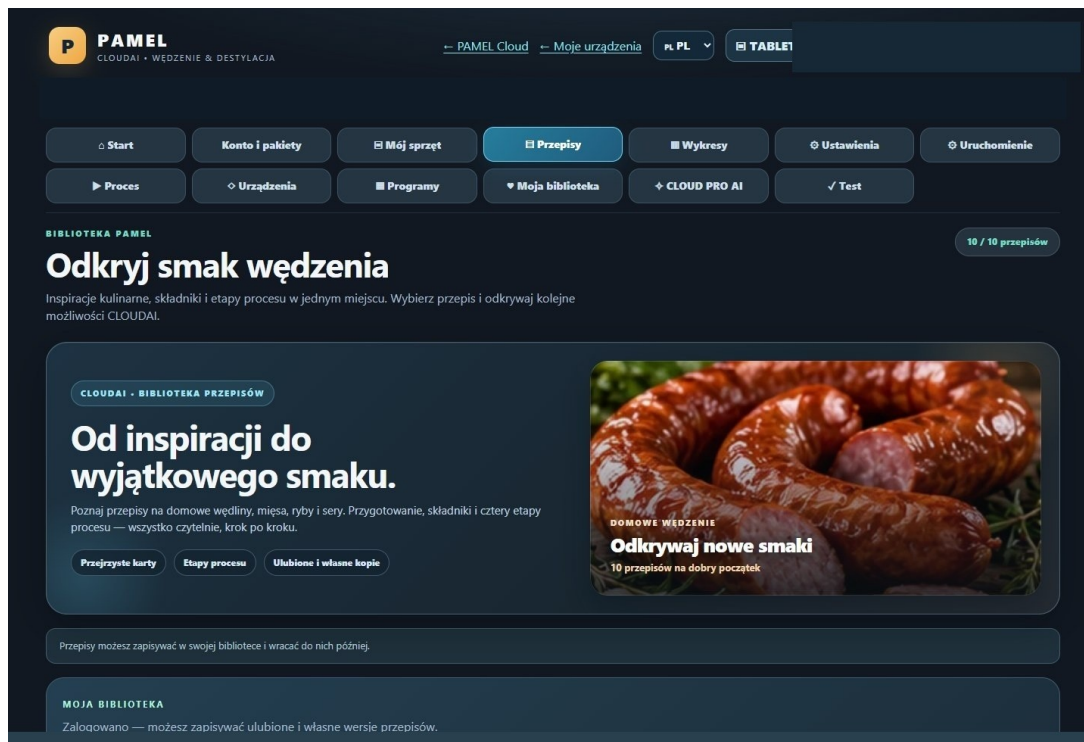
5.6 CLOUDAI - Programs - view 3

What you see and can do

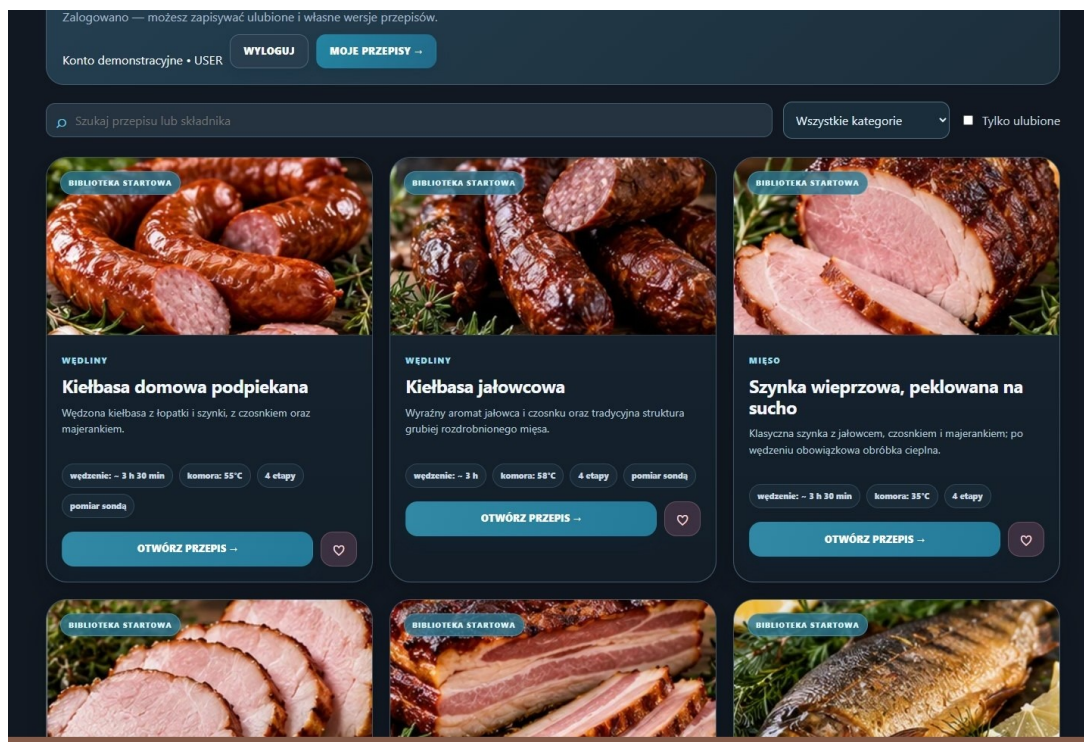
- Selecting a program does not save it to the controller. Use ZAŁADUJ PROGRAM (Load program).
- After saving is acknowledged, the panel opens Process. START remains separate.
- Stages can be enabled/disabled when supported by the controller.
- An active or waiting stage cannot be disabled using its switch; use Process controls.
- Factory and modified programs are labelled separately.

5.7 CLOUDAI - PRZEPISY (Recipes)

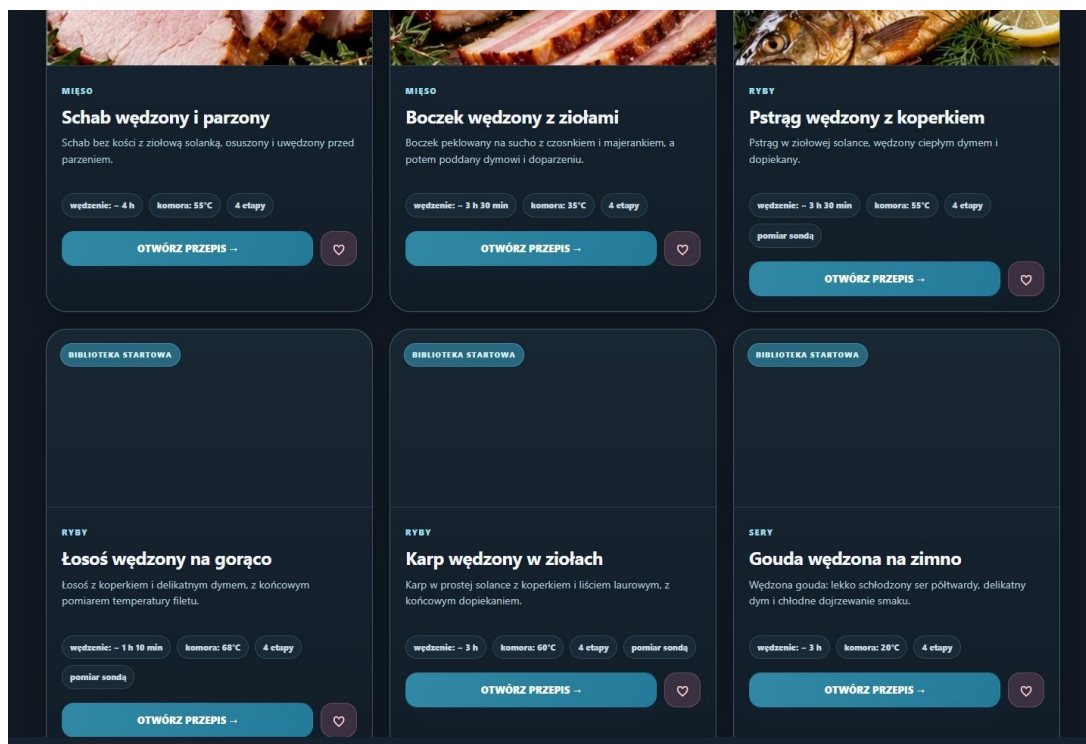
The recipe library provides inspiration and account functions. It is separate from the controller's technical preset catalogue.



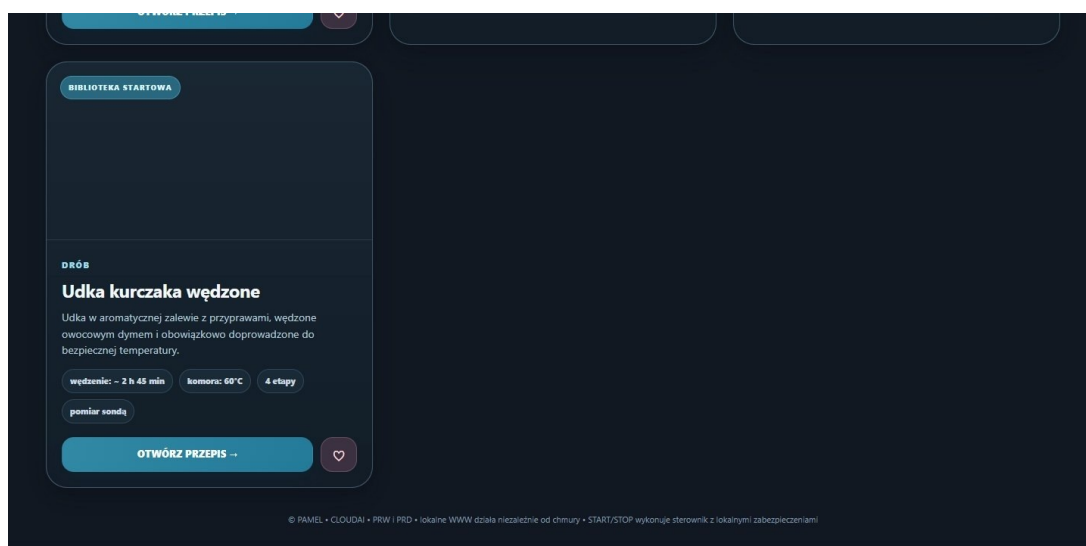
5.7 CLOUDAI - Recipes - view 1



5.7 CLOUDAI - Recipes - view 2



5.7 CLOUDAI - Recipes - view 3



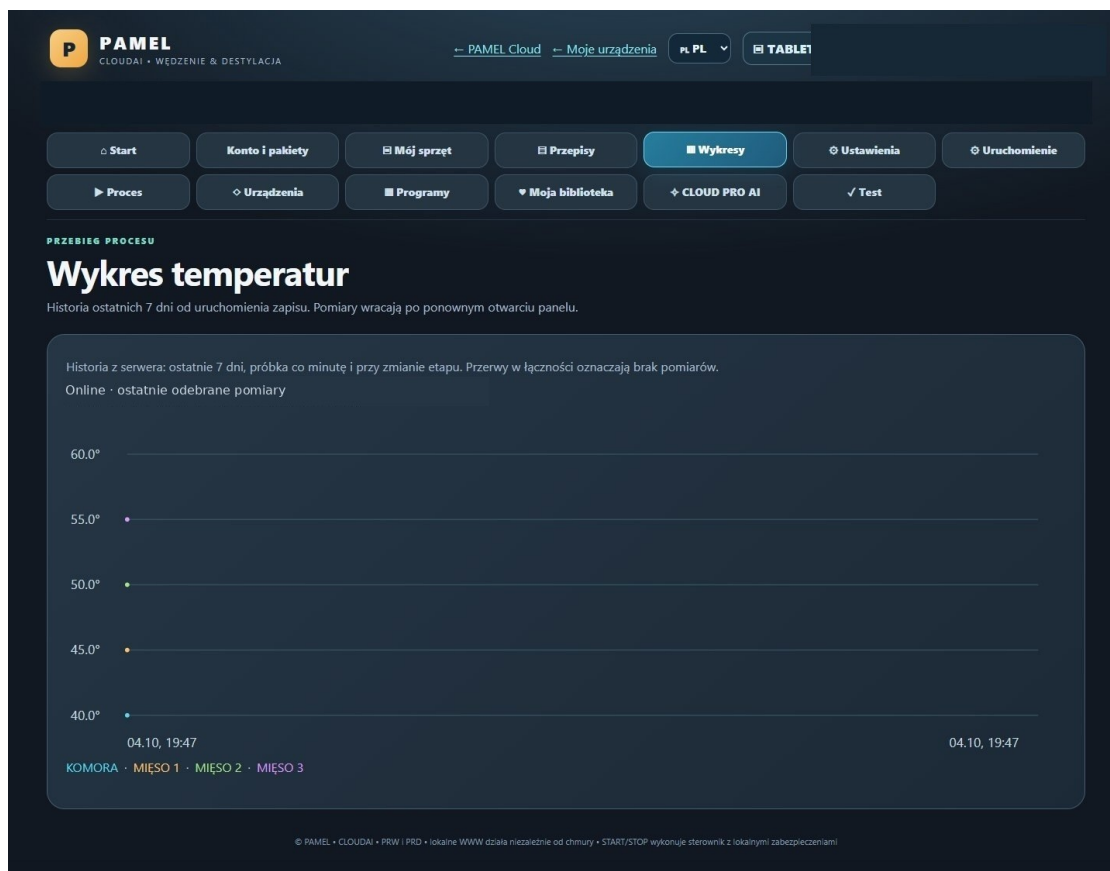
5.7 CLOUDAI - Recipes - view 4

What you see and can do

- Recipes include descriptions, ingredients and preparation steps.
- Save favourites and personal copies to your account.
- Editing an account recipe neither starts a process nor automatically changes the controller.
- Programming the controller always requires a separate deliberate action.

5.8 CLOUDAI - WYKRESY (Charts)

Server history lets you review measurements after reopening the panel.



5.8 CLOUDAI - WYKRESY (Charts)

What you see and can do

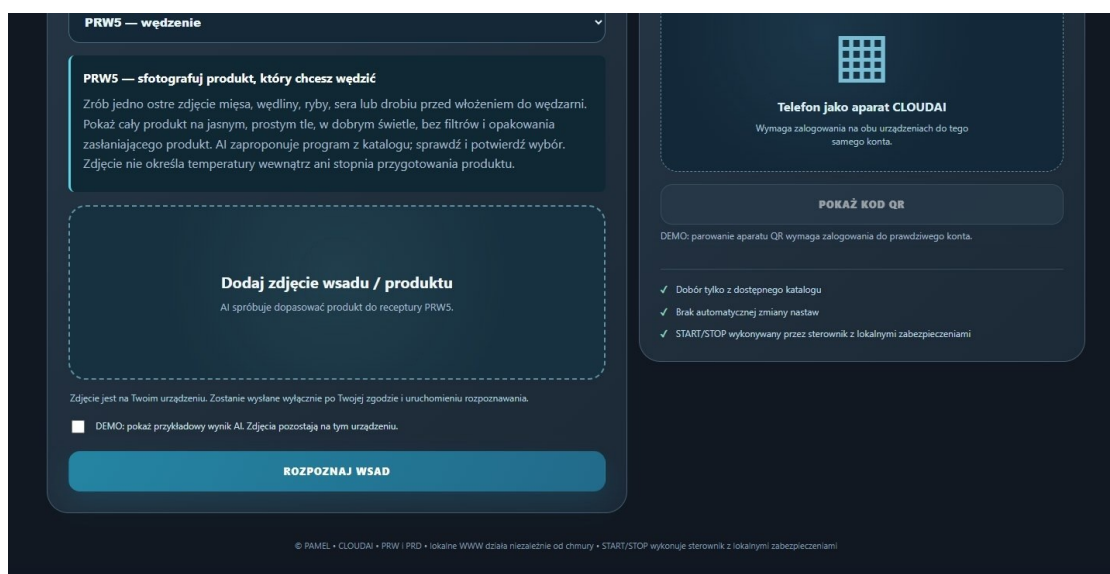
- History covers the last 7 days from the start of recording for the device.
- Samples are saved every minute and on significant state/stage/alarm changes.
- The chart shows the actual timeline and communication gaps.
- Account data retention and deletion follow the current PAMEL Cloud terms and privacy policy.

5.9 CLOUDAI - CLOUD PRO AI

CLOUD PRO AI = PAID ONLINE SERVICE. It is not required for local PRW5 operation. AI identifies the product/load and suggests a similar program from the controlled PRW catalogue.



5.9 CLOUDAI - CLOUD PRO AI - view 1



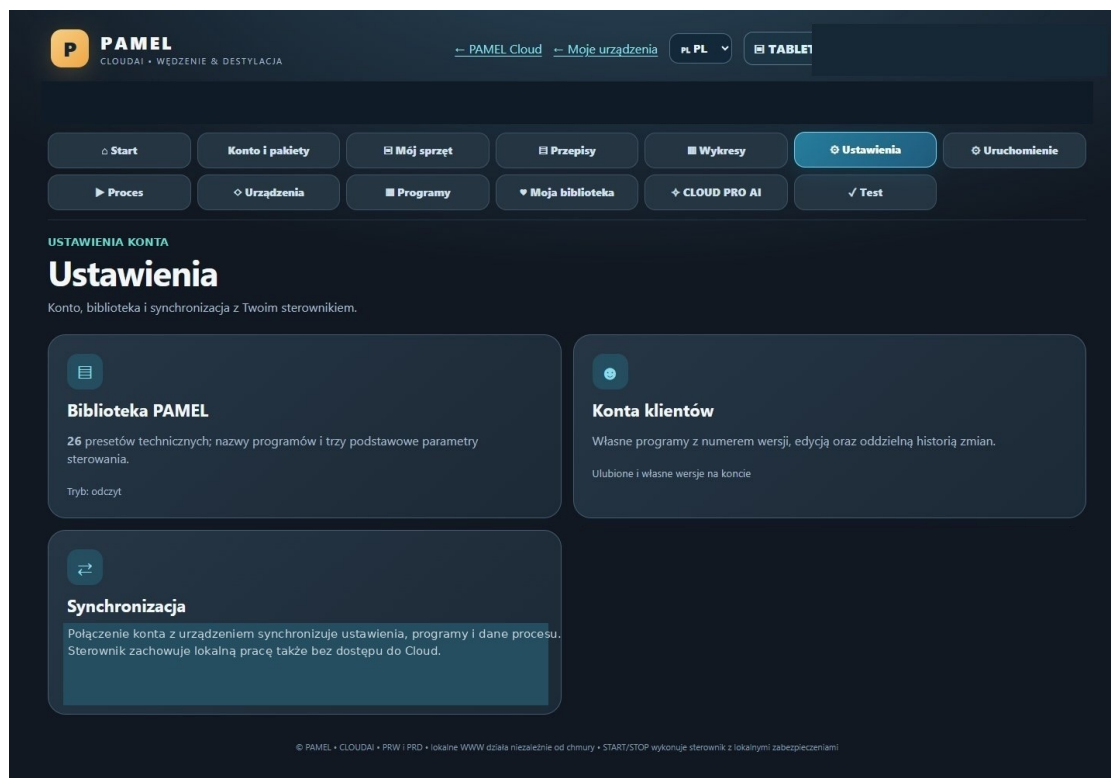
5.9 CLOUDAI - CLOUD PRO AI - view 2

What you see and can do

- Select a PRW model and add a photo of the product/load.
- The photo is sent to an external AI service only after you consent and start recognition.
- AI suggests only controlled catalogue entries; it does not invent process settings.
- AI never starts a program automatically.
- You always approve the selection. Final START remains subject to local safety checks.
- A QR code may let you use a phone camera while signed into the same account.

5.10 CLOUDAI - USTAWIENIA (Settings)

Cloud settings describe account, library and synchronisation functions.



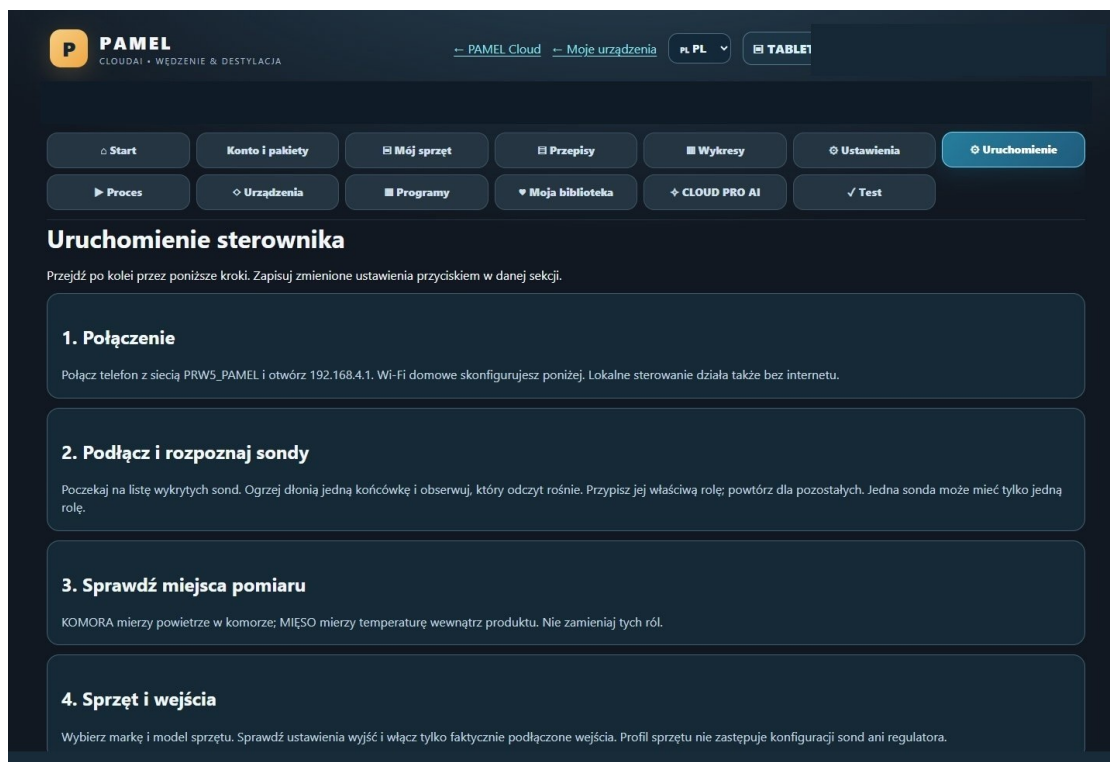
5.10 CLOUDAI - USTAWIENIA (Settings)

What you see and can do

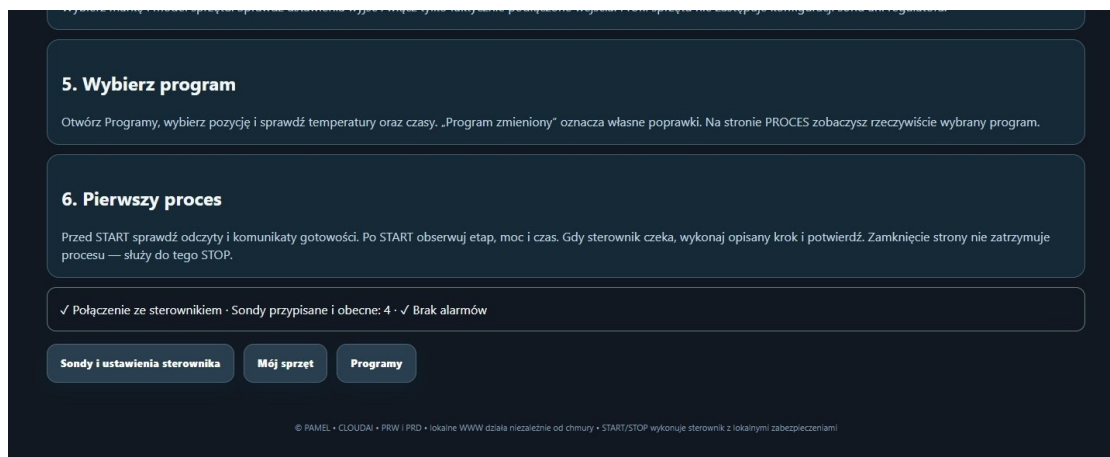
- PAMEL library: 26 technical PRW5 presets.
- Customer accounts: personal programs and library.
- Device synchronisation covers process monitoring, programs, probes, START/STOP and stage-transition confirmations.
- The controller works independently offline. Losing page access does not mean STOP.

5.11 CLOUDAI - URUCHOMIENIE (Setup)

Remote setup follows the local sequence: connection, probes, measurement locations, equipment, program and first process.



5.11 CLOUDAI - Setup - view 1



5.11 CLOUDAI - Setup - view 2

What you see and can do

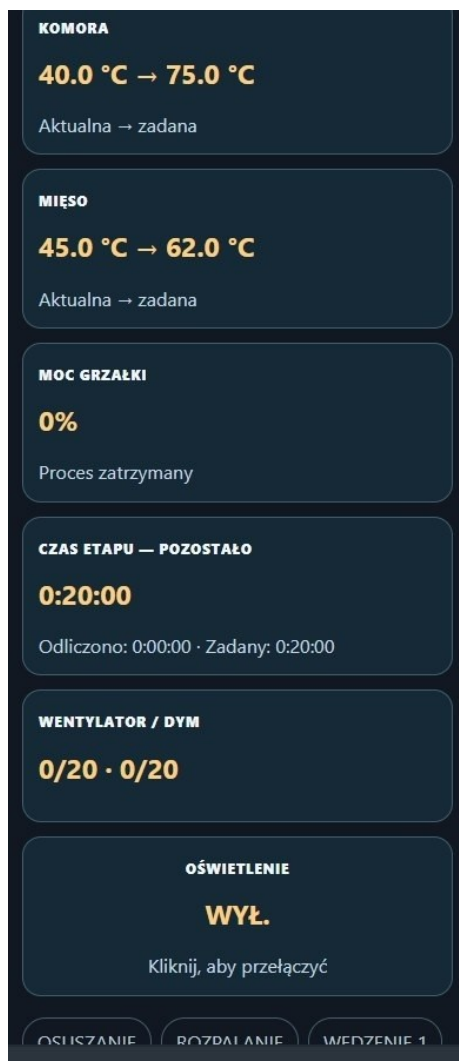
- Cloud indicates readiness issues: no connection, invalid state, alarm or missing required probe.
- Probe assignment depends on current software capabilities. If problems occur, use the local panel.
- START requires a program/settings summary. If configuration changes during review, the request may be rejected.

5.12 CLOUDAI on a phone

Cloud is responsive for phone use. The process view retains all critical information and STOP.



5.12 CLOUDAI on a phone - view 1



5.12 CLOUDAI on a phone - view 2



5.12 CLOUDAI on a phone - view 3

What you see and can do

- The menu scrolls or adapts to screen width.
- Process data matches the computer version.
- With weak connectivity, check the last reading's age. Do not assume an old reading is current.

6. Programs and process stages

PRW5 process sequence

Stage	User action	Controller action
DRYING	load product, close door, confirm	control chamber temperature, fan/smoke using saved settings; time according to the selected method
IGNITION	prepare and ignite the generator, confirm	apply saved ignition settings
SMOKING 1...5	monitor; edit/skip if needed	apply temperature, time, fan and smoke settings for active stages
FINISHING	after smoking select YES/SKIP	if YES, apply finishing temperature and time
FINISHED	remove product and stop the installation	switch process outputs off

Default shared preparation settings

Stage	Temperature	Time	Fan	Smoke	Notes
Drying	40°C	20 min base time	20/20	0/20	wizard base time 10–25 min; load correction –20% / 0 / +50%
Ignition	20°C	299 s	0/20	16/20	engine defaults; editable by the user
Finishing	50°C	300 min	20/20	0/20	after smoking, the user chooses whether to run this stage

IMPORTANT

These shared PRW5 preparation settings can be changed. They are not food-processing advice or a guarantee of results.

Timing

- IMMEDIATE: stage timing begins when the stage starts.
- AFTER TEMPERATURE: for drying and standard smoking stages, timing starts at setpoint minus 5°C.
- A later temperature drop does not reset timing once it has started.
- CASCADE starts timing upon entering each active stage.

Pause after a stage

A standard process may wait for confirmation. The controller retains the completed-stage summary, indicates the next active stage and switches process outputs off. Only selecting “Ready - start...” starts the next stage.

Skipping a stage

POMIŃ BIEŻĄCY ETAP (Skip current stage) affects only the running stage and requires confirmation. Disabling a stage in PROGRAMY instead saves the program configuration while retaining its settings for future use.

26 factory PRW5 programs

These technical presets specify chamber temperature, product target and maximum time. They are not hygiene advice or a food-safety guarantee. The user is responsible for suitable product processing and conditions.

Category	Program	Chamber	Product	Time
MEAT	PORK NECK	75°C	62°C	720 min
MEAT	PORK LOIN	72°C	62°C	660 min
MEAT	TENDERLOIN	72°C	62°C	420 min
MEAT	PORK BELLY	70°C	60°C	600 min
MEAT	PORK BACK FAT	52°C	41°C	720 min
MEAT	COLD SMOKING	25°C	90°C	3600 min
SAUSAGES	TRADITIONAL	78°C	72°C	180 min
SAUSAGES	FRANKFURTER	78°C	72°C	180 min
SAUSAGES	GAME	78°C	72°C	420 min
SAUSAGES	POULTRY	65°C	58°C	360 min
SAUSAGES	PORK	75°C	68°C	420 min
SAUSAGES	COLD SMOKING	25°C	90°C	1500 min

Category	Program	Chamber	Product	Time
FISH	EEL	70°C	72°C	300 min
FISH	SALMON	70°C	72°C	360 min
FISH	CARP	70°C	72°C	360 min
FISH	MACKEREL	70°C	58°C	300 min
FISH	TROUT	70°C	68°C	300 min
FISH	COLD SMOKING	25°C	90°C	840 min
CHEESE	HOT SMOKING	80°C	90°C	240 min
CHEESE	COLD SMOKING	25°C	90°C	300 min
POULTRY	CHICKEN	75°C	65°C	360 min
POULTRY	TURKEY	75°C	65°C	420 min
POULTRY	DUCK	75°C	60°C	360 min
POULTRY	CHICKEN BREAST	75°C	65°C	360 min
POULTRY	TURKEY BREAST	75°C	65°C	420 min
POULTRY	DUCK BREAST	75°C	65°C	360 min

ORIGINAL / MODIFIED

The factory preset remains the PAMEL reference. Saving changes creates a personal version. Restore defaults removes these changes and returns to the original.

CASCADE, CUSTOM and LAST

CASCADE

Cascade has five independent stages, each with a temperature and time. Time 0 skips a stage. START is blocked if all stages are skipped. Cascade advances automatically through active stages according to its own logic.

CUSTOM

CUSTOM is a user profile, not a PAMEL factory preset. Use it to build your own sequence without changing a factory reference.

LAST

LAST recalls the last successfully started program. A rejected START does not save it as LAST.

Editing during operation

Current or waiting-stage settings can be changed without resetting elapsed time. The controller checks limits and safety state and rejects prohibited changes.

7. Settings and temperature control

Stage setting ranges

Parameter	Range	UI step	Meaning
Chamber temperature	20–120°C	0.1–0.5°C depending on editor	temperature the regulator aims to maintain
Product temperature	0–95°C	0,1–0,5°C	0 = no product criterion; >0 may require the MEAT probe
Time	1–5000 min	1 min	maximum/set stage duration
Fan	0–20	1	0 = OFF, 1≈40%, 20=100%
Smoke	0–20	1	control level for both smoke outputs in a normal process
Stage enabled	YES/NO	—	disabled stages are skipped but retain their settings

Control modes

Mode	Settings	Default	Practical effect
MANUAL	manual power 0–100%	50%	constant power demand; safety functions remain active
AUTO P	Kp 0–100	Kp=30	recommended automatic mode; power depends on temperature error
AUTO PI	Kp 0–100, Ki 0–10	Kp=30, Ki=0,02	adds integral action to compensate for persistent error

Mode	Settings	Default	Practical effect
AUTO PID	Kp 0–100, Ki 0–10, Kd 0–1000	Kp=30, Ki=0,02, Kd=5	advanced mode; derivative action responds to the rate of change

Minimum and maximum power

pMin and pMax range from 0 to 100%. pMax limits maximum output. pMin defines the minimum used under applicable conditions. Configurations with pMin > pMax are rejected.

Manual power

Quick power adjustment is available only in MANUAL. In AUTO P/PI/PID, manual power changes are rejected and the panel asks you to change mode.

TIP

Unless manual tuning is needed, start with AUTO P and default settings. Change advanced PI/PID settings individually and observe temperature response.

Probes, inputs and network

DS18B20 probes

- Probes are detected automatically, including without Internet access.
- Roles are assigned by unique probe ID and stored permanently.
- A disconnected probe retains its role and resumes it when reconnected.
- One probe cannot be assigned two roles.
- Probe reassignment is blocked during an active process and while waiting for stage confirmation.
- START requires a valid CHAMBER probe. A product target >0 may also require a MEAT probe.

Digital inputs

Input	Default	Notes
SMOKE	disabled	optional; when enabled, shows the smoke sensor state but does not automatically confirm ignition
DOOR	disabled	optional; enable only with a suitable sensor or contact connected
THERMOSTAT	disabled	optional; enable only with a suitable sensor or contact connected

Local and home networks

- AP: PRW5_PAMEL, no password, address 192.168.4.1.
- The AP operates continuously alongside home Wi-Fi.
- Network scanning shows SSID, signal strength and security.
- After saving Wi-Fi settings, the panel waits for connection and displays the router-assigned IP address.
- Local control is independent of the PAMEL server.

8. Alarms, safety functions and emergencies

Alarm / interlock	When	Controller action	Action required
FIRE ALARM	CHAMBER $\geq 124^{\circ}\text{C}$	stops the process and switches its outputs off	remove cause, cool below 100°C , check probe, clear alarm and issue a new START
CHAMBER PROBE ERROR	missing/invalid control-probe reading	blocks temperature-dependent heating and may stop the process	check probe, cable and assignment; acknowledge after correcting the cause
MEAT PROBE ERROR	required product probe missing	stops or blocks the process depending on program	check the probe or deliberately disable the product criterion if unused
HARDWARE ERROR	a fault requiring a stop is detected	switch process outputs off	do not restart until the cause has been investigated
CHAMBER MISSING at START	no valid CHAMBER probe	rejects START	assign and check the CHAMBER probe
TEST ACTIVE	component test in progress	rejects START	end the test and wait for STOP

Power failure / restart

After restart, the device does not resume the process automatically. Process outputs remain off until deliberately started. Previously saved settings, probe roles, Wi-Fi and profiles remain in memory.

Internet loss

Internet loss or closing Cloud does not stop the process. The controller continues independently. Connect locally via PRW5_PAMEL or the LAN, if available.

9. Installer information

IMPORTANT

SMOKE, DOOR and THERMOSTAT inputs are optional and disabled by default. Enable them only when a suitable sensor/contact is connected.

Component	Type	Notes
HEATER	output	external actuator
HEATER FAN	output	external actuator
DRYING FAN	output	external actuator
SMOKE 230 V	output	smoke-generator circuit
SMOKE 12 V	output	smoke-generator circuit
LIGHTING	output	external actuator
BUZZER	indication	built-in audible indicator, not an external load
SMOKE / DOOR / THERMOSTAT	optional inputs	disabled by default; enable only used inputs

Connection rules

Use the markings on your device and the diagram for its version. Disconnect power before working on mains circuits. Where legally required, use a suitably qualified installer.

Testing and safe state

TEST briefly checks individual outputs. Test the buzzer separately as an audible indicator. STOP, alarms and between-stage waiting switch process outputs off. START is rejected if safety conditions are not met.

Optional inputs

SMOKE, DOOR and THERMOSTAT are not needed for basic operation. Leave unused inputs disabled. Enabling an input without a sensor may cause incorrect messages or state interpretation.

10. Statistics, data and updates

STATISTICS AND TECHNICAL DATA

The controller records operating statistics, including total device operating time and, where it controls a heater, total heater operating time. Heater time accumulates while heating is active regardless of power level.

When Cloud is enabled, the controller sends data needed for remote monitoring and service operation, including process state, temperatures, alarms and basic device information. The scope depends on the functions used.

Account and history data processing, storage and deletion are described in the current PAMEL Cloud terms and privacy policy at server.pamel.pl.

CLOUD / ACCOUNT

Account data, history and support requests are handled under current PAMEL Cloud rules.

Software updates

When PRW5 updates are available, follow the panel prompts to install them. If none is offered, continue normal operation. Do not upload arbitrary files. If unsure, consult server.pamel.pl or PAMEL service.

RULE

Stop the process and ensure stable power before updating. Do not disconnect power during installation.

11. Before contacting service

Symptom	Possible cause	Action required
PRW5_PAMEL is not visible	power problem, temporary AP startup error or device not operating	restart PRW5; its AP should remain available alongside home Wi-Fi. If still absent, contact service.
START does not work	missing CHAMBER probe, alarm, test, invalid state or required product probe missing	open Setup, check probes/alarms, end any test, return to STOP and retry.
Temperature displays --	probe disconnected, unassigned or incorrectly detected	wait a few seconds, refresh probes, warm the tip by hand and assign its role.
Program selected but not started	selection and START are separate	click Load program, wait for acknowledgement, then open Process and START.
Controller waits after a stage	waiting for next-stage confirmation	read the summary, prepare the next stage and select "Ready - start...".
Time does not advance	temperature-based timing selected	check the displayed threshold; PRW normally starts timing at setpoint -5°C .
Cannot change manual power	regulator in AUTO	select MANUAL, then change power within 0–100%.
Cannot disable a stage	stage active or waiting to start	use Skip current stage or pause controls in Process.
Cloud shows old data / offline	Internet lost or device not reporting	check the local panel; do not treat old telemetry as current.
Cloud refuses START	offline, not ready, alarm or missing probe	check PRW5 readiness and local state. Cloud does not bypass safety checks.

Symptom	Possible cause	Action required
Wi-Fi saved but not connected	wrong password, weak signal or unavailable network	scan networks and check SSID/password/signal. PRW5_PAMEL remains active.
Heater test rejected	required probe missing, temperature too high, alarm or process not stopped	stop the process; check CHAMBER and safety state.
Fire alarm cannot be cleared	CHAMBER still $\geq 100^{\circ}\text{C}$ or invalid reading	cool the installation, check the probe and remove the cause, then clear the alarm.
Process did not resume after restart	intended behaviour	outputs stay OFF after restart; check the installation and issue a new START.
Update will not start	no connection, no available update or temporary server problem	check connection and server.pamel.pl; do not upload arbitrary files. Contact service if unsure.

12. Maintenance and common user errors

- Disconnect power and allow the device and probes to cool before cleaning.
- Do not immerse the controller or connectors. Avoid condensation when moving from cold to warm surroundings.
- Check cables, terminals, plugs and insulation. Loose connections may overheat.
- Do not coil high-load cables tightly or route them over sharp edges or hot surfaces.
- Probes are consumables. Do not pull threaded/metal probes by their cables or remove them while hot.
- SMOKE, DOOR and THERMOSTAT inputs are optional. Do not enable an input without the corresponding sensor/contact.
- Do not interchange CHAMBER and MEAT roles. Incorrect assignment can cause faulty regulation or process termination.
- Cloud acknowledgement does not prove physical load activation. Check actual operation during commissioning.

Disposal and BDO

PAMEL is registered under BDO 000073814. Take used equipment to a suitable collection point or follow current manufacturer guidance. Do not dispose of electronics with household waste.

13. Support, service and contact



<https://serwer.pamel.pl/>

Start at serwer.pamel.pl for the Product Centre, manuals, FAQ, PAMEL EDU, documents, software and Cloud services.

Contact	Details
PAMEL	42-300 Myszków, ul. Urodzajna 5E
Telephone	453-343-360
Office	Mon–Fri 9:00–14:00
Technical support	Mon–Sat 16:00–19:00
E-mail	pamel@pamel.pl
Website	pamel.pl / serwer.pamel.pl
BDO	000073814

CURRENT INFORMATION

Current contact details, manuals, knowledge base and service information are available at pamel.pl and serwer.pamel.pl.

Requesting help in Cloud

CLOUDAI's Pomoc / Help button sends a problem description with basic diagnostic information needed to handle the request.

Prepare before contacting us

- PRW5 model and software version shown in Setup
- device number for Cloud issues
- photo of the error/alarm screen
- which probes are CHAMBER and MEAT
- component response during TEST; whether the buzzer was audible
- whether the issue occurs locally, in Cloud or both

User / installer notes

Record probe locations, smoker settings, first-process results and tuned regulator settings.

PRW5 quick reference

Essential information for daily operation

Local operation - FREE. Connect to PRW5_PAMEL or the same local network. Local control requires no Internet or subscription.

Cloud / PRO AI - a paid online service. Lack of a paid package does not disable local operation.

START - requires a valid CHAMBER probe and, when product temperature is used, a suitable MEAT probe.

STOP - stops the process. Closing the browser or losing Internet access does not replace STOP.

After a stage - the controller may wait for deliberate confirmation. Process outputs are off while waiting.

Fire alarm - CHAMBER threshold 124°C. Remove the cause; clearing requires a safe temperature drop and valid probe reading.

SMOKE / DOOR / THERMOSTAT inputs - OPTIONAL, disabled by default. Enable only connected inputs.

BUZZER - built-in audible indicator, not an external load or power output.

No Internet - the process continues in the controller. Use PRW5_PAMEL or local LAN/Wi-Fi.

Support: serwer.pamel.pl | pamel@pamel.pl | tel. 453-343-360

WARRANTY TERMS - 1/2

1. PAMEL grants a warranty for the controller (excluding accessories) within the Republic of Poland for a maximum of 60 months:

- 24 months of basic warranty,
- 6 months of extended manufacturer's warranty,
- an extension to 40 or 50 months may additionally be purchased.

The total warranty period may not exceed 80 months from the device manufacture date.

Additional equipment (e.g. probes, heaters) is covered by the standard warranty arising from the Civil Code.

A holographic sticker on the warranty card confirms a purchased extension.

2. Consumables and accessories intended for self-installation (e.g. antennas, sensors, brackets, heaters, cables, batteries) are not covered.

3. During the warranty period, the manufacturer undertakes to remedy physical defects free of charge.

If at least four repairs have been made under the basic warranty and the device remains defective, the Buyer is entitled to a new device of equivalent specifications or a refund.

4. The warranty period is extended by the repair duration.

5. Submit claims by email (pamel@pamel.pl) or telephone. The manufacturer will first attempt remote resolution and indicate the next steps.

6. At the manufacturer's request, the Buyer must complete a complaint report.

7. The warranty covers only defects arising from causes inherent in the device.

8. The warranty excludes damage caused by:

- improper installation, operation or maintenance,
- storage in unsuitable conditions,
- use of unsuitable consumables,
- unauthorised repairs or modifications,
- mechanical damage, flooding, condensation, contamination, weather, accidental events,
- exceeding rated parameters.

9. Claims concerning technical parameters are excluded where those parameters comply with the manufacturer's specifications.

WARRANTY TERMS - 2/2

10. To retain warranty rights, deliver the device:

- complete,
- in packaging protecting it against damage,
- with documentation, cables and additional components,
- with seals and stickers intact,
- with the original warranty card signed by both parties and the manufacture-date sticker.

11. The warranty excludes services and materials for normal servicing (e.g. installation, programming, cleaning, maintenance, replacement of fuses and bulbs). These are chargeable.

12. Service may refuse warranty repair if:

- documentation does not match the actual device,
- documents contain unauthorised alterations,
- device identification markings (e.g. labels) have been removed.

13. Warranty repairs are completed within 21 days of delivery to service.

If parts must be imported, this period may be extended; the Buyer will be notified by email.

14. Installation must comply with standards and this manual. Where legally required, a suitably qualified person must perform it.

15. This document exclusively governs the parties' rights and obligations.

16. Equipment not collected within 3 months after repair becomes the service provider's property.

17. Parts replaced during repair remain the manufacturer's property.

18. The manufacturer is not responsible for loss of user data stored in the device. After repair, the device is returned with factory settings restored.

19. By signing the warranty card, the Buyer confirms having read and accepted these terms.

A card without a signature and original manufacture-date sticker is invalid.

Note: Maintenance, cleaning, replacement of bulbs, fuses or consumables, and repairs arising from normal wear (e.g. potentiometers) do not count towards the number of repairs.

WARRANTY START DATE	SELLER'S STAMP	CUSTOMER'S SIGNATURE