Logivyx

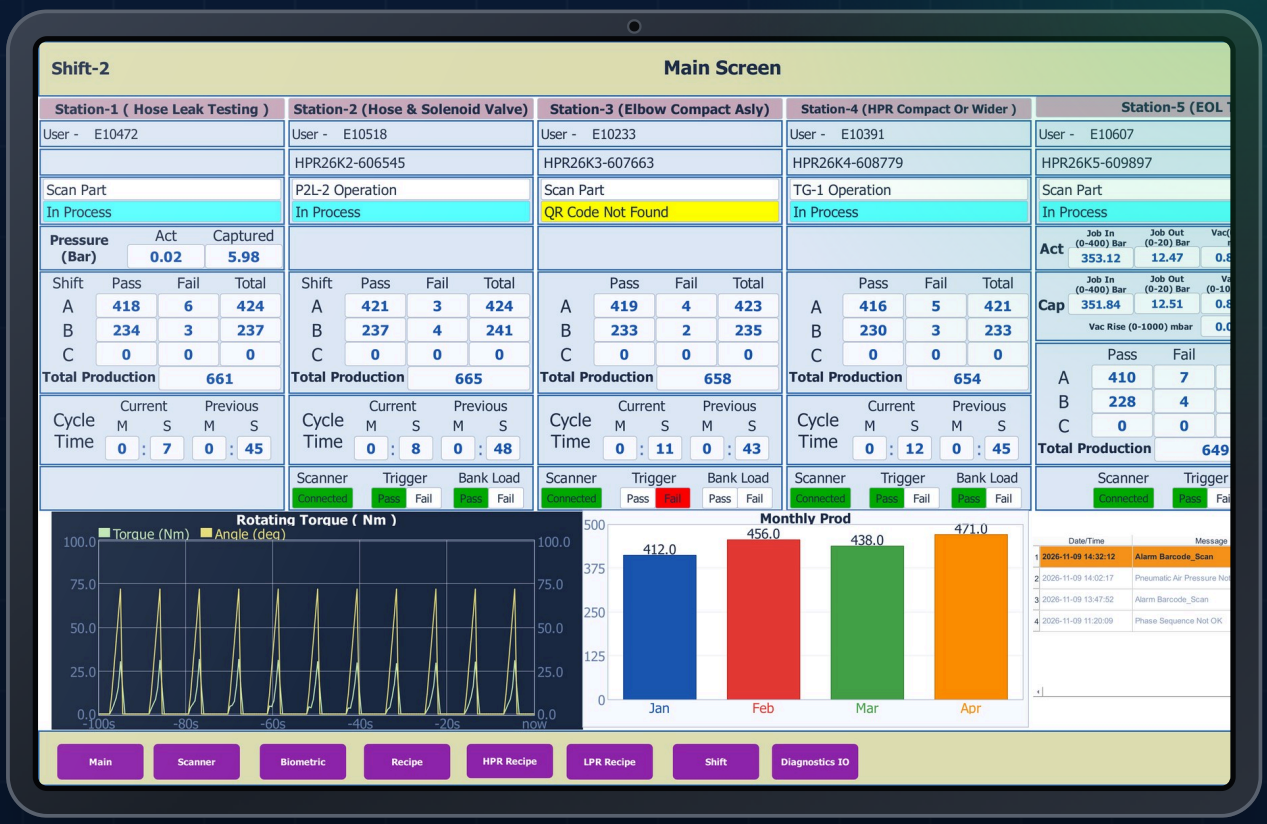
PRODUCT CATALOG · 2026

10.1" PANEL PC · HMI + SOFT PLC · READY TO RUN

PanelCore 10

The panel is the controller.

A fanless 10.1-inch industrial touch panel with the Logivyx Runtime pre-installed — operator screens and IEC 61131-3 control logic running together on one device. Mount it, connect your I/O and run the machine. No separate PLC.



LOGIVYX RUNTIME · MULTI-STATION ASSEMBLY LINE · LIVE PROJECT SCREEN

10.1" · 1280×800
10-point capacitive touch

Soft PLC inside
ST · Ladder · Sequence

Quad-core 2.4 GHz
Raspberry Pi 5 compute

VISUAL LOGIC.
ZERO CODE.

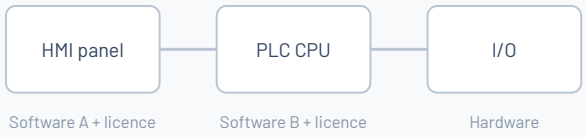
PRODUCT OVERVIEW

Unbox it. Mount it. Run the machine.

PanelCore 10 is Logivyx's ready-to-deploy operator station: an industrial 10.1-inch panel PC that arrives with the Logivyx Runtime installed and licensed. Design your project in Logivyx Studio, deploy it over the network, and the same panel shows the screens *and* executes the control logic.

THE CONVENTIONAL CABINET

HMI panel + PLC CPU + 2 tools



- ✕ Two devices to buy, wire and mount
- ✕ Two engineering tools and licences
- ✕ Tags duplicated between HMI and PLC

THE PANELCORE WAY

One panel. HMI and controller.



- ✓ PLC CPU removed from the bill of materials
- ✓ Screens and logic share one tag database
- ✓ Runtime pre-installed — deploy and run

10.1″
IPS-class touch display, 1280 × 800, 10-point touch

4×A76
Quad-core Arm Cortex-A76 at 2.4 GHz (Raspberry Pi 5)

0
Separate PLCs needed — the Soft PLC runs on the panel

8+
Industrial protocol drivers in the Logivyx Runtime

WHAT YOU GET

Industrial panel PC

Fanless aluminium enclosure, 10.1″ capacitive touch screen, front-panel mounting kit included.

Logivyx Runtime, pre-loaded

HMI/SCADA runtime with embedded Soft PLC installed on Linux ARM64 and licence activated for the device.

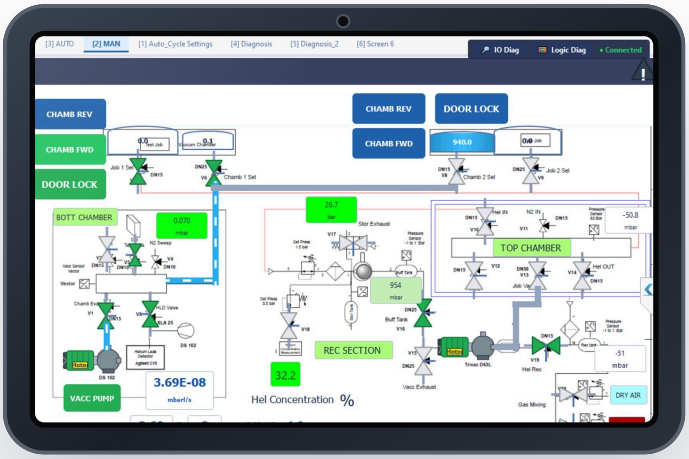
Network deploy from Studio

Push projects from Logivyx Studio on a Windows PC straight to the panel over Ethernet or Wi-Fi.

HARDWARE

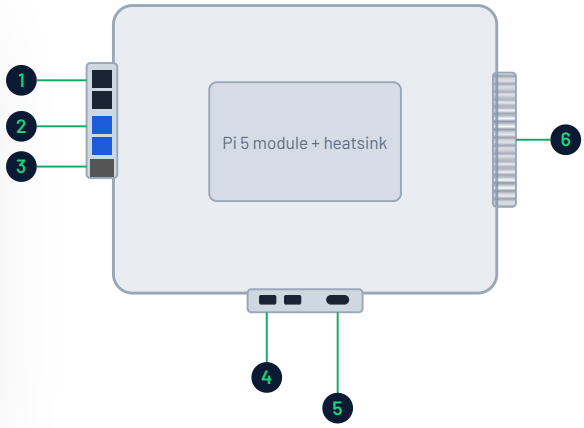
Built for the cabinet door, not the desk.

A rugged CNC-aluminium and sheet-metal housing with passive cooling, a bright multi-touch display and the I/O a modern machine needs — powered by Raspberry Pi 5 performance.



Front view. 10.1″ capacitive touch screen; optional 8 MP front camera (Vision variant).

REAR VIEW · SIDE I/O (SCHEMATIC)



1	2 × USB 2.0, Type-A — up to 480 Mbps
2	2 × USB 3.0, Type-A — up to 5 Gbps
3	1 × Gigabit Ethernet RJ45 with link/activity LEDs
4	2 × micro-HDMI — external display up to 4K60
5	Power in, USB Type-C — 5 V DC / 5 A
6	Passive heat-dissipation vents — fanless

Raspberry Pi 5 compute

Broadcom BCM2712, 4 × Cortex-A76 at 2.4 GHz with 4 GB or 8 GB LPDDR4X — headroom for fast scan cycles and rich screens.

Fanless & silent

The Pi 5 is bonded to the metal housing with thermal silicone; no fan to clog, fail or draw in dust.

10-point capacitive touch

1280 × 800, 16:10, 250 cd/m², 160° viewing angle — gloved-hand friendly widgets in Logivyx screens.

Wi-Fi & Bluetooth

Dual-band 802.11ac Wi-Fi and Bluetooth 5.0 / BLE alongside Gigabit Ethernet.

Optional 8 MP camera

Front camera for operator identification, inspection snapshots and Logivyx camera / vision widgets.

Front-panel mounting

Panel cut-out 254 × 168 mm with four clamping buckles and M4 screws — supplied in the box.

SOFTWARE ON BOARD

Logivyx Runtime, ready on first power-up.

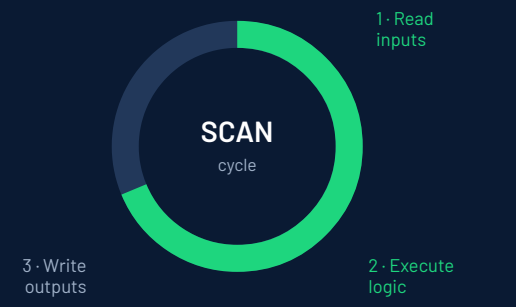
Every PanelCore ships with the full Logivyx Runtime — the same HMI/SCADA engine and embedded Soft PLC that power Logivyx projects on industrial PCs. Your .hmi project carries screens, tags, logic, alarms, recipes and reports in one file.

THE CORE USP

Embedded Soft PLC — on the panel

A deterministic, cyclic logic engine runs inside the runtime: it reads inputs, executes your Main routine and writes outputs every scan — with scan-time and overrun monitoring, retentive variables and STARTUP / SHUTDOWN routines. Program it in Structured Text, Ladder or the graphical Sequence designer.

Structured Text · Ladder · Sequence · PID · Timers · Counters · CiA 402 motion



HMI & visualisation

30+ widgets — gauges, trends, dual-axis and X-Y charts, grids, process and P&ID graphics, alarm banner and list.

Data, recipes & reports

SQLite data logging with batch keys and CSV export, multi-profile recipes, tag-triggered PDF reports, SQL Server read/write.

Security built in

User groups, hashed passwords and screen-, dialog- and widget-level authorisation for audit-friendly operation.

Diagnosis on the panel

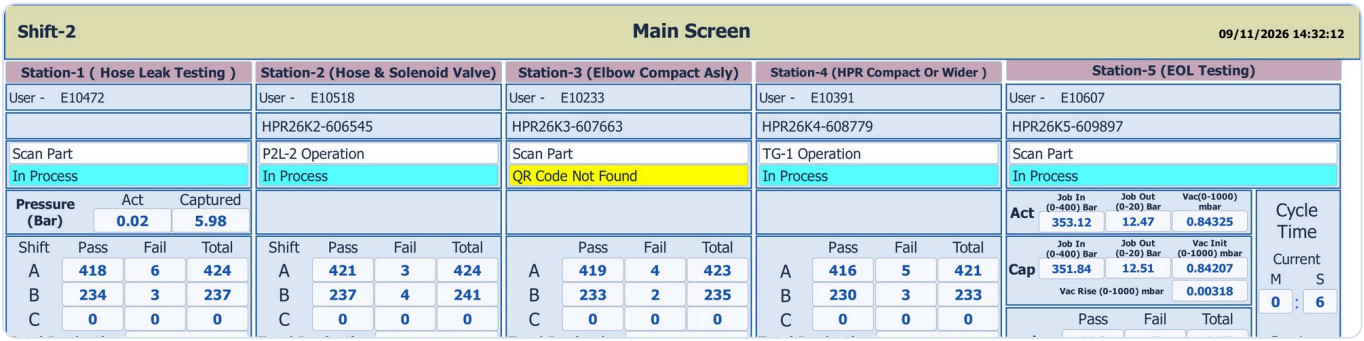
IO Diagnosis and watch window run on the deployed panel — filter tags, force values, flag stale data, export CSV.

Web & mobile viewer

Read-only live mirror of the panel's screens in any browser or Android device on the plant network.

Retentive by design

Retentive variables and internal tags persist across power cycles — the machine resumes where it stopped.

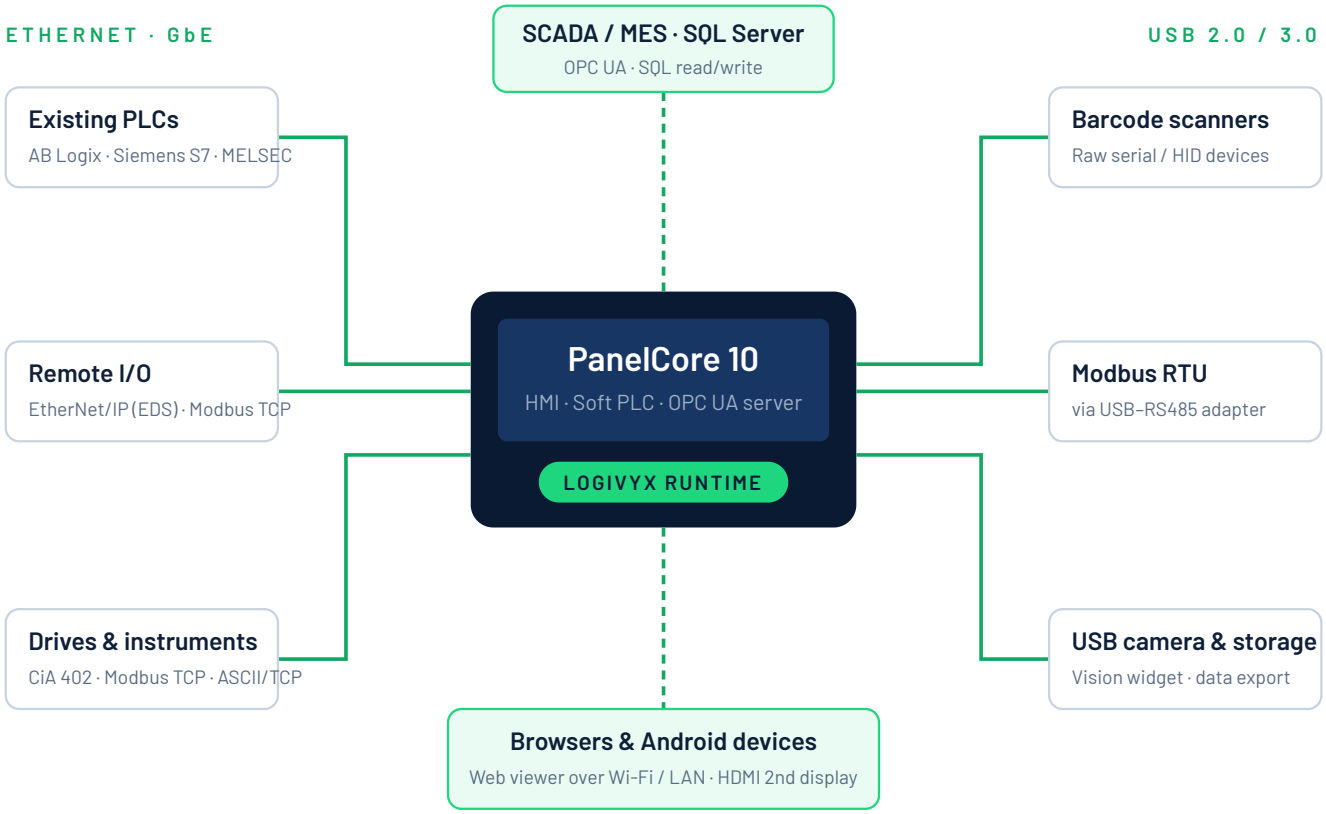


Live runtime screen. Per-station sequence step, scanned part codes, shift-wise production and cycle times — from a real Logivyx assembly-line project (simulated values).

CONNECTIVITY

One panel at the centre of the machine network.

Use PanelCore as the machine controller over Ethernet and USB field devices, as a vendor-neutral HMI on top of an existing PLC — or both at once in hybrid mode.



Mitsubishi

SLMP over Ethernet for MELSEC iQ-F (FX5) and SLMP-capable CPUs. Tag import from GX Works3 Global Label XML or CSV.

Siemens

S7 communication for S7-300/400 and S7-1200/1500. Data-block addressing, CSV tag import from TIA Portal.

Allen-Bradley

EtherNet/IP · CIP to ControlLogix / CompactLogix with symbolic tags. Import Studio 5000 L5X incl. UDTs.

FROM ENGINEERING DESK TO PANEL

01
Design

Draw screens and write ST, Ladder or Sequence logic in Logivyx Studio on Windows 10/11.

02
Simulate

Test screens and logic together on the built-in simulator before the panel is even mounted.

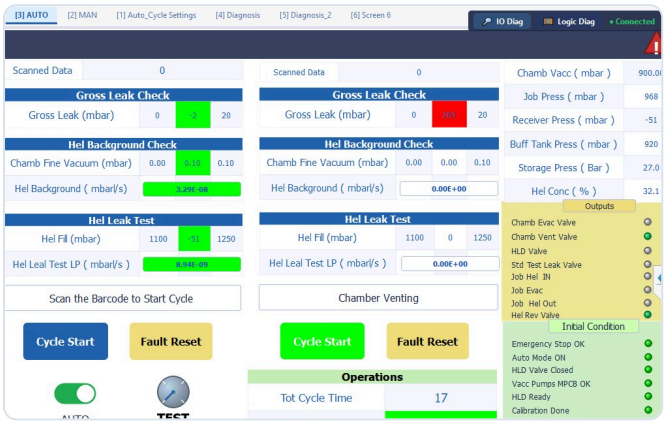
03
Deploy

Network-deploy the project to PanelCore — HMI and controller go live together.

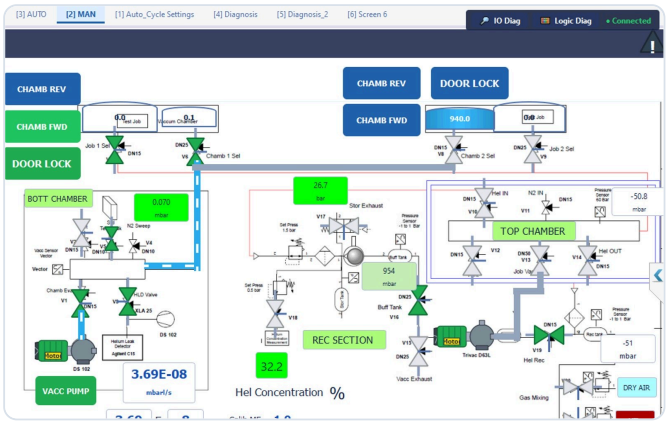
PROVEN ON REAL MACHINES

Real Logivyx projects, sized for a 10-inch panel.

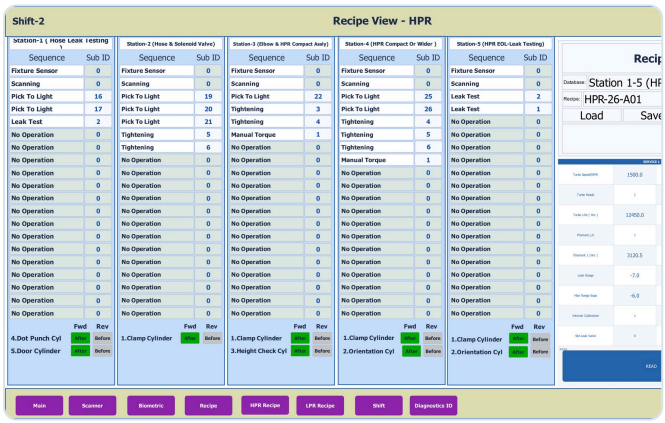
PanelCore runs the same project file as any Logivyx Runtime target. These screens come from production Logivyx projects — a helium leak-testing machine and a multi-station hose assembly line.



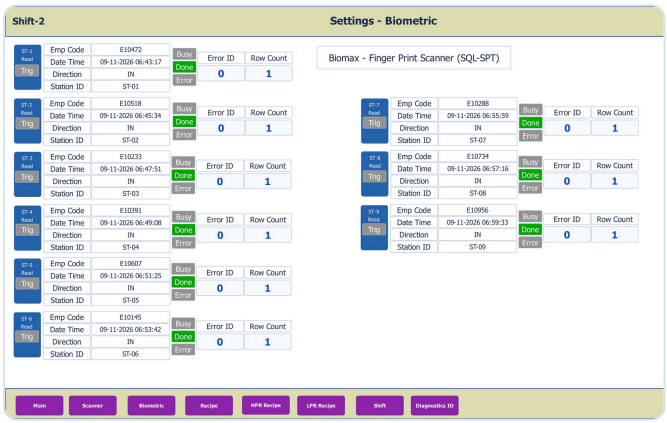
Helium Leak Testing — AUTO. Gross-leak, background and helium-leak results per stage with cycle counters and live alarms.



Helium Leak Testing — P&ID. Valves, vacuum chambers, pumps and gas lines animated live from Soft PLC tags.



Hose Assembly — Recipe view. Operation sequence of every station for the selected product, loaded from the recipe database.



Hose Assembly — Biometric link. Operator log-in per station read from the fingerprint system's SQL database.

IDEAL APPLICATIONS

Leak testing machines
Helium, vacuum- and pressure-decay testers.

Assembly SPMs
Press-fit, crimping and torque stations.

EOL & test benches
Logged results and PDF test certificates.

Filling & packaging
Recipe-driven cycles and batch reports.

Process skids
Tanks, valves, pumps and PID loops.

Gas & vacuum systems
Evacuation and pressure regulation.

Vision & traceability
Scanners, camera checks, SQL records.

Retrofits
Modernise a legacy machine or front a PLC.

TECHNICAL SPECIFICATIONS

Specifications

Computing — SYSTEM

Processor	Raspberry Pi 5 · Broadcom BCM2712, 4 × Arm Cortex-A76 @ 2.4 GHz
Memory	4 GB or 8 GB LPDDR4X (by variant)
Storage	32 GB or 64 GB industrial microSD (by variant)
Operating system	Raspberry Pi OS 64-bit (Linux ARM64), pre-configured

Display & touch — HMI

Display	10.1″ TFT LCD, 1280 × 800, 16:10, 16.7 M colours
Brightness / viewing	250 cd/m² · 160° / 160° (H/V)
Touch	Projected capacitive, 10-point multi-touch
Camera	8 MP front camera (Vision variant only)

Interfaces — I/O

Ethernet	1 × 10/100/1000 Mbps, RJ45 with LEDs
USB	2 × USB 3.0 (5 Gbps) · 2 × USB 2.0 (480 Mbps), Type-A
Video out	2 × micro-HDMI, up to 4K60
Wireless	Dual-band 802.11ac Wi-Fi · Bluetooth 5.0 / BLE

Power, mechanical & environment — HARDWARE

Power input	5 V DC, 5 A via USB Type-C · 25 W max
Enclosure	CNC aluminium + sheet metal, fanless
Dimensions / weight	258 × 172 × 38 mm (W × H × D) · approx. 900 g
Mounting	Front panel; cut-out 254 × 168 mm, R6.5 corners
Operating temp.	-20 °C to +60 °C
Humidity	5 % – 95 % RH, non-condensing · indoor use
Certifications	CE · FCC (hardware platform)

Logivyx Runtime — SOFTWARE

Pre-installed	Logivyx Runtime (HMI/SCADA + embedded Soft PLC), per-device licence activated
Engineering	Logivyx Studio on Windows 10/11 64-bit; network deploy to panel
Project format	Single .hmi file — screens, tags, logic, alarms, recipes, reports

Soft PLC — LOGIC

Languages	Structured Text (IEC 61131-3 style), Ladder Diagram, Sequence
Execution	Cyclic scan: input refresh → Main → output write-back; scan-time & overrun counters
Organisation	Main + routines, STARTUP / SHUTDOWN, user UDTs and Function Blocks
Library	TON/TOF/TP, CTU/CTD, R_TRIG/F_TRIG, PID, SCALE, LIMIT, maths, strings, SQL_READ / SQL_WRITE
Motion	CiA 402 drives — MC_Power, MC_Home, MC_Move..., MC_Stop, MC_Reset
Retention	Retentive variables persisted across power cycles

HMI & data — VISUALISATION

Widgets	30+ display, control, chart, process, P&ID and camera widgets
Data services	SQLite logging & recipes, tag-triggered PDF reports, SQL Server read/write
Security	User groups, hashed passwords, screen/dialog/widget authorisation
Remote access	Browser & Android web viewer (read-only); OPC UA server

Connectivity — DRIVERS

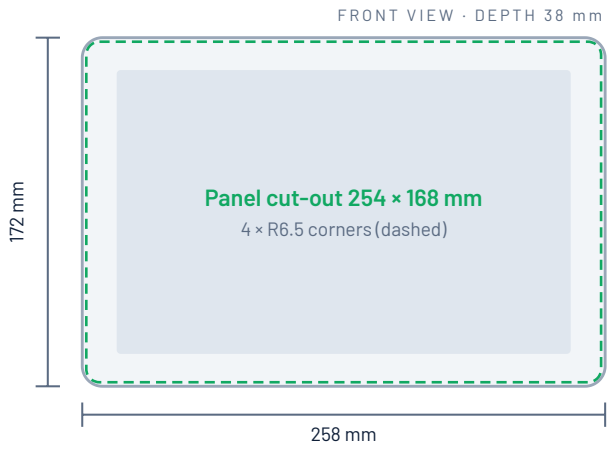
PLC drivers	Allen-Bradley Logix (EtherNet/IP) · Siemens S7 · Mitsubishi MELSEC (SLMP)
Open protocols	Modbus TCP · Modbus RTU* · OPC UA client & server · EtherNet/IP (EDS I/O)
Generic devices	ASCII over TCP, raw TCP, raw serial*; built-in simulator

* Serial devices connect through a USB–RS485 / RS232 adapter.

Specifications subject to change without notice.

DIMENSIONS & MOUNTING

Front-panel mount in minutes



1. Cut a **254 × 168 mm** opening with R6.5 corners in the cabinet door.
2. Insert PanelCore from the front; fix the four buckles to the side holes with the **M4 × 8** screws.
3. Tighten the **M4 × 16** clamping screws against the door, connect power and Ethernet — the runtime starts automatically.

> **Power tip:** supply a stable 5 V / 5 A on USB-C. From a 24 V DC cabinet supply, use an industrial 24 V → 5 V / 5 A USB-C converter.

ORDERING INFORMATION

Order code	Variant	RAM	Storage	8 MP camera	Best for
LGX-PC10-S	**PanelCore 10 Standard**	4 GB	32 GB	—	Single machines, HMI + Soft PLC
LGX-PC10-P	**PanelCore 10 Pro**	8 GB	64 GB	—	Multi-station lines, heavy logging & reports
LGX-PC10-V	**PanelCore 10 Vision**	8 GB	64 GB	✓	Vision checks, operator ID, traceability

In the box

PanelCore 10 unit with Logivyx Runtime pre-installed and licensed · 4 × mounting buckles with 4 × M4×8 and 4 × M4×16 screws · Quick-start guide

Recommended accessories

24 V DC → 5 V / 5 A USB-C power converter · USB–RS485 adapter for Modbus RTU · Logivyx Studio engineering licence

Logivyx

Request a live demo
and see PanelCore run your machine.

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PanelCore 10 hardware platform: EDATEC ED-HMI3010-101C (Raspberry Pi 5). Raspberry Pi is a trademark of Raspberry Pi Ltd.