



TouchGW 101

Industrial 10.1" touch controller for AV, audio & automation



Highlights

- Boots straight into a fully-configurable button panel — one press runs up to 16 audio, UDP, TCP and HTTP actions in sequence.
- Rugged fanless aluminium enclosure, front panel rated IP65.
- Secure remote administration over HTTPS; optional panel PIN and screen sleep.
- Power-safe A/B firmware updates with automatic rollback; hosted OTA.
- Remote support, central syslog and worldwide time built in.

Control & actions

Button actions	Up to 16 steps per button, executed in order on a single press
Step timing	Optional wait before any step — 10 ms to 2 min
Targets per step	Up to 16 destinations per step, addressed in parallel
UDP / TCP	Text or hex payload · configurable send timeout
HTTP	GET / POST / PUT · custom headers · content type · request body
Audio	One local file per button · optional looping · master volume control
Panel layout	Grid up to 12 × 8 buttons · per-button icon, colour, shape (round / pill / soft), span and font size
Configuration	On the panel itself, or from any browser over HTTPS

Compute

Processor	Rockchip RK3568 — quad-core 64-bit Arm Cortex-A55 @ 2.0 GHz · Mali-G52 GPU · 1 TOPS NPU
Memory / storage	2 GB LPDDR4 · 32 GB eMMC (redundant A/B firmware slots)
Software	noxIT TouchGW firmware on Debian Linux — single static app, kiosk boot
Real-time clock	Battery-backed; keeps time while unplugged

Display & touch

Display	10.1" TFT LCD · 1280 × 800 (16:10) · 300 cd/m ² · 1000:1 · 16.7 M colours · 85° all directions
Touch	Projected-capacitive · 10-point multi-touch · hardened glass front

Connectivity & interfaces

Network	1 × Gigabit Ethernet (10/100/1000) · on-board Wi-Fi + Bluetooth 5.0
Audio	Audio I/O — one 3.5 mm jack combining analog output + microphone input
Ports	2 × USB · HDMI (up to 4K) · RS-232 (COM) · microSD (TF) · SIM (optional 4G/LTE) · USB OTG
Terminal block	Pluggable screw terminal: serial UART · CAN · 3× digital I/O (GPIO) · RS-485



Management & security

Remote administration	Full configuration UI over HTTPS from any browser · admin password
Firmware updates	Ed25519-signed A/B images · automatic rollback on failure · hosted OTA channel, configurable poll interval
Remote support	Outbound secure tunnel, works behind NAT and firewalls · enabled by the operator
Logging & health	Central syslog over UDP or TCP · device health report every minute
Panel security	Optional numeric PIN · display sleep timer · signature verified before any firmware is applied
Time	UTC system clock · NTP sync · automatic timezone detection

Enclosure & mounting

Construction	Die-cast aluminium alloy · fanless · fully enclosed
Ingress protection	Front panel IP65
Dimensions	261.4 × 185.4 × 51 mm (W×H×D) · panel cut-out 241.3 × 165.4 mm
Mounting	Desktop · wall · VESA 100 × 75 · panel / cantilever

Power, environment & compliance

Power	12–36 V DC (barrel jack or terminal block) · ~18 W typical
Temperature	Operating -10 °C to +60 °C · storage -20 °C to +70 °C
Humidity	Up to 95 % RH, non-condensing
Robustness	Vibration IEC 60068-2-64 · shock IEC 60068-2-27 · fanless
Compliance	CE · FCC · EMC · CB · RoHS · CCC

Try it, then get the full documentation

Interactive demo	the actual panel software, running in your browser — touch-controller.noxit.it
Firmware & manual	signed firmware and the complete user manual, for registered customers on the portal
Support & projects	support@noxit.it — noxIT works with system integrators, consultants and distributors