

PARADOX

X45 / X46

Automation Security and Access Controllers

All-inclusive hardware • Ready to install



Complete Hardware



► All-inclusive product:

100-240 VAC 65 W power supply, 8 Ah lithium backup, LTE, Ethernet, Wi-Fi, M GFSK wireless, RS-485 AES128 expansion bus, front and wall tampers, one access door, 8 input/zones (X45) or 16 input/zones (X46), doubled to 16/32, and built-in status display.



► Hybrid Multi expansions:

M GFSK Wireless, RS-485, Ethernet or wifi expansion possibilities with fall back from RS485 to Wireless on selected modules.



► Fast installation:

Modern stylish enclosure with simple wall bracket, ample wiring space, clear label. Lighted terminals, PC software or BlueEye application programming.



► Professional service model:

System wide Remote firmware upgrades, service logs, secure installer access, Service Company environment, and Swan / Identifier ecosystem.



X45 and X46 at a glance

Feature	
Main role	Professional hybrid security and automation controller with onboard access-door hardware.
Onboard inputs	X45: 8 doubled to 16 with ATZ. X46: 16 physical inputs, doubled to 32 with ATZ.
Access hardware	X45 Only: 1 dedicated door output and 1 REX input (firmware enabling may be phased).
Power	Integrated 100-240 VAC, 65 W heavy-duty power supply 2.5A Max Aux output, 8 Ah internal lithium battery backup.
Expansion	M wireless, RS-485 bus, Ethernet/Wi-Fi network devices all with Auto Learn search or QR code scanning

Professional capacity

System maximum capacity	X45 / X46
Users	1,000
Partitions	40
Inputs / signaling or security zones	200
Wireless devices or RS485	200
Network devices	40 local network devices (Keypads cameras repeaters)
Programmable outputs	100
Access doors	64
Automation rooms / scenarios	50 rooms / 64 scenarios
Remote controls and wireless automation switches	Up to 200 combined; maximum 4 per user

► Domus automation Security and Access Control

- Inputs can be used as signaling inputs security zones, or both. Monitoring and controlling Security, Shutters, Doors, Environmental sensors, water flow, Temperature, and automation feedback.
- Automation Outputs can be triggered by system events, Inputs, Schedules, Sunset / Sunrise, Temperature readings, Scenarios and manual via K70M keypads, remotes, BlueEye, and PC.

► Secured System access and Reporting

- Direct monitoring to CMS via Ethernet, Wi-Fi or LTE channels to either Receivers IPC10 at CMS or VIPC20 installed locally or cloud
- System Secure remote Log in via Paradox Identifier ecosystem provides secure verified two-way

authentication for BlueEye, Dealer Portal, and service-company access.

► Wireless platform

- M wireless based on GFSK technology in 868 MHz and 914 MHz variants, with frequency hopping and encryption hopping.
- Automatic transmit-power management helps maintain reliable communication while extending wireless device battery life.

► Advanced Power Topology

X45/X46 system designed to avoid one large central battery backup providing backup for the RS485 bus devices (one point of failure) and rely instead on multiple in-module rechargeable, long-lasting lithium batteries during AC loss. They do not drain the controller battery and use their own internal batteries first, extending substantially system backup time without the need for oversized big controller batteries in separate enclosures. The controllers also offer, if needed, a larger enclosure for an external add-on battery of up to 12 Ah, totaling 20 Ah battery backup.

Battery configuration	24-hour backup target	12-hour backup target
Internal 8 Ah lithium battery	250 mA for 24 h, EN 50136 Grade 3	500 mA for 12 h, EN 50136 Grade 2
With External 12Ah battery (20Ah total)	750 mA for 24 h, EN 50136 Grade 3	1.5 A for 12 h, EN 50136 Grade 2

► RS-485 one-wire bus expansion

- RS-485 bus with AES128 encrypted communication.
- Typical bus speed 38.4 kbps; Larger distance can be obtained by lowering the bus speed to 19.2 kbps with up to 1,500 m, subject to cable, load, topology, and modules type.
- Industrial Hubs maybe used to create isolated RS485 branches and range extension, CE and FCC certified RS485 Hubs are offered to compliment the installation by Paradox.

► M Wireless Devices

Wide variety of wireless M devices are offered as bellow:

Category	Examples
Keypads	K38M wireless fixed LCD and K70M
Door contacts	Variety of Door Contacts with or without additional input
Motion detectors	Indoor and outdoor detectors
Special detectors	Smoke, water detector, water valve
Annunciators	SR40M-SL, SR40M, SR230M / SR250M wireless sirens, CM1M chime and sound player
Expansion modules	Variety of Input and output devices with and without power supply
Remote controls	Variety of functional remotes from one to eight function selection
Domus Automation remotes	Five, Four or two buttons slim portable or wall mount switches for Dimming, Curtain and On/Off functions

► Domus Home Automation and Security Devices (maximum 200 M wireless or RS485 devices)

Wide variety devices connected to fast RS485, 57.6Kbps, 38.4Kbps, or 19.2Kbps, one wire, Star or Daisy chain topology up to 1,500 m expandable with RS485-14, or any professional RS485 two way Hub.

Category	Examples
Dimming devices	100/240V Mosfet dimmers for high efficiency no flickering LED or Incandescent loads, In wall or Dinrail versions
High Voltage outputs	240V AC, 6A in wall or Din Rail 10A TV-8 certified for 192A in-rush current Driving LED's, tv's etc.

► Ethernet/Wi-Fi Expansion Devices (40 Maximum)

Up to 40 devices, keypads, cameras, and access control modules.

Category	Examples
Keypads	K70M and similar
Cameras	HD10 or similar, (Maximum 16)
Repeaters	RPT5M or similar (Maximum 5)

► Security Grade and Encryption

- LTE: EN 50136 Grade 3 for wired connection devices, EN50136 Grade 2 if wireless devices registered
- Network and bus encryption: AES 128 target for X45/ X46. M wireless uses Paradox proprietary encryption and hopping mechanisms.

► Installers Favorites

- Power supply 65W 110/240V Included
- Battery and all tamper protection included
- Fast and easy bracket mounting and clean wiring access.
- Remote upgrades reduce service visits.
- Extremely flexible expanding and installing

Technical Specifications

System capacity	X45 / X46
Power supply	100-240 VAC 65 W heavy-duty integrated supply
Battery Backup	Internal battery: 450 mA / 12 h (Grade 2); 175 mA / 24 h (Grade 3) With external battery: 1250 mA / 12 h (Grade 2); 600 mA / 24 h (Grade 3)
Auxiliary output	Up to 2.5 A auxiliary loads
Wireless Expension	M GFSK 868 / 914 MHz variants with frequency and encryption hopping
RS485 expansion Bus	AES128 encrypted, up to 200 bus devices
Ethernet/Wi-Fi expansion	AES128 encrypted, up to 40 devices
On Board inputs	X45: 8 doubled to 16, one REX, X46: 16 doubled to 32 with ATZ
On Board outputs:	1 Door 1Amp (X45 ONLY), 1 Relay, 2 Low open collectors, 1 Bell relay,
Total system inputs/Zones	200
Total Users	1000
Total Security Areas	40
Total Security Remotes	150 maximum 4 per user
Total Automation rooms	50
Total Scenarios	64
IP communication	Ethernet, 2.4 GHz Wi-Fi, LTE model with dual SIM
Onboard outputs	Bell output, one 30 V / 2 A relay output, two 0.1 A low-current outputs
Operating temperature	-20c to +50c
Enclosure	Polycarbonate wall-mount , front and Wall tamper, status display
Dimensions	26.8W x 19.5H x 3.6D cm (10.55" W x 7.68" H x 1.42" D)

