# **Paxton** 10 ins-01000

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The declaration of conformity is available on request. Contact details are provided at: http://paxton.info/596

More information: http://paxton.info/2336

These products are not suitable for retail sale. All warranties are invalid if these products are not installed by a competent person.

## US/CA

No products have been evaluated by UL for intruder or burglar use.

## Paxton10 NUC Server - 003-375-US

Alongside the existing Paxton10 Servers which have been shipped as Intel NUC's, Paxton sell the following Server alternatives under the sales code 003-375:

- ASUS Mini PC
- Lenovo ThinkCentre
- GIGAIPC QBiX PC

The Paxton10 Server and Paxton10 monitoring software is supplementary to UL 294 and not evaluated by UL

For questions related to the EMC performance of this product, contact: Intel Corporation, 5200 N.E Elam Young Parkway, Hillsboro, OR 97124. 1-800-628-8686.



Risk of explosion if the battery is replaced with an incorrect type. Batteries should be recycled where possible. Disposal of used batteries must be in accordance with local environmental regulations.



Use only the power cords and power adapters supplied by the product manufacturer. The power cord and adapter provided with this product are intended to be used with this product only. Do not use them with any other products

#### Safety Precautions for GIGAIPC QBiX PC

Please read the following safety instructions carefully.

All cautions and warnings on the device should be noted.

Make sure the power source matches the power rating of the device. Failure to use the included Power Adapter may violate regulatory compliance and may expose the user to safety hazards.

Position the power cord so that people cannot step on it. Do not place anything over the power cord.

Make sure the device is installed near a power outlet and is easily accessible. Place the device on a solid surface during installation to prevent falls.

Do not cover the openings on the device to ensure optimal heat dissipation.

Do not touch the heat sink or heat spreader when the system is running.

CAUTION - Risk of explosion if the battery is replaced with an incorrect type.

There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

Batteries should be recycled where possible. Dispose of used batteries according to the manufacturer's instructions and your local government's environmental regulations.

### DO NOT LEAVE THIS DEVICE IN AN UNCONTROLLED ENVIRONMENT WITH TEMPERATURES BEYOND THE DEVICE'S PERMITTED OPERATING TEMPERATURES (SEE TABLE BELOW) TO PREVENT DAMAGE.

Operation temperature	Operating temperature: 0°C to 50°C Operating humidity: 0-90% (non-condensing) Non-operating temperature: -40°C to 85°C Non-operating humidity: 0%-95% (non-condensing)	
	Use wide temperature range memory and storage	l

### **High Temperature Warning**

This equipment is intended to be used in a Restricted Access Location. The access can only be gained by an instructed person who have been instructed about the metal chassis of the equipment.

#### External metal parts are hot!

Before touching it, special attention or protection is necessary.



#### **CAUTION HOT PARTS!**

Wait one-half hour after switching off before handling parts.

#### Compliance Information for Intel NUC

For questions related to the EMC performance of this product, contact: Intel Corporation, 5200 N.E Elam Young Parkway, Hillsboro, OR 97124. 1-800-628-8686.



Failure to use the included FSP Group, Inc Model FSP065-REB Power Adaptor may violate regulatory compliance requirements and may expose the user to safety hazards.

# <u>Paxton10 Controller - 010-803-US, 010-304-US , 010-495-US, 010-522-US, 010-403-US, 010-315-US</u>



Caution: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

#### To comply as a UL listed installation, the following conditions must apply:

For indoor use only. 0 - 49°C, 85% humidity

To be installed within the protected premises.

Controller to be wall mounted only.

(Currently) The only UL294 compliant equipment with which the Paxton10 Controller is compatible to be connected with, is the Paxton10 VR Reader (010-254-US), Paxton10 Slimline Reader (010-296-US), Paxton10 Reader Keypad US (010-721-US), Paxton10 Reader Converter (010-552-US) and the Paxton10 Alarm connector (010-203).

For For UL installations using PoE, the following must be observed:

Compliance with IEEE 802.3 (at or af) specifications was not verified as part of UL 294.

Locations and wiring methods which shall be in accordance with the National Electrical Code, ANSI/NFPA 70.

This product is not intended for outside wiring as covered by Article 800 in the National Electrical Code. NFPA 70.

Category 5e, cabling is the minimum performance category recommended.

The minimum conductor gauge permitted to connect between the PSE or power injector and the PD shall be 26 AWG (0.13 mm2) for patch cords; 24 AWG (0.21 mm2) for horizontal or riser cable.

Connected through standard eight-pin RJ-45 connectors.

Evaluated for Mode A only.

To be powered from a power limited, UL/ULC listed ITE or UL294 listed injector or switch. (Tested by UL with D-Link DGS-1008P)

#### Wirina:

Where an equivalent cable / wire is used it must be 'UL Listed'. All interconnecting devices must be UL Listed

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), local codes, and the authorities having jurisdiction. Software features and functions have not been evaluated by UL

This product is not intended for outside wiring as covered by article 800 in the national electrical code, NFPA 70

The minimal permissible wire size to be used shall not be less than 22 AWG.

#### Paxton10 Controllers Performance Levels:

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Model	Destructive attack	Line Security encrption	Endurance	Standby Power	
Door controller	1	1	4	3	
Video Controller	1	1	4	2	
Reader Converter	1	1	4	1	

Input   PoE input into PoE Power Supply Model 010-495-US   22-5W (1.8A output) (Do not exceed output rating)   24 Power Supply (299-1208) Model 010-522-US   24V AC/DC (13.8VDC output), AC powered from Codex SEP-2450U-OE6   249 Power Supply (299-1208) Model 010-522-US   24V AC/DC (13.8VDC output), AC powered from Codex SEP-2450U-OE6   249 Power Supply (299-1208) Model 010-304-US   24V DC   24 Power Supply (299-1208) Model 010-304-US   24V DC   24 Power Supply (299-1208) Model 010-803-US   24V DC   24 Power Supply (299-1208) Model 010-304-US   24V DC   25 Power Supply (299-1208) Model 010-304-US   25 Power Supply (299-1208) Model 0	Product	Circuit	Voltage (VDC/VAC)	Current	
PoE Power Supply   Model 010-495-US   (12.8VDC Output)   (Do not exceed output rating)		Input			
Cay9-1208) Model   010-522-US   Cay9-1208) Model   010-522-US   Caybox SEP-2450U-OE6   Controller - 010-522-US, 010-493-US, 0Door Controller PCB, 010-315-US   Controller PCB, 010-315-US   Controller PCB, 010-315-US   Connector   Controller   Controller   Controller   Controller   Controller   Controller   Controller   Controller   Connector   Connect		PoE Power Supply		(Do not exceed	
Controller Only   12VDC   419mA - Max		(z99-1208) Model	(13.8VDC output) , AC powered from Codex SEP-2450U-	0.75A (2A output)	
Controller PCB, 010- 315-US	522-US, 010-495-US,	Controller Only	12VDC	419mA - Max	
Relay (Dry)   30VDC   2A - Inductive		Output			
RS485 Paxton10   24VDC   3 Wireless   Connectors	315-US	Lock	12VDC	1A - Inductive	
Connector   Connectors		Relay (Dry)	30VDC	2A – Inductive	
Exit Button   12V   100mA   100mA   10put			24VDC		
Input   PoE input to PoE   Power Supply   Model 010-304-US   28VAC (12-13.7VDC   (12.8VDC output)   (175W (4A output)		Paxton10 Reader	12VDC	2 Paxton10 Readers	
PoE input to PoE   Power Supply   Model 010-304-US   24.5-57VDC (12.8VDC output)   (Do not exceed output rating)		Exit Button	12V	100mA	
Power Supply   (12.8VDC output)   (Do not exceed output rating)		Input			
(Altronix) Model   010-803-US		Power Supply		(Do not exceed	
Video Controller - 010-803-US, 010-304-US           Relay (Dry)         30VDC         1A - Inductive           Relay (Dry)         30VDC         2A - Inductive           RS485 Paxton10 Connector         24VDC Connectors         3 Wireless Connectors           Paxton10 Reader         12VDC         2 Paxton10 Readers           SATA Drive         5VDC         0.55A		(Altronix) Model		175W (4A output)	
Lock   12VDC   1A - Inductive		Controller	12VDC	783mA Max	
Relay (Dry)   30VDC   2A – Inductive	Video Controller	Output			
RS485 Paxton10 24VDC 3 Wireless Connectors  Paxton10 Reader 12VDC 2 Paxton10 Readers  SATA Drive 5VDC 0.55A		Lock	12VDC	1A - Inductive	
Connector Connectors  Paxton10 Reader 12VDC 2 Paxton10 Readers  SATA Drive 5VDC 0.55A		Relay (Dry)	30VDC	2A – Inductive	
SATA Drive 5VDC 0.55A			24VDC		
		Paxton10 Reader	12VDC	2 Paxton10 Readers	
Exit Button 12V 100mA		SATA Drive	5VDC	0.55A	
		Exit Button	12V	100mA	

Exit buttons - A UL listed 'push to make' button must be used.

Door contact - A UL listed 'Normaly Open' (N.O.) switch must be used.

Tamper alarm - Connect to a UL listed burglar alarm unit for supervision

Hard Drives - UL listed hard drives must be used.

Plug-in Transformer (when used with door controller) - Do not connect to a receptacle controlled by a switch.

Cameras – connected to Video Controller. Note: Cameras are not powered from Video controller. PoE+ or 12VDC powered. Paxton10 Cameras can be used to provide a plug and play solution, without the need for any configuration or additional hardware. Third party cameras must provide 2 video streams: A high resolution main-stream (up to 4096 x 2160 @ 25 FPS), and a low resolution sub-stream (up to 640 x 480 @ 15 FPS).

## Maximum Line Lengths

Maximum cable extension length (Paxton10 Controller > reader)	100m/328ft
Maximum dataline length (Paxton10 Controller > Paxton10 Connector)	100m/328ft
Maximum dataline length (Paxton10 Controller > PoE Switch)	100m/328ft
Paxton10 Controller input/outputs Exit, Lock, PSU, Door Contact	50m/164ft – see Note [1]
Paxton10 Controller Relays	100m/328ft
Paxton10 Controller 12VDC Power Input	30m/98ft

#### Notes:

[1] The distance between the low power maglock (lock port) and the Paxton10 Controller is limited by the different lock brands and cable gauge. As an example when using a 500mA 12VDC electromagnetic lock, AWG18 cable gives 22m/72ft distance and AWG16 gives 45m/147ft distance.

## Paxton10 Slimline Reader - 010-296-US

To comply as a UL listed installation, the following conditions must apply:-

Wiring:- Where an equivalent cable / wire is used it must be 'UL Listed'. All interconnecting devices must be UL Listed.

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), local codes, and the authorities having jurisdiction. Software features and functions have not been evaluated by UL

The minimal permissible wire size to be used shall not be less than 22 AWG.

Outdoor use: -35°C - +66°C, 85% Humidity

Destructive attack	Line Security encryption	Endurance	Standby Power
1	1	4	1

Circuit	Voltage	Current
Input	12VDC from (010-519) Paxton10 Controller only	360mA

## Paxton10 Keypad Reader - 010-721-US

To comply as a UL listed installation, the following conditions must apply:-

Wiring:- Where an equivalent cable / wire is used it must be 'UL Listed'. All interconnecting devices must be UL Listed.

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), local codes, and the authorities having jurisdiction. Software features and functions have not been evaluated by UL

The minimal permissible wire size to be used shall not be less than 22 AWG.

Outdoor use: -35°C - +66°C, 85% Humidity

Destructive attack	Line Security encryption	Endurance	Standby Power
1	1	4	1

Circuit	Voltage	Current
Input	12VDC from (010-519) Paxton10 Controller only	360mA

## Paxton10 Desktop reader - 010-387-US

The Paxton10 desktop reader has not been evaluated by UL

## Paxton10 VR Reader - 010-254-US

To comply as a UL listed installation, the following conditions must apply:-

Wiring:-Where an equivalent cable / wire is used it must be 'UL Listed'. All interconnecting devices must be UL Listed.

Outdoor use: -35°C - +66°C, 85% Humidity

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), local codes, and the authorities having jurisdiction. Software features and functions have not been evaluated by UL

The minimal permissible wire size to be used shall not be less than 22 AWG.

Destructive attack	Line Security encryption	Endurance	Standby Power
2	1	4	2

Circuit	Voltage	Current
Input	12VDC from Paxton10 Controller only	360mA

## Paxton10 Alarm connector - 010-203-US

To comply as a UL listed installation, the following conditions must apply:-

For indoor use only.

To be installed within the protected premises.

The unit shall be installed in the Paxton10 connector housing (010-757). Use added stand offs to secure unit in enclosure.

Wiring:- Where an equivalent cable / wire is used it must be 'UL Listed'. All interconnecting devices must be UL Listed.

Wiring:- the two core input wiring shall use shielded cable that is securely grounded at one end.

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), local codes, and the authorities having jurisdiction. Software features and functions have not been evaluated by UL.

This product is not intended for outside wiring as covered by article 800 in the national electrical code, NFPA 70

Category 5e cabling is the minimum performance category recommended.

Destructive attack	Line Security encryption	Endurance	Standby Power
1	1	4	2

Circuit	Voltage	Current
Input RS485	30VDC from (010-121) Paxton10 Controller only	21mA from (010-121) Paxton10 Controller
Relays (seperately energized)	24V DC	2A

## Bluetooth smart credentials

Credential Transmission technology	Bluetooth
Bluetooth Version	V4.2
Application software version	V1 SR1
User Verification	User must activate pin or biometric security on smart devices used as a credential.
Verification of credential type	The Paxton10 software reports feature can be used to view system events and verify the credential type.
Limitation of use	The smart device used as a Bluetooth credential is not capable of command, control, programming or any other system manipulation.
	The Bluetooth credential is used in the same manner as a physical credential

## Credential type and transmission technology

Credentials evaluated by UL	Operating Frequency
Hitag2	125kHz
Mifare	13.56MHz
Bluetooth	2.4GHz

## Paxton10 reader LED indications

#### Red LED - Access Denied

- Check access levels and token validity, check events to see why access has been denied.

### Green LED - Access Granted

- Check lock/output wiring if you're still experiencing issues

Yellow LED - Pending Further Action (i.e. token + pin)

- Check reader configuration and user credentials.

### Blue LED - Checking for BLE tokens

- Check reader configuration matches tokens that are in use

Pink LED - Check data cable is OK

No LED - Not Configured, or Continue troubleshooting