Cisco Physical Access Gateway

The Cisco® Physical Access Gateway (Figure 1) is an integral component of the Cisco Physical Access Control solution, and is the primary module used to connect door hardware (readers, locks, etc.) to the IP network. The gateway can connect to a maximum of two doors and associated inputs and outputs.

The Cisco Physical Access Gateway is a mandatory component of any access control deployment. The following optional modules may be connected to the Cisco Physical Access Gateway to control additional doors, inputs, and outputs:

- Cisco Physical Access Gateway Reader Module
- Cisco Physical Access Gateway Input Module
- Cisco Physical Access Gateway Output Module

Figure 1. Cisco Physical Access Gateway

Features

Table 1 describes the features of the Cisco Physical Access Gateway.

Table 1. Cisco Physical Access Gateway Features

Feature	Description
Doors Managed	Up to two doors can be managed by the Cisco Physical Access Gateway.
Additional Module Support	Up to 15 additional modules can be connected to and managed by the Cisco Physical Access Gateway. These modules can be connected on a 3-wire controller area network (CAN) bus. All modules must be within 400 meters (1320 feet) of the Cisco Physical Access Gateway.
Reader/Lock Power	External devices such as readers or locks can be powered by the Cisco Physical Access Gateway. The maximum current draw is limited to 650mA at 12 VDC.
Credential Cache	250,000 credentials can be cached and encrypted.
Event Cache	150,000 events can be buffered by the door.
Encryption	All communication is 128-bit Advanced Encryption Standard (AES) encrypted.

Connectors

Table 2 describes the connectivity and connectors of the Cisco Physical Access Gateway.

Table 2. Cisco Physical Access Gateway Connectors

Connector	Description
Ethernet	There are two 10/100 BASE-TX RJ-45 connectors: • Ethernet 0: This is used to connect the Cisco Physical Access Gateway to the network. This can also be used to supply Power over Ethernet (PoE) to the device. • Ethernet 1: This is used to access the configuration page.
Weigand Reader	There is one 10-pin Weigand/clock and data reader interface on the device. This can be configured as two 5-pin Weigand/clock and data interfaces for installations where a 5-pin interface is sufficient.
Inputs	There are three inputs, each of which can be configured as supervised or unsupervised.
Outputs	There are three Form C relay outputs, with contacts rated 5A @ 30V DC or 125VAC (resistive). Each can be configured as either Normally Closed (NC) or Normally Open (NO).
Tamper Input	Unsupervised input; raises a “tamper” alarm when activated. Can be repurposed for general use by software configuration.
Power Fail Input	Unsupervised input; raises a “power fail” alarm when activated. Can be repurposed for general use by software configuration.
Power	2-pin connector for connecting a 12 to 24 VDC external power source.
RS-485	The RS-485 interface is reserved for future use.
CAN Bus	A 3-wire CAN bus is used to connect additional modules.

Configuration

The Cisco Physical Access Gateway has a built-in Web server that allows users to configure the device. Table 3 describes the items that can be configured:

Table 3. Cisco Physical Access Gateway Configuration

Item
Cisco Physical Access Manager server IP address
Dynamic Host Control Protocol (DHCP); enabled by default
Domain Name System (DNS) server IP address
Static IP address (if DHCP is not chosen): • Subnet mask • Default gateway

Specifications

Table 4 provides specifications of the Cisco Physical Access Gateway.

Table 4. Cisco Physical Access Gateway Mechanical Specifications

Item	Description			
Housing	Aluminum			
Dimensions (LxWxH)	• 5 x 7 x 2.14 in. • 127 x 178 x 54.6 mm			
Weight	**Without Plugs and Brackets**	**With Plugs**	**With Brackets**	**With Plugs and Brackets**
	1.65 lb (749 g)	1.8 lb (817 g)	1.81 lb (823 g)	1.97 lb (891 g)
Certifications	• FCC • UL • CE			
Operating Temperature	• Indoors only • 32 to 122℉ (0 to 50℃)			
Humidity	5 to 95% relative, non-condensing			

Item	Description
Power	• There are two options to power the device: • 12 to 24 VDC (+/- 10%) through an external power supply • 802.3AF-compliant Power over Ethernet (PoE) connected to the Ethernet 0 connector

Package Contents

Table 5 describes the items that ship with the Cisco Physical Access Gateway.

Table 5. Package Contents

Item		
Cisco Physical Access Gateway		
Connector plugs	**Pin**	**Qty**
	10	1
	3	4
	2	6
6 resistors (1K) for input supervision		
2 mounting brackets, with 4 screws for each bracket		
Regulatory compliance and safety information		
Quick start guide		

Availability

The Cisco Physical Access Gateway is available through Cisco Authorized Technology Provider (ATP) Partners.

Ordering Information

Table 6 lists the part numbers for the Cisco Physical Access Gateway.

Table 6. Ordering Information

Part Number	Description
CIAC-GW-K9	Cisco Physical Access Gateway

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For More Information

For more information about the Cisco Physical Access Gateway, visit http://www.cisco.com/go/eac or contact your local account representative.

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