



HID M1 Transparent Gateway

Quick Start Guide

This quick start guide will help you set up HID® M1 Transparent Gateway.

The solution is installed between the existing access control panel and HID Signo™ readers.

HID M1 enables sovereign keys and a transparent architecture for access control systems and supports authentication of DESFire EV1/2/3 credentials.

Solution components

- **Main Node:** The main processing unit, installed in a secure area.
- **Key Module:** Stores encryption keys and is housed within the Main Node.
- **IO Module:** Connects the Main Node, readers, and the controller.
- **Transparent HID Signo reader:** Reads and transmits encrypted card data.
- **Card credentials:** Custom DESFire EV1/2/3.
- **HID Linq™ Key Manager:** Key management software to inject encryption keys into the Key Module.
- **Main Node admin interface:** Software to pair and configure devices.

Installation overview

1. **Prepare the Key Module** using HID Linq Key Manager to configure, provision, and inject encryption keys.
2. **Install the Key Module** into the Main Node.
3. **Mount the Main Node and IO Modules** in a secure area.
4. **Connect the IO Modules** to the existing controller.
5. **Set the DIP switches** on both the Main Node and IO Modules to admin mode.
6. **Upgrade existing Signo readers** using the HID Reader Manager™ app, or install new readers compatible with HID M1.
7. **Connect the readers** to the IO Modules.
8. **Power on all devices** and access the admin interface via a web browser.
9. **Configure network settings**, pair devices, and enter the OSDP settings for the existing controller.
10. **Test the system** using a credential programmed with the injected keys. If issues arise, review the logs in the Main Node admin interface.



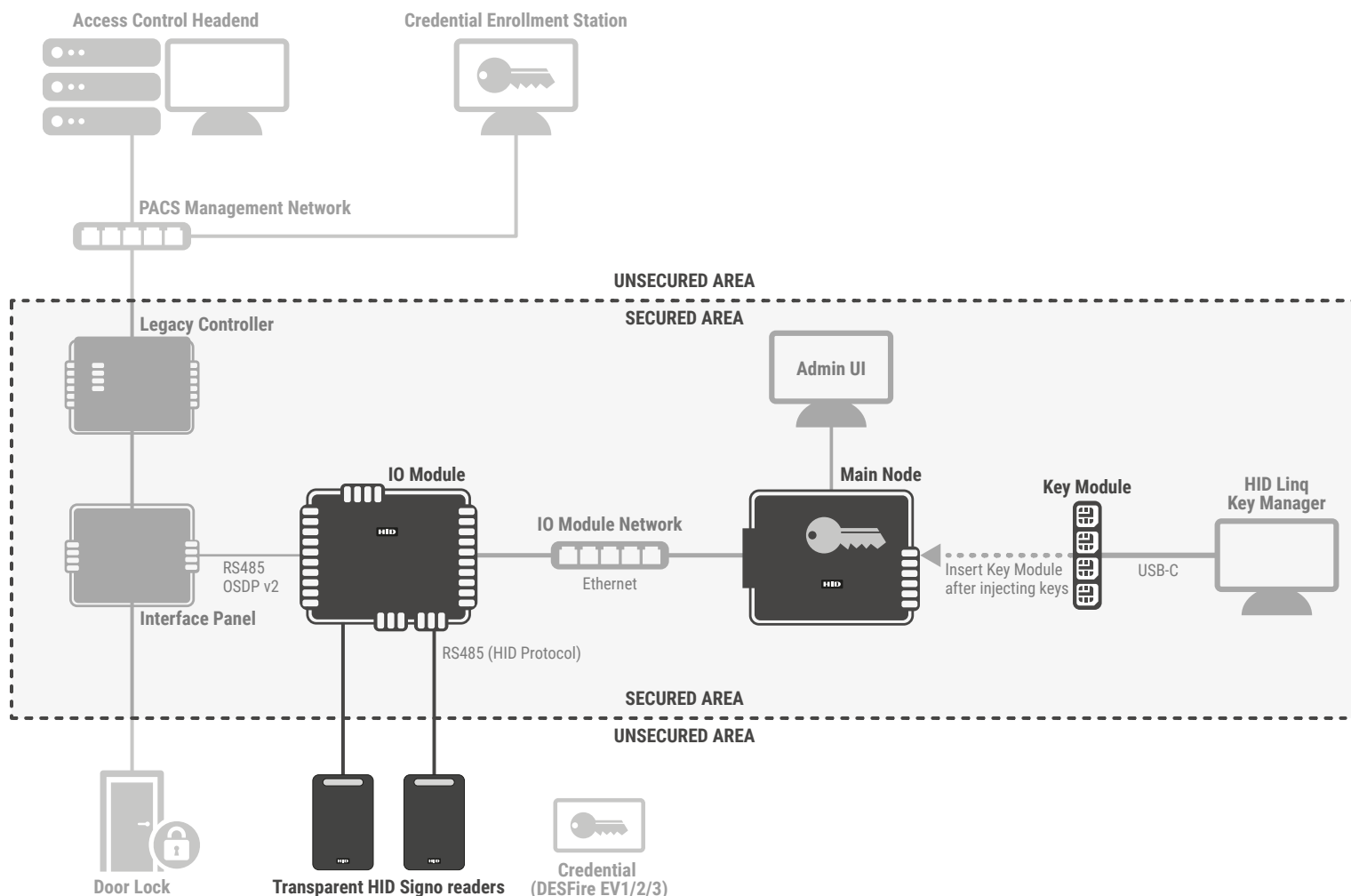
www.hidglobal.com/PLT-07917

Scan the QR code or visit the link to view the HID M1 Transparent Gateway Installation and Specifications (PLT-07917).

Search www.hidglobal.com/documents for other languages.



PLT-08117 B.1



Specifications

Main Node (M1-1100)

Mounting	DIN Rail or HID M1 hole pattern with bracket
Primary Power	12V to 24V DC (± 10%)
Max Input Current	2A @ 12V or 1A @ 24V (24W max)
USB Ports	USB 2.0 Type A (internal), 500mA @ 5V (± 10 %) USB 3.0 Type A (external), 1A @ 5V (± 10 %)
Inputs	Cabinet tamper (0 V to 3.3V) Battery failure (0 V to 3.3V) AC failure (0 V to 3.3V)
Outputs	None
Temperature Rating	Storage: -67° F to 185° F (-55° C to 85° C) Operating: 32° F to 158° F (0° C to 70° C)
Humidity Rating	5% to 95% Relative Humidity, Non-Condensing (RHNC)
Ethernet Host Requirements	10BASE-T/100BASE-TX/1000BASE-T (Gbit)
Ethernet	CAT-5 minimum (shielded)

Key Module (M1-1001)

Mounting	The Key Module (M1-1001) is installed inside the Main Node (M1-1100)
Primary Power	Powered by Main Node (M1-1100)
USB Port	USB-C, 500mA @ 5V (± 10 %)
Temperature Rating	Storage: -67° F to 185° F (-55° C to 85° C) Operating: 32° F to 158° F (0° C to 70° C)
Humidity Rating	5% to 95% Relative Humidity, Non-Condensing (RHNC)

IO Module (M1-1002)

Mounting	DIN Rail or HID M1 hole pattern with bracket
Primary Power	12V to 24V DC (± 10%)
Max Input Current	1.6A @ 12V or 0.8A @ 24V (19.2W max)
USB Ports	USB 2.0 Type A, 500mA @ 5V (± 10 %)
Relays	5A @ 30V DC
Inputs	Two transparent HID Signo readers (-7V to 12V) Cabinet tamper (0V to 3.3V) Battery failure (0V to 3.3V) AC failure (0V to 3.3V) Request to Exit (REX) (0V to 3.3V) Door Position Sensor (DPS) (0V to 3.3V)
Outputs	In Gateway Mode, controller 1 and 2 output reader PACS data to the upstream controller. In Controller Mode, there are two relays for door control and one spare
Temperature Rating	Storage: -67° F to 185° F (-55° C to 85° C) Operating: 32° F to 158° F (0° C to 70° C)
Humidity Rating	5% to 95% Relative Humidity, Non-Condensing (RHNC)
Ethernet Host Requirements	10BASE-T/100BASE-TX
Ethernet	CAT-5 minimum (shielded)

Regulatory

UL

UL Recognized Component (UL294) All National and local Electrical codes apply. This equipment is intended to be powered from a limited power source output, of a UL294 Certified Power Supply.

Install in accordance with NFPA70 (NEC) Local Codes, and authorities having jurisdiction. Follow all National and Local Codes.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Additionally evaluated to ULC 60839-11-1

UL 294 Performance Levels

Model #	Access Control Line Security Level	Destructive Attack Level	Endurance Level	Stand-By Power Level	Conditions
M1-1100 M1-1001 M1-1002	Level I	Level I	Level IV	Level I	

FCC

Class A Digital Devices FCC Compliance Statement: Dec 11

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

CE Marking

HID Global hereby declares that HID M1, consisting of a Main Node, Key Module, and IO Module are in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

HID Global declaran por la presente que HID M1, compuesto por un Nodo Principal, Módulo de Llave y Módulo IO, cumple con los requisitos esenciales y otras disposiciones relevantes de la Directiva 2014/53/EU.

HID Global déclarent par la présente que HID M1, composé d'un Nœud Principal, d'un Module Clé et d'un Module IO, est conforme aux exigences essentielles et autres dispositions pertinentes de la Directive 2014/53/EU.

A HID Global declaram que o HID M1, composto por um Nodo Principal, Módulo de Chave e Módulo IO, está em conformidade com os requisitos essenciais e outras disposições relevantes da Diretiva 2014/53/EU.

HID Global erklären hiermit, dass der HID M1, bestehend aus einem Hauptknoten, einem Schlüsselsystemmodul und einem IO-Modul, den grundlegenden Anforderungen und anderen relevanten Bestimmungen der Richtlinie 2014/53/EU entspricht.

HID Global dichiarano che HID M1, composto da un Nodo Principale, Modulo Chiave e Modulo IO, è conforme ai requisiti essenziali e ad altre disposizioni pertinenti della Direttiva 2014/53/EU.

Download copies of the Radio Equipment Directive Declaration of Conformity (DoC) at: <https://www.hidglobal.com/certifications>

