# pivCLASS®
How to Order Guide

**HID**

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## Contacts

For technical support, please visit: **https://support.hidglobal.com.**

## What's new

| Date | Description | Revision |
|------|-------------|----------|
| May 2023 | Updated email address in Section 20. | C.2 |

A complete list of revisions is available in **Revision history on page 25**.

# Contents

# 1. Overview

The HID Global® pivCLASS® solutions portfolio is an extensive product family designed to support authentication of FIPS 201 compliant smart cards such as PIV, PIV-I, CIV, CAC, FRAC, and TWIC in both government and non-government environments. Using FIPS 201 compliant cards for physical access control results in interoperability, high security and compliance with government regulations where required.

The pivCLASS modular approach provides government agencies the ability to use their PIV identity cards for strong Public Key Infrastructure (PKI)-based validation for physical access control. The solution enables this functionality without the need to rip and replace existing Physical Access Control Systems (PACS), reducing costs, and removing complexities to make it easy and affordable to acquire, install and maintain compliant physical access control systems.

pivCLASS accomplishes this in part by communicating with an agency's PACS and external trust authority PKIs to deliver functionality specified by National Institute of Standards and Technology (NIST) Federal Information Processing Standards Publication 201 (FIPS 201).

Ordering information for all pivCLASS components are included in this How to Order Guide.

## 1.1 Reseller certification

You must be a pivCLASS certified reseller to order any pivCLASS solution components except pivCLASS readers. Achieve certification when a minimum of two staff members successfully completing the pivCLASS training program. The pivCLASS Certified Reseller is expected to be able to support their end customers for issues around pivCLASS and if it is beyond the Certified Resellers' capability to support, then the Certified Reseller will work with HID pivCLASS Technical Support on the issue.

## 1.2 Reader configuration choices

pivCLASS readers can be ordered to support three different modes of operation:

Wiegand: In Wiegand mode, the reader reads the CHUID data container and reports the FASC-N or UUID from the card and passes this data directly to the door controller or panel over a Wiegand interface. Configure the FASC-N output to provide various output formats including 64 bit BDC, 75 bit GSA, 128 bit reversed BCD and 200 bit full FASC-N. The UUID output is always 128 bits. Custom output formats are available, but some of these may not be supported in PAM mode. In Wiegand mode, no authentication is performed. This mode is provided only to enable a phased implementation approach. If the end state is to use a PAM, select full-duplex (FDX) RS-485 communication protocol. For all other end states select half-duplex (HDX).

Re-configuration between PAM and Wiegand, or OSDP and Wiegand can be changed in the field; However, a FDX (PAM or Wiegand) reader can not be changed to a HDX (OSDP or Wiegand). For example, use the following two-step process to reconfigure from Wiegand to PAM mode:

• Connect the reader to the PAM.

• Reconfigure the reader to PAM mode using a pivCLASS Reader Programming Card.

**PAM:** in this mode the reader is connected to a pivCLASS Authentication Module (PAM) using RS485 full-duplex (FDX) communication protocol. This mode supports CHUID, CAK (Card Authentication Key), PIV+PIN, PIV+PIN+BIO authentication and others, as defined in FIPS 201 and TWIC authentication modes such as CHUID + BIO and CAK + Bio. Exact capabilities supported will be determined by reader type (contactless, contact or biometric).

**HDX OSDP:** in this mode the reader is connected directly to a panel or intelligent controller that supports RS485 half-duplex (HDX) and OSDP. If using OSDP without pivCLASS Embedded Authentication, the capabilities are the same as a Wiegand reader and will only report applicable CHUID data as configured in the reader. If the controller is using pivCLASS Embedded Authentication, then all of the same authentication modes as the PAM are supported.

## 1.3 Reader part number configuration aides

In addition to this document, HID Global provides an online tool, the pivCLASS Configuration Guide, for determining the part number for various pivCLASS readers. To access this tool, go to http://www.hidglobal.com/node/19914, open with Excel, and click SELECT to make a selection from the available pivCLASS readers.

# 2. HID Signo PIV Readers

**Application:** HID Signo PIV Readers are hardware variants of the flagship HID Signo line and are designed to support the authentication of FIPS 201 compliant smart cards such as PIV, PIV-I, CIV, CAC, FRAC, and TWIC in both government and non-government environments.

HID Signo PIV Readers are BAA Complaint and FICAM Certified. You do not need to be pivCLASS certified to resell HID Signo PIV Readers.

If you are connecting the Signo PIV Reader directly to a panel or intelligent controller for use with either Wiegand or OSDP (PAM and EA are supported with Signo PIV), use this page to construct the appropriate part number.

Follow the steps below to determine a standard configuration HID Signo PIV Reader part number.

## 1. Select hardware option (select one model)

☐ **20** - Designed for applications requiring a narrow card reader.

☐ **20K** - Designed for applications requiring a narrow reader with 2 x 6 capacitive keypad.

☐ **40** - Designed for applications requiring switch mounting.

☐ **40K** - Designed for applications requiring wall switch mounting with 3 x 4 capacitive keypad.

**Federal Identity, Credential, and Access Management (FICAM) & Buy American Act (BAA) Certified Hardware**
☒ **H** - BAA

**Wiring Connection (select one option)**
☐ **N** - Pigtail
☐ **T** - Terminal Strip

**Body Color**
☒ **K** - Black

**Trim/Mounting Plate Color**
☒ **S** - Silver

A black trim/mounting plate is available as an accessory item at an additional cost. Please see accessories list below.

## 2. Select credential profile

HID Signo PIV Readers are only available with the Custom Credential Profile, which includes CHUID credential read support. Bluetooth (BLE) is disabled by default on all HID Signo PIV Readers.

| Communication | NFC/BLE | High Frequency | | | | | | | | | | | | Low Frequency | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Credentials Supported | Seos (Mobile IDs via NFC/BLE) | Seos | iCLASS SE | iCLASS SR | iCLASS | MIFARE DESFire EV1/EV2 (SIO) | MIFARE Classic (SIO) | MIFARE DESFire EV1/EV2 (CSN) | MIFARE Classic (CSN) | MIFARE DESFire EV1/EV2 (Custom Data) | MIFARE Classic (Custom Data) | FeliCa Idm | CEPAS (CAN or UID) | FIPS-201 CHUID | 125kHz HID Proximity | 125kHz Indala Proximity | 125kHz EM4102 Proximity |
| ☐ **03** - Custom Profile | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

● Supported

## 3. Select configuration option

| Credential Profile | Prox Disabled | Prox Enabled | PAM mode ON |
|---|---|---|---|
| CUSTOM | 00059X | 0004XR | 007CP5 |

- Bluetooth (BLE) disabled
- OSDP Transparent Mode enabled
- Idle LED color is RED, flash GREEN on card read
- Tamper enabled
- Keypad 4-bit burst, Keypad backlight RED (keypad readers only)
- Visual Impaired Mode enabled
- Velocity Check disabled and Intelligent Power Management mode disabled

For any other configuration, including non-standard credential configurations, please work with your local HID representative. An example of a "non-standard" credential configuration would be where you would like to order a HID Signo PIV Reader with Indala and CSN credential read capability disabled.

## 4. Enter the numbers/letters from the selections above into the following table

Assemble your selections from Step 1 to 3.

| | Reader Model | BAA | Wiring Connection | Body Color | Trim Color | | Credential Profile | | Configuration Option |
|---|---|---|---|---|---|---|---|---|---|
| **Example** | 40K | H | T | K | S | – | 03 | – | 0004XR |
| **Final Part Number** | | H | | K | S | – | 03 | – | |

## 5. Place an order

To place an order for HID Signo Readers, authorized channel partners may submit a purchase order to HID Global Customer Service at **https://www. hidglobal.com/customer-service**

## HID Signo PIV Reader common and popular orderable part numbers

HID Signo PIV Reader part numbers below provide full compatibility with the associated pivCLASS readers.

| Compatible HID Signo PIV Reader Part Number (pigtail) | pivCLASS Reader Part Number | Compatible HID Signo PIV Reader Part Number (terminal strip) |
|---|---|---|
| Signo PIV 20<br>20HNKS-03-00059X | R10<br>900NH(R/P)TEKxyyyy | Signo PIV 20<br>20HTKS-03-00059X |
| Signo PIV 40<br>40HNKS-03-00059X | R40<br>920NH(R/P)TEKxyyyy | Signo PIV 40<br>40HTKS-03-00059X |
| Signo PIV 20K / Signo PIV 40K<br>20KHNKS-03-00059X<br>40KHNKS-03-00059X | RK40<br>921NH(R/P)TEKxyyyy | Signo PIV 20K / Signo PIV 40K<br>20KHTKS-03-00059X<br>40KHTKS-03-00059X |
| Signo PIV 20<br>20HNKS-03-0004XR | RP10<br>900PH(R/P)TEKxyyyy | Signo PIV 20<br>20HTKS-03-0004XR |
| Signo PIV 40<br>40HNKS-03-0004XR | RP40<br>920PH(R/P)TEKxyyyy | Signo PIV 40<br>40HTKS-03-0004XR |
| Signo PIV 20K / Signo PIV 40K<br>20KHNKS-03-0004XR<br>40KHNKS-03-0004XR | RPK40<br>921PH(R/P)TEKxyyyy | Signo PIV 20K / Signo PIV 40K<br>20KHTKS-03-0004XR<br>40KHTKS-03-0004XR |
| **Note:** HID Signo 20K reader is mullion mount with 2 x 6 keypad | | **Note:** HID Signo 20K reader is mullion mount with 2 x 6 keypad |

## HID Signo PIV Reader configuration

HID Signo PIV Readers can be configured using an Android smartphone with the HID Reader Manager™ application, a tool that provides powerful configuration and upgrade capabilities through a convenient smart phone application.

**Notes:** 1. An Android device is needed to enable BLE via NFC, BLE is then used to configure HID Signo PIV Readers via HID Reader Manager, after configuration is complete BLE can also be disabled with the tool.
2. Configuration of CHUID output formats is currently not supported in HID Reader Manager v1.8.0. – this feature will be added in a future version.

**Google Play (Android devices)**

# 3. pivCLASS readers – FDX; Wiegand or PAM mode

Order these readers if currently (or in the future) connecting the pivCLASS reader directly to a PAM. Use the online **pivCLASS Configuration Guide** if you need further guidance on part numbers. You do not need to be pivCLASS certified to resell pivCLASS readers.

**Note:** Configuration settings below are PAM mode readers, please refer to configuration guide for Wiegand variants.

| Description | Part Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Base Part No. | 125 kHz Option[1] | 13.56 MHz | Controller Communication[2] | Controller Connection | Version | Color | Keyset[3] | Configuration Setting |
| **pivCLASS R10 & RP10** Mini-Mullion Contactless Reader. | 900 | N = Without Prox P = With Prox | H (contactless) | R = RS485 FDX | N = Pigtail T = Terminal Strip | E | K = Black | 0 = Standard E = Elite | If No Prox = 032Y If Prox = 0007 |
| **pivCLASS R40 & RP40®** Wall Switch Contactless Reader. | 920 | | | | | | | | |
| **pivCLASS RK40 & RPK40®** Wall Switch Contactless Keypad Reader Keypad. | 921 | N = Without Prox P = With Prox | H (contactless) | R = RS485 FDX | N = Pigtail T = Terminal Strip | E | K = Black | 0 = Standard E = Elite | If No Prox = 033A If Prox = 033B |
| **pivCLASS RKCL40 & RPKCL40** Wall Switch Contact/ Contactless Keypad Reader with LCD display. | 923 | N = Without Prox P = With Prox | P (contact + contactless) | R = RS485 FDX | N = Pigtail T = Terminal Strip | E | K = Black | 0 = Standard E = Elite | If No Prox = 032V If Prox = 000B |
| **pivCLASS RKCLB40** Wall Switch Contact/ Contactless Keypad Reader with LCD display and biometric sensor. | 924 | N = Without Prox | P (contact + contactless) | R = RS485 FDX | N = Pigtail T = Terminal Strip | E | K = Black | 0 = Standard E = Elite | 0504 |

[1] **125 kHz Prox Interpreters**
Order P for HID® Prox, AWID, EM4102.
All pivCLASS readers support high frequency 13.56 MHz technology.

[2] **Controller Communication**
Full duplex (FDX) is required when connecting a pivCLASS reader to a PAM.

[3] **iCLASS® Keyset Options (Factory or Field Configurable)**
0 = Standard Security (Version 1) Keyset – compatible with iCLASS SE®, iCLASS SR, standard iCLASS, SE for MIFARE Classic and SE for MIFARE DESFire EV1 credentials.
E = Elite, reads only SE Elite credentials with unique matching keys – compatible with iCLASS SE, iCLASS SR, standard iCLASS, SE for MIFARE Classic, and SE for MIFARE DESFire EV1 with matching Elite keys. Line item on PO requires ICE reference number.

# 4. pivCLASS readers – HDX; Wiegand or OSDP

If you are connecting the pivCLASS reader directly to a panel or intelligent controller for use with either Wiegand, Half Duplex (HDX) OSDP, or strong authentication over OSDP use this page to construct the appropriate part number. Obtaining individual pivCLASS reader part numbers requires the use of the online **pivCLASS Configuration Guide**. You do not need to be pivCLASS certified to resell pivCLASS readers.

> **Note:** Configuration settings below are for OSDP V2 reader with 200bit FIPS output mode readers. Please refer to configuration guide for Wiegand or other variants.

| Description | Part Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Base Part No. | 125 kHz Option[1] | 13.56 MHz | Controller Communication[2] | Controller Connection | Version | Color | Keyset[3] | Configuration Setting |
| **pivCLASS R10 & RP10** Mini-Mullion Contactless Reader. | 900 | N = Without Prox  P = With Prox | H (contactless) | P = RS485 HDX OSDP | N = Pigtail  T = Terminal Strip | E | K = Black | 0 = Standard  E = Elite | If No Prox = 00UF  If Prox = 00UH |
| **pivCLASS R40 & RP40** Wall Switch Contactless Reader. | 920 | | | | | | | | If No Prox = 00P1  If Prox = 00P2 |
| **pivCLASS RK40 & RPK40** Wall Switch Contactless Keypad Reader Keypad. | 921 | | | | | | | | If No Prox = 00UG  If Prox = 00UE |
| **pivCLASS RKCL40 & RPKCL40** Wall Switch Contact/ Contactless Keypad Reader with LCD display. | 923 | N = Without Prox  P = With Prox | P (contact + contactless) | P = RS485 HDX OSDP | N = Pigtail  T = Terminal Strip | E | K = Black | 0 = Standard  E = Elite | If No Prox = 00P3  If Prox = 00P4 |

[1] **125 kHz Prox Interpreters**
Order P for HID Prox, AWID, EM4102.
All pivCLASS readers support high frequency 13.56 MHz technology.

[2] **Controller Communication**
P = Supports either Wiegand or half- duplex (HDX) RS485 with OSDP. Reconfigurable in field from Wiegand to HDX RS485 using a programming card. HDX is not supported by PAM.

[3] **iCLASS Keyset Options (Factory or Field Configurable)**
0 = Standard Security (Version 1) Keyset – compatible with iCLASS SE, iCLASS SR, standard iCLASS, SE for MIFARE Classic and SE for MIFARE DESFire EV1 credentials.
E = Elite, reads only SE Elite credentials with unique matching keys – compatible with iCLASS SE, iCLASS SR, standard iCLASS, SE for MIFARE Classic and SE for MIFARE DESFire EV1 with matching Elite keys. Line item on PO requires ICE reference number.

> **Note:** Part numbers referenced are active for Standard Key, but may not be active for Elite.  Please reach out to your RSM if you require an Elite version.

[4] **Configuration Settings**
Identifies all firmware configurations including Wiegand mode output settings and audio/visual settings (for example, default settings: buzzer on, LED normally red, flashes green on read, buffer one key, no parity, 4 bit message), OSDP uses default settings of panel control for all audio/visual. For use on OSDP panels using strong authentication, select OSDP V2 compliant readers. Use the pivCLASS Configuration Guide located at **http://www.hidglobal.com/node/19914** to "SELECT" from the available pivCLASS readers the specific configuration setting. Settings shown are for OSDP V2 reader with 200bit FIPS output mode readers, please refer to configuration guide for Wiegand or other variants

# 5. pivCLASS PAM and reader bundles

Bundles consist of two (2) pivCLASS readers and one (1) pivCLASS Authentication Module (PAM). Certification via pivCLASS Authentication Module training is required to resell these bundles. See **Certification training on page 20**. First year maintenance is included with purchase.

Include supplemental information for ordering this product. See **pivCLASS supplemental ordering information on page 24**.

| Description | | Part Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | **Base Part No.** | **125 kHz Option[1]** | **13.56 MHz[2]** | **Controller Communication[2]** | **Controller Connection[4]** | **Version** | **Color[5]** | **Keyset[6]** | **Configuration Setting** |
| **pivCLASS R40 OR pivCLASS RP40** Contactless Smart Card Reader: Finished Reader, Wall Switch. | **pivCLASS Authentication Module (Model: M2000)** Authentication module hardware, firmware and installation guides. Includes PAM with plastic enclosure and mounting plate. | B920 | N / P | H | R | N / T | E | K | O | If No Prox = 032Y If Prox = 0007 |
| **pivCLASS RKCL40 OR pivCLASS RPKCL40** Contactless and Contact Smart Card Reader: Finished Reader, Wall Switch, Key Pad, LCD US Double-Gang Size. | **pivCLASS Authentication Module (Model: M2000)** Authentication module hardware, firmware and installation guides. Includes PAM with plastic enclosure and mounting plate. | B923 | N / P | P | R | N / T | E | K | O | If No Prox = 032V If Prox = 000B |
| **pivCLASS RKCLB40** Contactless and Contact Smart Card Reader: Finished Reader, Wall Switch, Key Pad, LCD and biometric sensor. US Double-Gang Size. | **pivCLASS Authentication Module (Model: M2000)** Authentication module hardware, firmware and installation guides. Includes PAM with plastic enclosure and mounting plate. | B924 | N | P | R | N / T | E | K | O | 0504 |

| | |
|---|---|
| [1]**125 kHz Option:** | N = Without Prox; P = Support of HID Prox, AWID and EM4102 (32 bit). |
| [2]**13.56 MHz:** | H = contactless only; P = contactless and contact. |
| [3]**Controller Communication:** | R = Full duplex (FDX) RS485; required when connecting to a PAM. |
| [4]**Controller Connection:** | N = Pigtail (18"); T = Terminal strip. |
| [5]**Color:** | K = Black |
| [6]**Keyset:** | O = Standard Security (Version 1) Keyset – compatible with iCLASS SE, iCLASS SR, standard iCLASS, SE for MIFARE Classic and SE for MIFARE DESFire EV1 credentials. |
| | E = Elite, reads only SE Elite credentials with unique matching keys. Works with iCLASS SE, iCLASS SR, standard iCLASS, SE for MIFARE Classic and SE for MIFARE DESFire EV1 with matching Elite keys. Line item on PO requires ICE reference number. |

## Maintenance and support

| Description | Part Number |
|---|---|
| **PAM Firmware Standard Maintenance and Support** One year renewal of standard Maintenance and Support service. 8x5 Central M-F. Includes M&S for pivCLASS Reader Services component. | 91000-MS |

# 6. pivCLASS Embedded Authentication reader bundles

Bundles consist of two (2) pivCLASS readers and two licenses for their connection to pivCLASS Embedded Authentication. Certification via pivCLASS Authentication Module training is required to resell these bundles. See **Certification training on page 20**. First year maintenance is included with purchase.

Include supplemental information for ordering this product. See **pivCLASS supplemental ordering information on page 24**.

| Description | Part Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Base Part No. | 125 kHz Option[1] | 13.56 MHz[2] | Controller Communication[2] | Controller Connection[4] | Version | Color[5] | Keyset[6] | Configuration Setting |
| **pivCLASS R40** **OR** **pivCLASS RP40** Contactless Smart Card Reader: Finished Reader, Wall Switch. | E920 | N / P | H | P | N / T | E | K | O | If No Prox = 00P1 If Prox = 00P2 |
| **pivCLASS RKCL40** **OR** **pivCLASS RPKCL40** Contactless and Contact Smart Card Reader: Finished Reader, Wall Switch, Key Pad, LCD US Double-Gang Size. | E923 | N / P | P | P | N / T | E | K | O | If No Prox = 00P3 If Prox = 00P4 |

| | |
|---|---|
| **[1]125 kHz Option:** | N = Without Prox; P = Support of HID Prox, AWID and EM4102 (32 bit). |
| **[2]13.56 MHz:** | H = contactless only; P = contactless and contact. |
| **[3]Controller Communication:** | P = Half Duplex (HDX) RS485, required when connecting to pivCLASS Embedded Authentication. |
| **[4]Controller Connection:** | N = Pigtail (18"); T = Terminal strip. |
| **[5]Color:** | K = Black |
| **[6]Keyset:** | 0 = Standard Security (Version 1) Keyset – compatible with iCLASS SE, iCLASS SR, standard iCLASS, SE for MIFARE Classic and SE for MIFARE DESFire EV1 credentials. |
| | E = Elite, reads only SE Elite credentials with unique matching keys. Works with iCLASS SE, iCLASS SR, standard iCLASS, SE for MIFARE Classic and SE for MIFARE DESFire EV1 with matching Elite keys. Line item on PO requires ICE reference number. |

## Maintenance and support

| Description | Part Number |
|---|---|
| **PAM Firmware Standard Maintenance and Support** One year renewal of standard Maintenance and Support service. 8x5 Central M-F. Includes M&S for pivCLASS Embedded Authentication Reader connection component. | E91000-MS |

# 7. Validation Workstation

The pivCLASS Validation Workstation verifies TWIC, PIV, PIV-I, CIV, FRAC and CAC cards. It also verifies the cardholder's PIN using the card's contact interface. Validation Workstation matches the cardholder's stored biometric against a live sample and validates the card's digital certificate chain using OCSP or SCVP protocols. For TWIC cards, Validation Workstation queries the TWIC Canceled Card List (CCL) to determine revocation status. All FIPS 201 credentials are authenticated using PKI-AUTH or PKI-CAK protocols. pivCLASS Software Training is required to resell these products. See **Certification training on page 20**. First year maintenance is included with purchase.

Validation Workstation does not provide any PACS interoperability.

Include supplemental information for ordering this product. See **pivCLASS supplemental ordering information on page 24**.

| Description | Part Number |
|---|---|
| **pivCLASS Validation Workstation**<br>Only includes pivCLASS Validation Workstation software and documentation. PACS interoperability not included.<br>Requires a USB contact reader (OMNIKEY® 5422 recommended) and optional biometric sensor. See **USB readers and credential testing aides on page 19**. | PVC-D/S |
| **pivCLASS Validation Workstation Audit Trail Option**<br>Includes Audit Trail software. Does not include any additional PACS interoperability. | PVCAT-D |

**Note:** The Validation Workstation requires a USB Smart Card reader, such as the OMNIKEY 5422 and optionally a USB fingerprint sensor. Refer to the Registration Engine datasheet for supported USB fingerprint sensors.

## Maintenance and support

| Description | Part Number |
|---|---|
| **pivCLASS Validation Workstation Standard Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-D/S-MS |
| **pivCLASS Validation Workstation Audit Trail Option Standard Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVCAT-D-MS |

# 8. Registration Engine and Certificate Manager

The Registration Engine includes all the functionality of the Validation Workstation and the ability to interoperate with a PACS head-end collecting card information (such as name, FASC-N or UUID, expiration date and photo) and creating a card holder record in a PACS. The Certificate Manager provides the capability to revalidate registered cardholders on an ongoing basis. If a cardholder's certificate is invalid or revoked, Certificate Manager can automatically suspend the card in the PACS and send an email to a distribution list for notification. pivCLASS Software Training is required to resell these products. See **Certification training on page 20**. First year maintenance and support is included with purchase.

Include supplemental information for ordering this product. See **pivCLASS supplemental ordering information on page 24**.

| Description | Part Number | |
| --- | --- | --- |
| | **Base Part Number** | **PACS ID** |
| **pivCLASS Registration Engine**<br>Includes software that interfaces with one (1) specific PACS and supporting documentation. One license per workstation. Requires a USB contact reader (OMNIKEY 5422 recommended) and optional USB biometric sensor. See **USB readers and credential testing aides on page 19**. | PVCP-D/S- | XX-YY[1] |
| **pivCLASS PACS Plugin Change**<br>Use this part number to change your pivCLASS PACS Plugin license from one PACS headend vendor product to another. Maintenance & Support for this plugin is provided as part of the pivCLASS Registration Engine M&S. | PVCP-D/S-CPLG- | XX-YY[1] |
| **pivCLASS Certificate Manager**<br>Includes software only. One license per PACS. Second license required for redundant PACS if present. | PVC-CM | N/A |
| **pivCLASS Certificate Manager – Redundant Copy**<br>For use as hot-spare redundancy. Includes software and supporting documentation. | PVC-CM-REDNT | N/A |

[1] To determine the identifiers for entry, see **pivCLASS PACS plug-in and connector information on page 23**.
• XX = PACS Product ID
• YY = PACS Version ID

> **Note:** The registration engine requires a USB Smart Card reader such as the OMNIKEY 5422 and optionally a USB fingerprint sensor. Refer to the datasheet for supported USB fingerprint sensors.

## Maintenance and support

| Description | Part Number |
| --- | --- |
| **pivCLASS Registration Engine Standard Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVCP-D/S-MS |
| **pivCLASS Certificate Manager Standard Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-CM-MS |
| **pivCLASS Certificate Manager Standard Maintenance and Support – Redundant Copy**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-CM-REDNT-MS |

# 9. Reader Services

Reader Services provides the interface to manage and control readers and authentication modules such as the PAM. For certification training, see **Certification training on page 20**. First year maintenance is included with purchase.

Include supplemental information for ordering this product. See **pivCLASS supplemental ordering information on page 24**.

| Description | Part Number |
|---|---|
| **pivCLASS Reader Services**<br>Includes software and supporting documentation. Reader Services is included in the purchase of a PAM. If used without a PAM, one copy per reader is required. | PVC-FXRDR |
| **pivCLASS Reader Services – Redundant Copy**<br>For use as hot-spare redundancy. Includes software and supporting documentation. | PVC-FXRDR-REDNT |
| **pivCLASS Embedded Authentication License**<br>Two licenses for connecting readers to pivCLASS Embedded Authentication | EA-LICENSE2 |

## Maintenance and support

| Description | Part Number |
|---|---|
| **pivCLASS Reader Services Standard Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-FXRDR-MS |
| **pivCLASS Reader Services Standard Maintenance and Support – Redundant Copy**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-FXRDR-REDNT-MS |
| **pivCLASS Embedded Authentication Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | E91000-MS |

# 10. pivCLASS Authentication Module

Order the pivCLASS Authentication Module using the following part numbers. The PAM supports up to two (2) pivCLASS readers. Purchase includes the pivCLASS Reader Services component required for operation. Certification via pivCLASS Authentication Module training is required to resell this component. See **Certification training on page 20**. First year maintenance is included with purchase.

Include supplemental information for ordering this product. See **pivCLASS supplemental ordering information on page 24**.

| Description | | Part Number | | | |
|---|---|---|---|---|---|
| | | Base Part No. | Product Version | Packaging | Configuration Setting |
| **pivCLASS Authentication Module**<br>Model: M2000<br>Authentication module hardware, firmware and installation manuals. Includes pivCLASS Reader Services component. |  | 91000 | B | B = Plastic Enclosure Back plate and Cover<br><br>N = No enclosure (board only) | NNN = Default |

## Maintenance and support

| Description | Part Number |
|---|---|
| **PAM Firmware Standard Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. Includes M&S for pivCLASS Reader Services component. | 91000-MS |

# 11. pivCLASS IDPublisher

This web service product enables the provisioning and de-provisioning of credentials from an IDMS, CMS or HR data base into a PACS. Certification via pivCLASS Software training is required to resell these products. See **Certification training on page 20**. First year maintenance is included with purchase.

Include supplemental information for ordering this product. See **pivCLASS supplemental ordering information on page 24**.

| Description | Part Number |
|---|---|
| **pivCLASS IDPublisher 500**<br>500 badge capacity. | PVC-IDPUB500[1] |
| **pivCLASS IDPublisher 1000**<br>1000 badge capacity. | PVC-IDPUB1000[1] |
| **pivCLASS IDPublisher UNL**<br>Unlimited badge capacity. | PVC-IDPUBUNL[1] |
| **pivCLASS IDPublisher 500 – Redundant Copy**<br>For use as hot-spare redundancy. Includes software and supporting documentation. | PVC-IDPUB500-REDNT[1] |
| **pivCLASS IDPublisher 1000 – Redundant Copy**<br>For use as hot-spare redundancy. Includes software and supporting documentation. | PVC-IDPUB1000-REDNT[1] |
| **pivCLASS IDPublisher UNL – Redundant Copy**<br>For use as hot-spare redundancy. Includes software and supporting documentation. | PVC-IDPUBUNL-REDNT[1] |

[1] When ordering a pivCLASS IDPublisher option, you may be requested to also supply a supplemental part number to identify the Plug-in needed. This will be in the form of PACS-SVC-xx-yy. To determine the identifiers for entry, see **pivCLASS PACS plug-in and connector information on page 23**.
• XX = PACS Product ID
• YY = PACS Version ID

## Maintenance and support

| Description | Part Number |
|---|---|
| **pivCLASS IDPublisher 500 Standard Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-IDPUB500-MS |
| **pivCLASS IDPublisher 1000 Standard Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-IDPUB1000-MS |
| **pivCLASS IDPublisher UNL Standard Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-IDPUBUNL-MS |
| **pivCLASS IDPublisher 500 Standard Maintenance and Support – Redundant Copy**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-IDPUB500-REDNT-MS |
| **pivCLASS IDPublisher 1000 Standard Maintenance and Support – Redundant Copy**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-IDPUB1000- REDNT-MS |
| **pivCLASS IDPublisher UNL Standard Maintenance and Support – Redundant Copy**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-IDPUBUNL- REDNT-MS |

# 12. pivCLASS MultiPACS

MultiPACS allows for the simultaneous provisioning and de-provisioning of identity and credential records into multiple and disparate physical access control systems (PACS). The MultiPACS system supports multiple Registration Engines, pivCLASS Mobile with PACS Registration Engines and IDPublishers or any combination. It consists of multiple components, including a MultiPACS Console and one MultiPACS Connector for each PACS head-end serviced. It also requires a Certificate Manager (sold separately). Certification via pivCLASS Software training is required to resell these products. See **Certification training on page 20**. First year maintenance is included with purchase.

Include supplemental information for ordering this product. See **pivCLASS supplemental ordering information on page 24**.

| Description | Part Number | |
| --- | --- | --- |
| | **Base Part Number** | **PACS ID** |
| **pivCLASS MultiPACS Console**<br>Provides management interface to the system. | PVC-MPX-CNSL | N/A |
| **pivCLASS MultiPACS Console – Redundant Copy**<br>For use as hot-spare redundancy. Includes software and supporting documentation. | PVC-MPX-CNSL-REDNT | N/A |
| **pivCLASS MultiPACS Connector**<br>A PACS specific connector is required for each separate PACS being serviced that isn't already associated with a pivCLASS Registration Engine or pivCLASS IDPublisher. | PVC-MPX-CNX- | XX-YY[1] |
| **pivCLASS MultiPACS Connector – Redundant Copy**<br>For use as hot-spare redundancy. Includes software and supporting documentation. | PVC-MPX-CNX-REDNT | N/A |

[1] To determine the identifiers for entry, see **pivCLASS PACS plug-in and connector information on page 23**.
• XX = PACS Product ID
• YY = PACS Version ID

## Maintenance and support

| Description | Part Number |
| --- | --- |
| **pivCLASS MultiPACS Console Standard Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-MPX-CNSL-MS |
| **pivCLASS MultiPACS Console Standard Maintenance and Support – Redundant Copy**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-MPX-CNSL-REDNT-MS |
| **pivCLASS MultiPACS Connector Standard Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-MPX-CNX-MS |
| **pivCLASS MultiPACS Connector Standard Maintenance and Support – Redundant Copy**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-MPX-CNX-REDNT-MS |

# 13. pivCLASS Data Import

pivCLASS Data Import is a software application that keeps the pivCLASS PACS Service credential database synchronized with the head-end PACS database. When Data Import detects a change in the PACS database it updates the pivCLASS PACS Service credential database accordingly. These updates are then pushed out to mobile devices on demand or in batch during the next mobile device data synchronization. Data Import can be thought of as retrieving cardholder data from the PACS database versus pushing cardholder data to the PACS database as is done during registration. Data Import can be used to download any supported card type to the handhelds, e.g., FIPS 201, HID® proximity, HID iCLASS, DESFire, etc. Please ensure that the handheld selected has the appropriate card reader. Certification via pivCLASS Software training is required to resell these products. See **Certification training on page 20**. First year maintenance and support is included with purchase.

PACS products supported by Data Import are listed in **pivCLASS PACS plug-in and connector information on page 23**.

Include supplemental information when ordering this product. See **pivCLASS supplemental ordering information on page 24**.

| Description | Part Number |
|---|---|
| **pivCLASS Data Import**<br>Includes software and supporting documentation. | PVC-DTAIMP-XX-YY[1] |
| **pivCLASS Data Import – Redundant Copy**<br>For use as hot-spare redundancy. Includes software and supporting documentation. | PVC-DTAIMP-REDNT-XX-YY1 |

[1] To determine the identifiers for entry, see **pivCLASS PACS plug-in and connector information on page 23**.
• XX = PACS Product ID
• YY = PACS Version ID

**Note:** Not all PACS head-end products are supported.

## Maintenance and support

| Description | Part Number |
|---|---|
| **pivCLASS Data Import Standard Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-DTAIMP-MS |
| **ppivCLASS Data Import Standard Maintenance and Support – Redundant Copy**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-DTAIMP-REDNT-MS |

# 14. pivCLASS software bundles

pivCLASS BASE bundle for smaller sites that do not require the expandability of a standard pivCLASS system or need a lower entry point into HID Global's comprehensive solution for PKI validation. This bundle delivers the minimum required software and licenses for a site to start implementing the pivCLASS solution. Certification via pivCLASS Software training is required to resell these products. See **Certification training on page 20**.

Bundle includes:

• 1 Certificate Manager
• 1 Registration Engine
• 8 Reader Connections (for PAM, Embedded Authentication or biometric readers)
• 1st year Maintenance & Support

Limitation of bundle:

• Limited to 1 Registration Engine, 1 Certificate Manager, and 8 reader connections

| Description | Part Number |
|---|---|
| **pivCLASS BASE Bundle**<br>Includes software and supporting documentation. | PVC-BASE-XX-YY¹ |

¹ To determine the identifiers for entry, see p**pivCLASS PACS plug-in and connector information on page 23**.
 • XX = PACS Product ID
 • YY = PACS Version ID

**Note:** Not all PACS head-end products are supported.

## Maintenance and support

| Description | Part Number |
|---|---|
| **pivCLASS Base Bundle Maintenance and Support**<br>One year renewal of standard Maintenance and Support service. 8x5 Central M-F. | PVC-BASE-MS |

# 15. USB readers

USB smart card readers and biometric sensors are used during cardholder registration to ensure that the person presenting the card is the person to whom it was issued. The pivCLASS products are compatible with the following devices.

## USB reader and biometric sensor

| Description | Part Number |
| --- | --- |
| **OMNIKEY Smart Card Reader**<br>OMNIKEY 5422 USB smart card reader. Contact reader. EMV, CCID and TAA compliant. Recommended for use with the pivCLASS Validation Workstation and the pivCLASS Registration Engine. | R54220301 |
| **Idemia Biometric Sensor**<br>Idemia MS00-1300B-P biometric sensor. USB biometric sensor for use with the pivCLASS Registration Engine during enrollment and registration.<br><br>**Note:** Support and warranty through Idemia. | SNR-00058 |

# 16. Certification training

> **Note:** Completion of pivCLASS Software training is required to resell any pivCLASS software or software bundles.

> **Note:** Completion of pivCLASS Authentication Module training is required to resell pivCLASS Authentication Modules (PAMs) and pivCLASS Bundles with panels or readers.

> **Note:** Completion of pivCLASS Software and pivCLASS Authentication Module training is required to purchase pivCLASS Evaluation Kits.

pivCLASS Software Training consists of an introductory PKI & FIPS online course and other modules focused on the pivCLASS software components that make up the pivCLASS solution. These include the pivCLASS Registration Engine, Certificate Manager and various pivCLASS products used to connect this software to external components such as PACS head-end platforms, Identity Management systems, Card Management Systems and Human Resource databases.

To enroll, visit **https://www.hidglobal.com/training**. Click **Request account**, complete and submit the form.

> **Note:** Approval takes approximately two business days.

| Description |
| --- |
| **pivCLASS Software 5.x Certification training** |
| **https://hid.docebosaas.com/learn/course/223/pivclass-software-5x-certification** |
| **pivCLASS Authentication Module (PAM) 5.x Certification training** |
| **https://hid.docebosaas.com/learn/course/224/pivclass-authentication-module-pam-5x-certification** |

# 17. Reader programming cards

Reader programming cards are used to reconfigure a reader to a desired target configuration by using Reader Configuration Cards. Firmware Update Cards can be used to reload the reader with the latest version of firmware. Contact HID Technical Support (**https://support.hidglobal.com**) to ensure selecting the proper configuration card extension.

| Description | Part Number | | |
| --- | --- | --- | --- |
| | **Base Part Number** | **iCLASS Security Keys** | **Configuration Card Extension** |
| **Reader Mode and Output Configuration Settings** <br> Use these part numbers to order configuration cards to change reader modes (for example, Wiegand to PAM) and output formats  (for example, 200 bit Wiegand). <br> Includes reader configuration programming card and instructions | SEC9X-CRD- | 0 = Standard <br> E = Elite | -XXXX = Specific configuration[1] |
| **Reset Beeper / LED, Keypad and IPM to Factory Defaults** <br> Use these part numbers to order configuration cards to reset reader settings to factory defaults. <br> Includes reader configuration programming card and instructions | SEC9X-CRD- | 0 = Standard <br> E = Elite | -XXXX = Specific configuration[2] |

[1] Contact your HID GLOBAL Support Representative (**https://support.hidglobal.com**) to determine your specific configuration extension.

[2] Factory Default configuration includes: LED normally red, beep on and flashes green on read card; keypad data = buffer one key, no parity, 4 bit message, Intelligent Power Management = Off; Prox reads 125 kHz HID Prox, AWID, EM4102.

# 18. Reader accessories

| Description | Part Number |
|---|---|
| R10 (or equivalent size model) Reader Spacer, Black | 6132AKB |
| R15 (or equivalent size model) Reader Spacer, Black | 6132AKC |
| R40 (or equivalent size model) Reader Spacer, Black | 6132AKE |
| RK40 (or equivalent size model) Reader Spacer, Black | 6132AK |
| RKCL40 (or equivalent size model) Reader Spacer, Angle Right, Black | 6132AKK |
| RKCL40 (or equivalent size model) Reader Spacer, Angle Left, Black | 6132AKL |
| RKCLB40 (or equivalent size model) Reader Spacer, Angle Right, Black | 6132AKK |
| RKCLB40 (or equivalent size model) Reader Spacer, Angle Left, Black | 6132AKL |
| Kit containing 10 gaskets, IP65, R10 size; highly recommended for outdoor installations | IP65GSKT-R10 |
| Kit containing 10 gaskets, IP65, R40 size; highly recommended for outdoor installations | IP65GSKT-R40 |
| Kit containing 10 gaskets, IP65, RK40 size; highly recommended for outdoor installations | IP65GSKT-RK40 |

# 19. pivCLASS PACS plug-in and connector information

Use this table to complete the Registration Engine, Multi PACS Connector, or Data Import PACS ID part number extension.

| Vendor | Product Name | Vendor # | Version # | Supports PAM | Supports pivCLASS Embedded Authentication |
|---|---|---|---|---|---|
| Advantor | ASN | 33 | 00 | • | – |
| AMAG | Symmetry | 01 | 00 | • | – |
| Amano McGann | AmanoNet | 25 | 00 | • | – |
| AMT | WebBrix | 02 | 00 | • | – |
| Apollo | APACS | 31 | 00 | • | – |
| Avigilon | ACM | 18 | 00 | • | • |
| Brivo | OnSite Server | 03 | 00 | • | – |
| CBORD | CS Gold | 30 | 00 | • | – |
| Continental Access | CA 3000 | 04 | 00 | • | – |
| DAQ Electronics | StarWatch SMS | 29 | 00 | • | – |
| Datawatch | D3000 | 05 | 00 | • | – |
| DSX | WinDSX | 06 | 00 | • | – |
| Feenics | Keep | 34 | 00 | – | • |
| Galaxy | System Galaxy | 32 | 00 | • | – |
| Gallagher | Command Centre | 07 | 00 | • | – |
| Genetec | Security Center | 27 | 00 | • | • |
| Identiv-Hirsch | Velocity | 08 | 00 | • | – |
| Honeywell | EBI | 09 | 01 | • | – |
| Honeywell | Pro-Watch | 09 | 02 | • | – |
| Kantech | EntraPass | 12 | 00 | • | – |
| LenelS2 | OnGuard | 14 | 00 | • | • |
| MonDyn | SafeNET | 26 | 00 | • | – |
| Open Options | DNA Fusion | 16 | 00 | • | • |
| Quintron | AccessNsite | 17 | 00 | • | – |
| ReconaSense | Access Control | 35 | 00 | – | • |
| RS2 Technologies | AccessIt! | 19 | 00 | • | • |
| Sielox | Pinnacle | 21 | 00 | • | – |
| Siemens | SiPass | 22 | 00 | • | – |
| Software House | CCURE 9000 | 23 | 02 | • | – |

**Note:** Plug-in functionality varies according to the capabilities of the PACS headend product. Contact your HID Sales Representative for details.

**Note:** Latest versions validated against contained in plug-in connector specific manuals. These refer to latest internally validated in HID and may not represent the versions listed for FICAM or latest validated by each OEM.

# 20. pivCLASS supplemental ordering information

In order to ensure proper delivery of services, this form must be completed when purchasing any pivCLASS parts that include a maintenance or support agreement. This form is required for the following parts:

| Software | | | | Hardware/License |
|---|---|---|---|---|
| PVC-BASE-XX-YY | PVCP-D/S-MS | PVC-IDPUB1000-MS | PVC-MPX-CNSL-MS | 91000BBNNN |
| PVC-BASE-MS | PVC-D/S | PVC-IDPUBUNL | PVC-MPX-CNX-XX-YY | 91000BNNNN |
| PVC-CM | PVC-IDPUB500 | PVC-IDPUBUNL-MS | PVC-MPX-CNX-MS | 91000-MS |
| PVC-CM-MS | PVC-IDPUB500-MS | PVC-D/S-MS | PVC-DTAIMP-XX-YY | PVC-FXRDR |
| PVCP-D/S-XX-YY | PVC-IDPUB1000 | PVC-MPX-CNSL | PVC-DTAIMP-MS | PVC-FXRDR-MS |
| | | | PVCAT-D /PVCAT-D-MS | EA-LICENSE2 |
| | | | | E91000-MS |

Questions about this form should be submitted to: **nampacspivclass@hidglobal.com**

## Integrator/installer contact information

| | |
|---|---|
| **Company Name** | |
| **Contact Name** | |
| **Email** | |
| **Phone Number** | |

## End user contact information

| | |
|---|---|
| **End User Company Name** | |
| **End User Contact Name** | |
| **End User Email** | |
| **End User Phone Number** | |
| **End User Address where software is deployed** | |
| **End User Access Control System used at location** | |
| **End User Access Control System version** | |

## Digital updates contact preference

Please provide a preferred email address for electronic delivery of order fulfillment and software updates to be sent to. This may be the same as the Integrator/Installer or End User email from above.

| | |
|---|---|
| **Digital Updates Contact Email** | |

## Existing maintenance contract details

If there is an existing installation of pivCLASS, please provide the following if available:

| | |
|---|---|
| **pivCLASS Service Contract Number(s)** | |
| **Start date** | |
| **End date** | |
| **Total number of months** | |
| **pivCLASS System ID(s)** | |
| **Access Control System License #** | |

# Revision history

| Date | Description | Revision |
|------|-------------|----------|
| May 2023 | Updated email address in Section 20. | C.2 |
| March 2023 | Further updates to training links in Section 16. | C.2 |
| February 2023 | Updated training links in Section 16. | C.0 |
| November 2022 | Removed firmware update cards from section 17 Reader programming cards. | B.9 |
| September 2022 | Minor updates. | B.8 |
| August 2022 | Removed Identicard PremiSys, Johnson Controls P2000, Matrix Systems Frontier, and Software House CCURE 800 plug-ins. | B.7 |
| June 2022 | Adds 007CP5 Weigand with PAM mode ON configuration option for Signo PIV readers. | B.6 |
| June 2022 | Renamed section 15 to remove reference to credential testing aides. | B.5 |
| May 2022 | Updated pivCLASS supplemental ordering information, removed Credential testing aides section, updated PAM support for Signo PIV readers. | B.4 |
| May 2022 | Added Signo PIV reader information and removed PACS mobile validation software information. | B.3 |
| May 2022 | Updated Open Options DNA Fusion support for pivCLASS embedded Authentication. | B.2 |
| March 2022 | Updated part number for Idemia Biometric Sensor. Updated document to latest HID branding. | B.1 |
| June 2020 | Added new sections for pivCLASS PAM and Reader Bundles and pivCLASS Embedded Authentication Reader Bundles. Updated Maintenance and Support information throughout | B.0 |
| July 2019 | Updated for per pivCLASS 5.6 & 5.7 release. New Feenics plugin, updated version of PAM. Corrected reader part numbers. | A.9 |
| March 2018 | Corrected part numbers, added versions to plug-in section, simplified reader section. | A.8 |
| June 2016 | Added pivCLASS Strong Authentication OSDP readers - LCD Contact. | A.7 |
| February 2016 | Updated bundled part number. | A.6 |
| February 2016 | New MS part number for "Bundles", added certification training required for Validation Workstation, fixed MultiPACS connector part number error, deleted Datastrip handheld reader page, added workstation to Certificate Training page, removed Evaluation Kits. | A.5 |
| October 2015 | New supplemental info page, added biometric bundle, removed R15 and RP15 readers (no longer sold), removed discontinued color offerings, deleted PIV Audit Card kit (superseded by NIST test cards), PAM purchase now includes Reader Services component. | A.4 |
| March 2015 | Removed the HDX Wiegand mode reader part numbers. Updated vendor plug-ins. | A.3 |
| January 2015 | Added biometric reader, various redundant part numbers, separated reader section into PAM and Wiegand mode, added PACS Service component part numbers | A.2 |
| August 2014 | New redundant part numbers added, IP65 gasket description changed, bundle part number table and descriptions changed, Evaluation Kit contents changed. | A.1 |
| April 2014 | Changed to new standardized part number (formerly D00546) now PLT-01964. | A.0 |

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