

Cidron Family Reader

The Cidron reader family's compatibility with secure RFID-technologies and BLE,NFC mobile credential incorporated in a robust,yet timeless design, makes them ideally suited for both indoor - and outdoor installations in all kinds of physical access control applications.

Cidron family is a reader operating on both 125KHz and 13,56MHz which makes it ideal to use where several card populations with different RFID-technologies and/or frequencies should be used at the same time. The Cidron family allows for controlled upgrading of legacy RFID-technologies utilizing 125KHz to a secure RFID technology such as MIFARE® DESFire® EV1 which operates on 13,56MHz and allows for AES128 encrypted communication between credential and reader. Cidron family supports reading of 13,56MHz technologies, for instance, MIFARE Classic®, MIFARE Plus® sector and MIFARE DESFire EV1 application combined with 125KHz technologies such as Electromarine (EM4200) and HID® Proximity compatible cards.

Cidron VG3 reader compliants to encrypted BLE and ISO18092 NFC technologies for access control by mobile credential to instead of RFID smart cards.

Cidron family features a contact card socket which is designed to read Secure Access Module's (SAM's) embedded on a SIM-card sized contact chip. Cidron family is compatible with MIFARE® SAM AV2 which gives the possibility to further increase the security of storing encryption

keys (Evaluation Assurance Level, EAL5+) and also allows for diversification of encryption keys. Using diversified keys means that each card in the card population will have its own unique encryption key and not share the same encryption key across the whole card population.

The Cidron family is available both with - and without keypad. The version with keypad has backlit keys that is configurable to always be on, off or in auto mode which means that when a card is presented to the reader or a key is pressed the keypad will light up. The version without keypad has a symbol at the front of the reader which will be lit when a card is presented to a reader configured to auto mode.

The substantial LED frame provides visual indications to the user, the LED frame can indicate green, red or yellow. There is also an embedded buzzer that can be used for audible indications. The LED frame, backlight and buzzer can all be configured to indicate different operations and events using sound or light to communicate with the user. The indications can also be activated by external controls by using general



purpose input/output's (GP/O's),for instance an individual reader can be configured to light up the LED frame in green or red by the fire alarm system depending on which GPI/O the fire alarm system is connected to.

The Cidron family also includes a range of key fobs with the same design factor and purpose built-in accessories that facilitates installation, assist in complying with legislation and protects the reader from external factors.The Cidron family is designed for surface mounting but can also be fitted to standard European installation boxes.

With the array of communication protocols available in the Cidron reader it makes it extremely versatile and can be installed in most physical access control systems without any additional plug-in modules.The Open Supervised Device Protocol,OSDP™ is a bidirectional communication protocol developed by SIA (Security Industry Assciation) which provides continuous monitoring of the reader but if applied it also enables AES128 encrypted communication between the reader and the controller. This so called "Secure Channel" is available in Cidron readers.





Advantages

- Timeless design reader in standard size
- BLE & ISO18092 NFC
- 13.56MHz Mifare® Classic & Plus, DESFire® EV1
- 125KHz EM Prox
- SAM AV2
- Wiegand and RS485 communication interface
- OSDP Secure Channel

Technical Specifications

CIDRON VG3 READER	
Operating frequency	125KHz & 13,56MHz
Contactless ISO Standard	ISO14443A/B, ISO18092 NFC
Contactless cards	- EM Prox, EM4100, EM4200, - MIFARE Classic (4 byte, 7 byte), MIFARE Plus, MIFARE DESFire EV1; - ISO18092 NFC (T2T, T4T) tags.
Mobile ID	ISO18092 NFC, BLE 4.0
Secure Access Module	MIFARE SAM AV2, external SAM card connection slot.
Communication Interface	Wiegand, Clock/Data, RS485 (OSDP 1, OSDP 2, including Secure channel), BLE 4.0
Keypad	12 digit keypad in 4 rows of 3 keys in each row with Blue LED backlit controlled to ON/OFF and auto, intensely adjustable.
Indicators	- LED bar with red, green and Amber intensely adjustable. - Buzzer.
Power supply	9 – 30VDC
Input/Output	4 input for LED and buzzer and 2 configurable GPIO's
Tamper alarm	Built-in mechanical tamper switch which allows for indication both break off protection and opening of the reader.
Operating temperature	-40° – +70°C. With thermostat controlled embedded heater.
Operating humidity	0 – 95% RHNC (Relative Humidity No Condensation)
Ingress Protection Classification	IP 65 (request weather protection casing)
Housing dimensions	L=109mm, H=25mm, W=79mm
Configuration Methods	Configuration card, reader tool software or factory configured readers.

*The specifications are subject to change without notice.

Cidron VG3 RFID+BLE OSDP Reader	Part No.
Cidron Standard 13.56MHz/BLE with keypad, matte black	SC93100-MDB-VDI27-S
Cidron Combi 13.56MHz/125KHz/BLE with keypad, matte black	SC93100-MDEB-VDI27-S
Cidron Standard 13.56MHz/BLE without keypad, matte black	SC93110-MDB-VDI27-S
Cidron Combi 13.56MHz/125KHz/BLE without keypad, matte black	SC93110-MDEB-VDI27-S

VG3 RFID & BLE Slimline OSDP Reader



Advantages

- Timeless design reader in slimline size
- BLE & ISO18092 NFC
- 13.56MHz Mifare® Classic & Plus, DESFire® EV1
- SAM AV2
- Wiegand and RS485 communication interface
- OSDP Secure Channel

Technical Specifications

CIDRON VG3 READER	
Operating frequency	13,56MHz
Contactless ISO Standard	ISO14443A/B, ISO18092 NFC
Contactless cards	- EM Prox, EM4100, EM4200, - MIFARE Classic (4 byte, 7 byte), MIFARE Plus, MIFARE DESFire EV1; - ISO18092 NFC (T2T, T4T) tags.
Mobile ID	ISO18092 NFC, BLE 4.0
Secure Access Module	MIFARE SAM AV2, external SAM card connection slot.
Communication Interface	Wiegand, Clock/Data, RS485 (OSDP 1, OSDP 2, including Secure channel), BLE 4.0
Keypad	12 digit keypad in 2 rows of 6 keys in each row with Blue LED backlit controlled to ON/OFF and auto, intensely adjustable.
Indicators	- LED bar with red, green and Amber intensely adjustable. - Buzzer.
Power supply	9 – 30VDC
Input/Output	4 input for LED and buzzer and 2 configurable GPIO's
Tamper alarm	Built-in mechanical tamper switch which allows for indication both break off protection and opening of the reader.
Operating temperature	-40° – +70°C. With thermostat controlled embedded heater.
Operating humidity	0 – 95% RHNC (Relative Humidity No Condensation)
Ingress Protection Classification	IP 65 (request weather protection casing)
Housing dimensions	L=141mm, H=25mm, W=48mm
Configuration Methods	Configuration card, reader tool software or factory configured readers.

*The specifications are subject to change without notice.

Cidron VG3 RFID+BLE Slimline OSDP Reader	Part No.
Cidron Slimline 13.56MHz/BLE with keypad, matte black	SC93200-MDB-VDI27-S
Cidron Slimline 13.56MHz/BLE without keypad, matte black	SC93210-MDB-VDI27-S

VG2 RFID OSDP Reader



Advantages

- Timeless design reader in standard size
- 13.56MHz Mifare® Classic & Plus, DESFire® EV1
- 125KHz EM Prox
- SAM AV2
- Wiegand and RS485 communication interface
- OSDP Secure Channel

Technical Specifications

CIDRON VG2 READER	
Operating frequency	125KHz & 13,56MHz
Contactless ISO Standard	ISO14443A/B, ISO18092 NFC
Contactless cards	- EM Prox, EM4100, EM4200, - MIFARE Classic (4 byte, 7 byte), MIFARE Plus, MIFARE DESFire EV1; - ISO18092 NFC (T2T, T4T) tags.
Mobile ID	ISO18092 NFC
Secure Access Module	MIFARE SAM AV2, external SAM card connection slot.
Communication Interface	Wiegand, Clock/Data, RS485 (OSDP 1, OSDP 2, including Secure channel)
Keypad	12 digit keypad in 4 rows of 3 keys in each row with Blue LED backlit controlled to ON/OFF and auto, intensely adjustable.
Indicators	- LED bar with red, green and Amber intensely adjustable. - Buzzer.
Power supply	9 – 30VDC
Input/Output	4 input for LED and buzzer and 2 configurable GPIO's
Tamper alarm	Built-in mechanical tamper switch which allows for indication both break off protection and opening of the reader.
Operating temperature	-40° – +70°C. With thermostat controlled embedded heater.
Operating humidity	0 – 95% RHNC (Relative Humidity No Condensation)
Ingress Protection Classification	IP 65 (request weather protection casing)
Housing dimensions	L=109mm, H=25mm, W=79mm
Configuration Methods	Configuration card, reader tool software or factory configured readers.

*The specifications are subject to change without notice.

Cidron VG2 RFID OSDP Reader	Part No.
Cidron Standard 13.56MHz with keypad, matte black	SC9100-MD-VDI27-S
Cidron Combi 13.56MHz/125KHz with keypad, matte black	SC9100-MDE-VDI27-S
Cidron Standard 13.56MHz without keypad, matte black	SC9110-MD-VDI27-S
Cidron Combi 13.56MHz/125KHz without keypad, matte black	SC9110-MDE-VDI27-S

VG2 RFID Slimline OSDP Reader



Advantages

- Timeless design reader in slimline size
- 13.56MHz Mifare® Classic & Plus, DESFire® EV1
- SAM AV2
- Wiegand and RS485 communication interface
- OSDP Secure Channel

Technical Specifications

CIDRON VG2 READER	
Operating frequency	125KHz & 13,56MHz
Contactless ISO Standard	ISO14443A/B, ISO18092 NFC
Contactless cards	- EM Prox, EM4100, EM4200, - MIFARE Classic (4 byte, 7 byte), MIFARE Plus, MIFARE DESFire EV1; - ISO18092 NFC (T2T, T4T) tags.
Mobile ID	ISO18092 NFC
Secure Access Module	MIFARE SAM AV2, external SAM card connection slot.
Communication Interface	Wiegand, Clock/Data, RS485 (OSDP 1, OSDP 2, including Secure channel)
Keypad	12 digit keypad in 2 rows of 6 keys in each row with Blue LED backlit controlled to ON/OFF and auto, intensely adjustable.
Indicators	- LED bar with red, green and Amber intensely adjustable. - Buzzer.
Power supply	9 – 30VDC
Input/Output	4 input for LED and buzzer and 2 configurable GPIO's
Tamper alarm	Built-in mechanical tamper switch which allows for indication both break off protection and opening of the reader.
Operating temperature	-40° – +70°C. With thermostat controlled embedded heater.
Operating humidity	0 – 95% RHNC (Relative Humidity No Condensation)
Ingress Protection Classification	IP 65 (request weather protection casing)
Housing dimensions	L=141mm, H=25mm, W=48mm
Configuration Methods	Configuration card, reader tool software or factory configured readers.

*The specifications are subject to change without notice.

Cidron VG2 RFID SLIMLINE OSDP Reader	Part No.
Cidron Slimline 13.56MHz with keypad, matte black	SC9200-MD-VDI27-S
Cidron Slimline 13.56MHz without keypad, matte black	SC9210-MD-VDI27-S

CIDRON-E Economic Slimline Reader



Advantages

- Timeless design reader in Slimline size
- 13.56MHz Mifare®, DESFire® EV1
- Wiegand and RS232 communication interface

Technical Specifications

CIDRON E READER	
Operating frequency	13,56MHz
Contactless ISO Standard	ISO14443A
Contactless cards	MIFARE CSN 4 byte, MIFARE CSN 7 byte MIFARE Classic and MIFARE DESFire EV1; Also supports other ISO 14443 A compatible cards CSN.
Communication Interface	Wiegand and RS232
Indicators	- LED bar with red, green and Amber intensely adjustable. - Buzzer
Power supply	9 – 12VDC
Operating temperature	-20° – +60°C
Operating humidity	0 – 95% RHNC (Relative Humidity No Condensation)
Ingress Protection Classification	IP 65 (request weather protection casing)
Housing dimensions	L=141mm, H=25mm, W=48mm
Configuration Methods	Configuration card, reader tool software or factory configured readers.
Compliances	CE & RoHS

*The specifications are subject to change without notice.

Cidron E Reader	Part No.
Cidron E Slimline 13.56MHz without keypad, matte black	SC9230-MD-VDI27-S

VG4 Customizable Battery-driven Access Control Reader



Advantages

- Timeless design reader in Slimline size
- Low power consumption battery driven reader
- BLE & ISO18092 NFC
- 13.56MHz Mifare® Classic, DESFire® EV1
- Wireless BLE communication interface
- 2000 card users under standalone mode

Technical specifications

CIDRON VG4 READER	
Operating frequency	13,56MHz
Contactless ISO Standard	ISO14443A, ISO18092 NFC
Contactless cards	MIFARE® Classic, DESFire® EV1
Mobile ID	BLE, ISO18092 NFC
Communication Interface	BLE
Card capacity	2000 users
Indicators	LED bar with red, green
Power supply	3.5-8.4 V DC, battery pack
Current consumption	Ultra low power consumption reader, standby mode are sleep mode power consumption 120µA average
Input/Output	2 inputs – door contact, door exit 2 outputs – control door lock
Slave reader	Slave reader that can be connected to the master reader
Operating temperature	-20 ~ +70°C
Operating humidity	0~95% RHNC (Relative Humidity No Condensation)
Compliances	IP65
Housing dimensions	L=141mm, H=25mm, W=48mm

*The specifications are subject to change without notice.

Accessories for the Cidron reader

The Cidron reader accessories includes products that facilitate installation, assist with complying to legislation and protect the reader from external factors.

Today, the competition is very tough in many markets, making it increasingly more important to stand out from the crowd and therefore we also offer the opportunity to profile your readers for increased recognition. You can choose between a laser engraved or printed logo in single color or in full color. This way, you get the readers to follow your or your customer's graphic profile.



Cidron Standard
Color: Black



Cidron Slimline
Color: White

Vandalization Protection for the Cidron reader

The cidron reader vandalization protection is an accessory that protects the reader and helps it withstand violence by absorbing and redirecting external forces away from the reader.

In certain environments such as schools and penitentiaries, readers are subjected to an increased risk of vandalism. Even though the reader is robust in its basic design, an extra layer of protection might be needed in high-risk environments.

The vandalization protection is available for all Cidron reader models, and comes in the color black. It is securely fastened to the wall using the installation kit supplied.



Cidron Standard
Color: Black
Dimensions: 120x147x31 mm

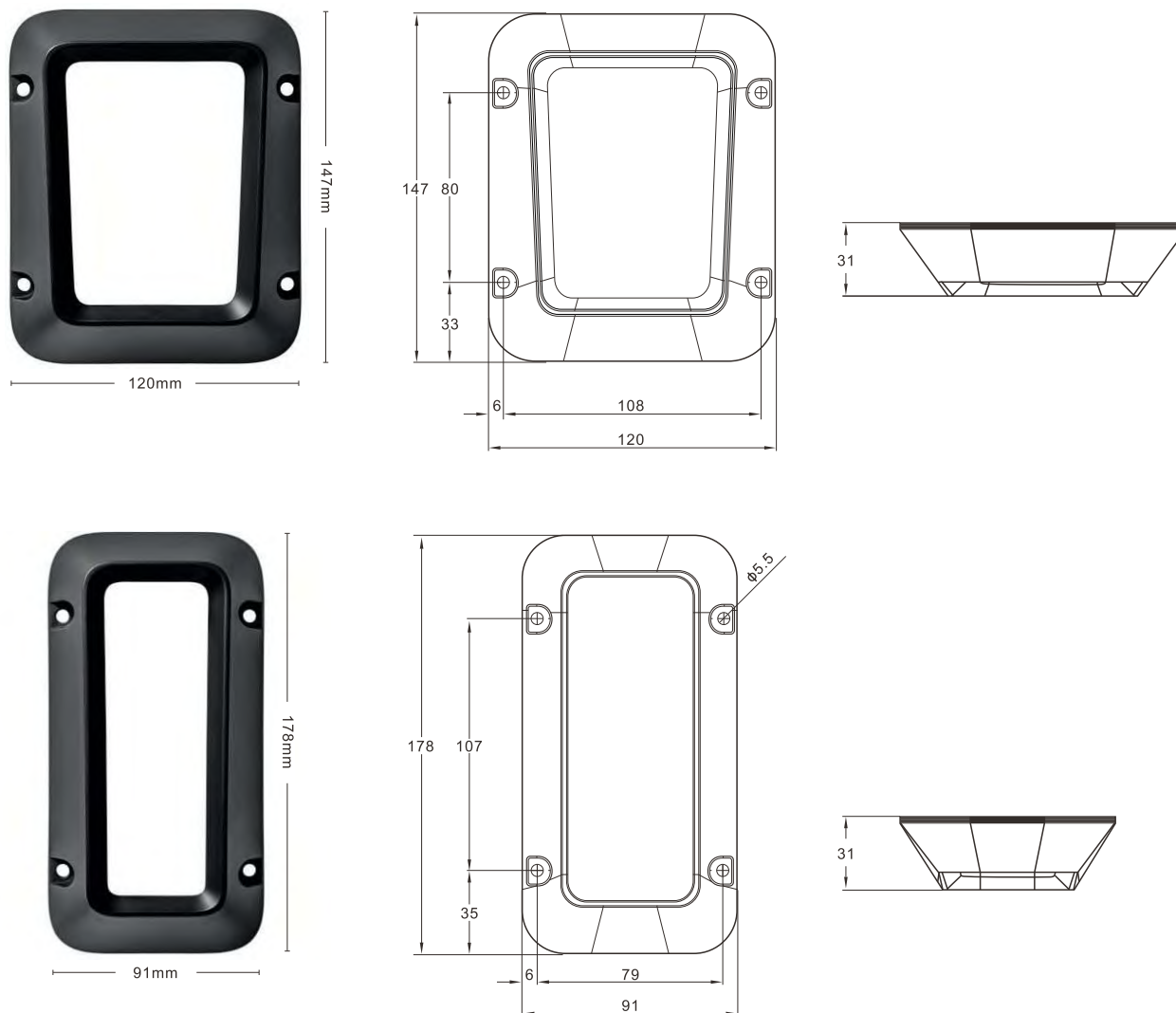
Cidron Slimline
Color: Black
Dimensions: 91x178x31 mm

Specifications

- The supplied screws require the installation tool Security Torx TT25.
- The vandalization protection can easily be refitted to already installed Cidron readers.

Compatible accessories

- Distance plates for the vandalization protection for the Cidron reader.

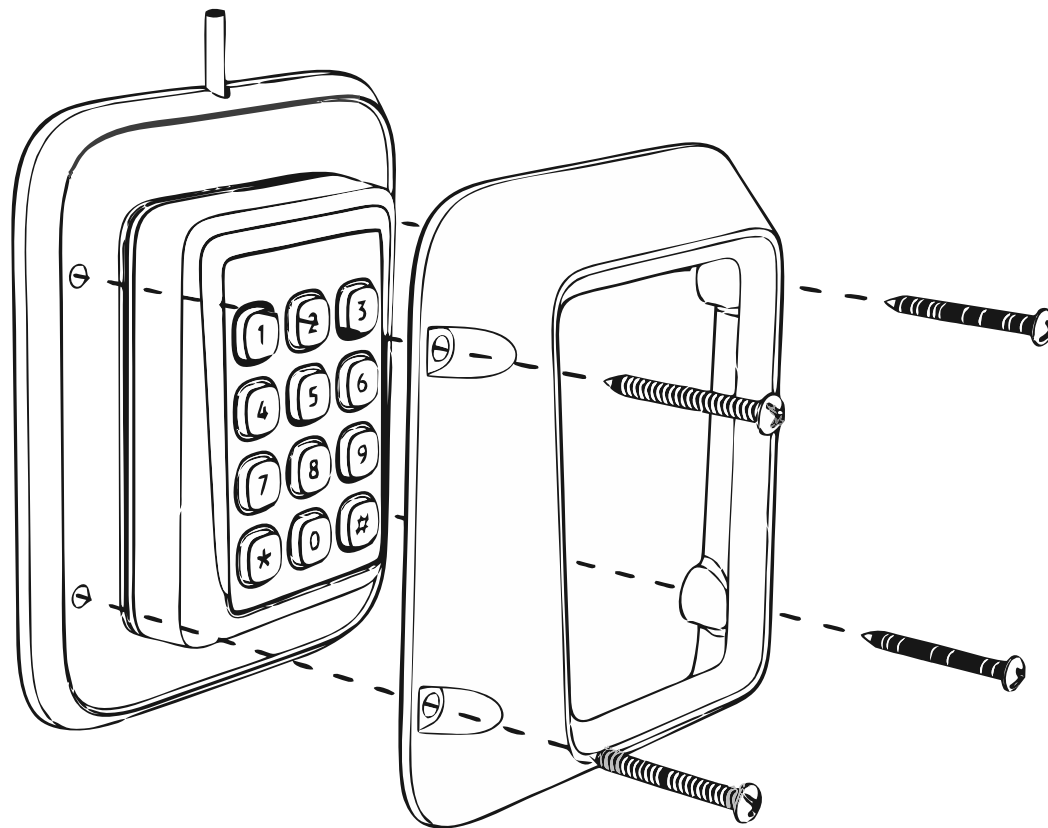


Compatible accessories

Distance plate made to fit together with the vandalization protection for the Cidron reader

- Distanceplate for vandalization protection Cidron Slimline (SC9297-S/V)
- Distanceplate for vandalization protection Cidron Standard (SC9197-S/V)

Distance plate, large + Vandalization protection



Part No.	Description	Dimensions
SC9180-S	Cidron Vandalization Protection Standard/Combi, Matte Black	120x147x31 mm
SC9280-S	Cidron Vandalization Protection Slimline/Slimline E, Matte Black	91x178x31 mm

Distance plate for the Cidron reader

A Distance plate enables smooth and flexible installations. when a reader shall be installed in an environment where additional cover is needed for example to hide old installation holes or to cover an uneven surface, our recommendation is to use a distance plate.

The distance plates comes in two sizes, standard and large, for different applications. You will find dimensions in the specification below.

If you add Vandalization protection for your Cidron reader, you need to make sure to select the large distance plate for your type of Cidron reader: Standard/Combi or Slimline/slimline E.

Installation guidelines on how to mount a distance plate is included in the installation manuals for all Cidron models.

tamper alarm switch issues on uneven walls spacer can solve those kinds of issues.

The Cidron reader accessories includes products that:

- **facilitate installation**
- assist with complying to legislation
- protect the reader from external factors



Distance plate standard size.
Part No: SC9191-S(black).



Distance plate standard size.
Part No: SC9191-V(white).

Specifications

- Material: Polycarbonate
- The distance plate comes in two different sizes, standard and large. Both versions are available for the Cidron Standard/Combi and the Cidron Slimline/Slimline E readers.
- When using a Vandalization protection, select distance plate large for the installation.
- The distance plates are also available in versions with different angels.

Product specification and part numbers

Distance plate for Cidron Standard and Combi readers. Standard size:

Part No SC9191-S (black) and SC9191-V (White).
Dimensions: L 82mm. H 112mm. W 10mm.

Distance plate for Cidron Standard and Combi readers. Large size:

Part No SC9197-S (black) and SC9197-V (White).
Dimensions: L 133mm. H 159mm. W 11mm.

Distance plate for Cidron Slimline and Slimline E readers. Standard size:

Part No SC9291-S (black) and SC9291-V (White).
Dimensions: L 50mm. H 143mm. W 10mm.

Distance plate for Cidron Slimline and Slimline E readers. Large size:

Part No SC9297-S (black) and SC9297-V (White).
Dimensions: L 104mm. H 190mm. W 11mm.

Part No.	Description
SC9191-S	Distance plate for Cidron Standrd and Combi readers, black. Standard size.
SC9191-V	Distance plate for Cidron Standrd and Combi readers, white. Standard size.
SC9197-S	Distance plate for Cidron Standrd and Combi readers, black. Large size.
SC9197-V	Distance plate for Cidron Standrd and Combi readers, white. Large size.
SC9291-S	Distance plate for Cidron Slimline and Slimline E readers, black. Standard size.
SC9291-V	Distance plate for Cidron Slimline and Slimline E readers, white. Standard size.
SC9297-S	Distance plate for Cidron Slimline and Slimline E readers, black. Large size.
SC9297-V	Distance plate for Cidron Slimline and Slimline E readers, white. Large size.

Angled Distance plate for the cidron reader

To increase accessibility as well as visibility of the cidron reader keypad, an angled distance plate is recommended, specially for installations at hospitals and local authorities, in order to comply to the Equality Act.

The distance plate is available in two different angles, 10° and 33°. The 33° angled Distance plate is suitable to install on a horizontal surface for instance on different models of entrance speed gates and turnstiles, adapted for people in wheelchairs with the recommended installation height of 900mm (center of reader) above the ground/floor.

The angled distance plates are available for all Cidron reader models.

Installation guidelines on how to mount a distance plate is included in the installation manuals for all Cidron models .

The Cidron reader accessories includes products that:

- **facilitate installation**
- **assist with complying to legislation**
- **protect the reader from external factors**



Angled Distance plate for Cidron Standard and Combi readers with a 33° angle.



Angled Distance plate for Cidron Slimline and Slimline E readers with a 33° angle.

Specifications

- Material: Polycarbonate
- The angeled distance plate comes in two versions, with a 33° angel and with a 10° angel. Both versions are available for the Cidron Standard/Combi and the cidron Slimline/Slimline E readers.

Product specification and part numbers

Angled Distance plate for Cidron Standard and Combi readers with a 33° angel:

Part No SC9192-S (black) and SC9192-V (white).

Dimensions: 105x75x10mm

Angled Distance plate for Cidron Standard and Combi readers with a 10° angel:

Part No SC9193-S (black) and SC9193-S-V (white).

Dimensions: 105x75x10mm

Angled Distance plate for Cidron Slimline and Slimline E readers with a 33° angel:

Part No SC9292-S (black) and SC9292-V (white).

Dimensions: 141x48x20mm

Angled Distance plate for Cidron Slimline and Slimline E readers with a 10° angel:

Part No SC9293-S (black) and SC9293-V (white).

Dimensions: 141x48x20mm

Part No.	Description
SC9192-S	Angled Distance plate for Cidron Standard and Combi readers with a 33° angel, black.
SC9192-V	Angled Distance plate for Cidron Standard and Combi readers with a 33° angel, white.
SC9193-S	Angled Distance plate for Cidron Standard and Combi readers with a 10° angel, black.
SC9193-V	Angled Distance plate for Cidron Standard and Combi readers with a 10° angel, white.
SC9292-S	Angled Distance plate for Cidron Slimline and slimline e readers with a 33° angel, black.
SC9292-V	Angled Distance plate for Cidron Slimline and slimline e readers with a 33° angel, white.
SC9293-S	Angled Distance plate for Cidron Slimline and slimline e readers with a 10° angel, black.
SC9293-V	Angled Distance plate for Cidron Slimline and slimline e readers with a 10° angel, white.

Climate Protection for the Cidron reader

Even though the reader is robust in its basic design, an extra layer of weather protection might be needed in certain environments. The shield protects the reader from snow, rain and sunlight and comes in two different colors, transparent and white, for different applications.

The white Climate protection is recommended when the reader needs to be covered from sunlight. The color also makes it harder for unauthorized to observe a user pin code.

The transparent Climate protection provides the user with a good visibility of the reader and the key pad, even from different angles and heights.

The Climate protection can easily be modified to fit all Cidron reader models, Standard/Combi/Slimline/Slimline E.

The Cidron reader accessories includes products that:

- facilitate installation
- assist with complying to legislation
- **protect the reader from external factors**



Climate Protection
Color: Transparant
Part No: SC9901-T



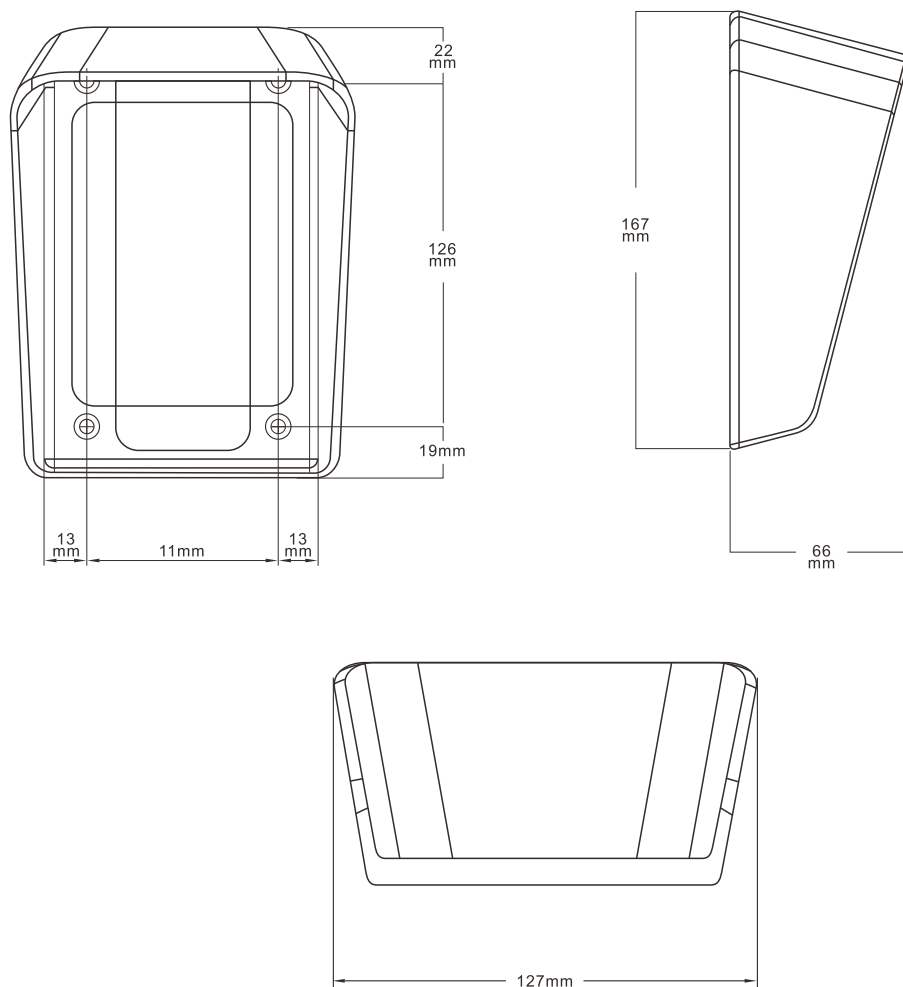
Climate Protection
Color: White
Part No: SC9901-V

Specifications

- Dimensions: 125x165x70mm
- Material: Polycarbonate

Installation support

- Four screws and screw plugs are supplied together with the accessory for installation of the climate protection
- The supplied screws require the installation tool Security Torx TT25



Part No.	Description
SC9901-T	Cidron Climate Protection, transparant.
SC9901-V	Cidron Climate Protection, white.

Installation tool for Cidron Std/Combi/Slim

The Cidron installation tool is designed to securely open the card reader. The special made shape makes it easy to insert the tool into the locking part to release the frame for service and maintenance work.



Part number: SC9914