Access control

SiPass readers and cards

Built to stand the test of time

Answers for infrastructure.

SIEMENS

SiPass readers and cards – robust, reliable and easy to use

Siemens provides a wide range of readers and cards to satisfy the access control requirements of most environments. Our readers and cards can work with virtually any access control system on the market, but they are specifically tested and qualified for use with SiPass systems.

Designed for easy installation and use, the SiPass reader portfolio includes technologies ranging from magnetic stripe to 125 kHz proximity, multi-purpose smart card technology, and Cotag technology, which offers the convenience of hands-free functionality. Each technology type includes at least one model with an integrated keypad to enable card-plus-PIN functionality, which is ideal for higher security applications.

The majority of SiPass readers supports Siemens advanced reader protocols – BC-Link or CerPass/UCI (RS485). The advantages of using these protocols include the ability to connect two readers to a single door controller, which simplifies the installation and reduces costs, and active monitoring of reader status, which enhances security.

Whichever type of SiPass readers and cards you choose, you can be confident that they will significantly enhance security at your site(s).

Which technology suits your needs?

Reading technologies
SiPass readers and cards operate via four different types of reading technology: magnetic stripe, 125 kHz proximity, Cotag and Smart Card.

Magnetic stripe
The user swipes a magnetic stripe card in the slot on the reader. The advantage of magnetic stripe cards is that they are fairly inexpensive. They are mainly used today when expanding an existing access control system that uses magnetic stripe technology.

125 kHz proximity
The information stored within a 125 kHz proximity card or tag is sent to the reader when the card or tag is held in front of it. This reduces the wear and tear on the cards and readers which results in a lower total cost of ownership over time. Some of our 125 kHz proximity readers support the SiPass algorithm, which offers a higher level of security than conventional 125 kHz.

Cotag
The main advantage of Cotag technology is that it provides both proximity and hands-free card reading. It operates on the 132 kHz band, which is similar to 125 kHz. All Cotag readers can read both active (long-range) and passive (proximity) Cotag cards and tags. Both types of cards can be mixed in the same system to provide ultimate convenience and cost-efficiency.

Cotag active cards contain a battery, which enables these cards to transmit information with a higher output power than passive cards and thereby results in a longer reading distance. When Cotag hands-free readers are used together with active cards and tags it is possible to create a truly hands-free access control environment. This is useful in cases where some cardholders are disabled or where hands are often occupied, such as in a hospital or a warehouse.

Cotag is more secure than standard 125 kHz technology because the content on the card is protected and there is no equipment available outside Siemens to read or copy the cards.

Smart card
Smart cards can be used for additional purposes beyond that of access control. They function as proximity access cards, but since they can store much more information they can also be used as cash cards at company restaurants or vending machines, for example. It is also possible to store biometric data such as fingerprint templates. Smart cards offer the highest degree of security in our card range.

Communication protocols
SiPass readers communicate with the door controllers in the system either via standard reader protocols such as Wiegand and Clock&Data, or via Siemens' advanced reader protocols, BC-Link and CerPass (RS485).

Advantages of BC-Link and CerPass (RS485) protocols:
- Since they are bi-directional they can be used for buzzer control, LED feedback and arming/disarming of an intrusion area
- Installation is faster since less wiring is required
- Higher level of security compared to using Wiegand or Clock&Data
- Constant monitoring of reader status

Highlights
- Hands-free access with Cotag technology
- Easy to install and use
- Robust and reliable
- Fully tested with SiPass systems
- Enhanced security with advanced reader protocols

Readers

	PIN-only	Magnetic Stripe					
	M43	BC18	BC43	AR6181-RX	AR6182-RX	ARS6311-RX	
SiPass Entro Lite	■	■	■			■	
SiPass Entro	■	■	■			■	
SiPass integrated				■	■	■	
SIPORT				■	■		
Card technology	None (keypad only)	Magstripe (track 2)	Magstripe (track 2)	EM4102 (also known as Miro or UNIQUE 125 kHz), SiPass algorithm, Hitag 1 and Hitag 2	EM4102 (also known as Miro or UNIQUE 125 kHz), SiPass algorithm, Hitag 1 and Hitag 2	EM 4102 (also known as Miro or UNIQUE 125 kHz), CerPass, SiPass algorithm	SiPa
Description	PIN-only reader. Used for group codes or to add PIN functionality to an existing card-only reader. Tamper switch.	Compact card-only reader. Supplied with 3 meter cable.	Card and PIN reader. Tamper switch.	Card-only reader. Square design. Smart two-part construction makes it very easy to mount. Also includes a surface mounting frame.	Card and PIN reader. Square design. Smart two-part construction makes it very easy to mount. Also includes surface mounting frame.	Card-only reader. Compact and economical. Tamper switch.	Card Mull two- mak to m swit
Card read distance*	–	–	–	7 cm (approx.)	7 cm (approx.)	12 cm (approx.)	7 cm
Interface to controller	BC-Link	Clock&Data	BC-Link	RS485 monitored CerPass/UCI protocol	RS485 monitored CerPass/UCI protocol	Clock&Data (ABA Track II) and Wiegand (26/34/42 bit)	RS48 CerP
Operating voltage	12 to 24 VDC	5 VDC	12 to 24 VDC	12 to 24 VDC	12 to 24 VDC	10 to 16 VDC	12 V
Average current consumption	27 mA @ 12 VDC	5 mA @ 5 VDC	30 mA @ 12 VDC	145 mA @ 12 VDC	145 mA @ 12 VDC	32 mA @ 12 VDC	35 m
Indicators	3 x LED (red/yellow/green)	2 x LED (red/green)	3 x LED (red/yellow/green)	1 x LED (red/yellow/green), 1 x buzzer	1 x LED (red/yellow/green), 1 x buzzer	3 x LED (red/yellow/green) 1 x buzzer	3 x L gree
Environment	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indo
Operating temperature	–35 to +50 °C	–10 to +55 °C	–35 to +50 °C	–25 to +70 °C	–25 to +70 °C	–25 to +60 °C	–10
IP rating	IP54	IP55	IP54	IP65	IP65	IP65	IP65
Housing	Cast metal with security lock	Cast metal	Cast metal with stainless steel keys and security lock	PC/ABS plastic	PC/ABS plastic	ABS plastic	PC/A
Color	Grey	Brushed aluminum	Grey	Silver (RAL9006)	Silver (RAL9006)	Silver (RAL9006)	Silve
Dimensions (W x H x D)	80 x 140 x 40 mm	29 x 124 x 28 mm	110 x 160 x 47 mm	With mounting frame 85.5 x 91 x 40 mm W/o mounting frame 85.5 x 91 x 23 mm	With mounting frame 85.5 x 91 x 40 mm W/o mounting frame 85.5 x 91 x 23 mm	40 x 100 x 25 mm	48 x
Keypad	Stainless steel keys	No	Stainless steel keys	No	Membrane keys	No	No
Approval	CE	CE	CE	CE	CE	CE	CE
Accessories	SH2 rain cover IS391 spy-proof cover BB3 flush mounting kit	SH1 universal rain cover	SH4 rain cover BB4 flush mounting kit	SH1 universal rain cover	SH1 universal rain cover	SH1 universal rain cover	SH1 cove
Compatible cards/tags	None	IB1	IB1	ABR5100-PR ABR5100-BL ABR5100-TG	ABR5100-PR ABR5100-BL ABR5100-TG	ABR5100-PR ABR5100-BL ABR5100-TG	ABR ABR ABR
Order no.	S24246-F8400-A1	S24246-F4100-A1	S24246-F4101-A1	6FL7170-8AD	6FL7170-8AE	S24246-Z3900-A1	6FL

Cards

	Magnetic Stripe					
	IB1		ABR5100-PR	ABR5100-BL	ABR5100-TG	
Description	Magnetic stripe card with CR80 ISO format (track 2). Card number on back.		Pre-printed ISO cards compliant with the SiPass algorithm. Can be used with the readers ARS6311-RX, AR6331-CP, AR6332-CP, AR6181-RX and AR6182-RX. Card number on back.	Blank, printable ISO cards compliant with the SiPass algorithm. Can be used with the readers ARS6311-RX, AR6331-CP, AR6332-CP, AR6181-RX and AR6182-RX. Card number on back.	SiPass proximity keyring tag. Can be used with readers ARS6311-RX, AR6331-CP, AR6332-CP, AR6181-RX and AR6182-RX. Card number on back.	Print pliar read Can read PD3(EM (mag card
Quantity in order	100		10	10	10	1
Dimensions (W x H x D)	54 x 86 x 0.76 mm		54 x 86 x 0.76 mm	54 x 86 x 0.76 mm	29.80 x 44.90 x 1.55 mm	54 x
Order no.	S24246-D5000-A1		6FL7820-8KA10	6FL7820-8KA20	6FL7820-8KA30	S242

*All reading distances provided here have been measured in lab conditions and may vary according to environmental conditions.

Proximity 125 kHz

	AR6331-CP	AR6332-CP	PP500-EM	HD500-EM	PR500-EM	SP500-EM	PM500-EM	PD30-EM	PD40-EM
			■	■	■	■	■		
			■	■	■	■	■	■	■
■	■	■	■	■	■	■	■		
■	■								
ss algorithm	SiPass algorithm	EM4102 (also known as Miro or UNIQUE 125 kHz)	EM4102 (also known as Miro or UNIQUE 125 kHz)	EM4102 (also known as Miro or UNIQUE 125 kHz)	EM4102 (also known as Miro or UNIQUE 125 kHz)	EM4102 (also known as Miro or UNIQUE 125 kHz)	EM4102 (also known as Miro or UNIQUE 125 kHz)	EM4102 (also known as Miro or UNIQUE 125 kHz)	EM4102 (also k as Miro or UNIQ 125 kHz)
-only reader. ion design. Smart part construction es it very easy ount. Tamper ch.	Card and PIN reader. Mullion design. Smart two-part construction makes it very easy to mount. Tamper switch.	Heavy-duty card and PIN reader. Position indicator light and illuminated keypad make it easy to use in dark places. Tamper switch.	Heavy-duty card-only reader. Vandal-proof, impact and fire resistant. Popular both in vulnerable locations and modern office environments.	Card-only reader. Slim and compact.	Card-only reader. Compact design. Designed for mounting in single-gang back boxes.	Card-only reader. Designed for panel mounting. Suitable for most remote call-point locations.	All-in-one reader and door controller. Fits directly on a standard Scandinavian lock case. Supplied with drop box and five meter cable.	All-in-one reade door controller. directly on Euro lock cases that low the DIN 18 standard. Suppl with drop box a meter cable.
(approx)	7 cm (approx)	5 cm	6 cm	10 cm	10 cm	5 cm	3 cm	3 cm
35 monitored ass protocol	RS485 monitored CerPass protocol	BC-Link, Clock&Data or Wiegand	BC-Link, Clock&Data or Wiegand	BC-Link, Clock&Data or Wiegand	BC-Link, Clock&Data or Wiegand	BC-Link, Clock&Data or Wiegand	BC-Link	BC-Link
DC	12 VDC	12 to 24 VDC	10.6 to 32 VDC	10.6 to 32 VDC	10.6 to 32 VDC	10.6 to 32 VDC	8 to 40 VDC 8 to 30 VAC	8 to 40 VDC 8 to 30 VAC
nA @ 12 VDC	35 mA @ 12 VDC	30mA @ 12VDC	20 mA @ 12 VDC	22mA @ 12VDC	21 mA @ 12 VDC	20mA @ 12VDC	100mA @ 12VDC	100 mA @ 12 V
ED (red/yellow/ n), 1 x buzzer	3 x LED (red/yellow/ green), 1 x buzzer	3 x LED (red/yellow/ green), 1 x buzzer	3 x LED (red/yellow/ green), 1 x buzzer	3 x LED (red/yellow/ green), 1 x buzzer	3 x LED (red/yellow/ green), 1 x buzzer	3 x LED (red/yellow/ green), 1 x buzzer	3 x LED (red/yellow/ green)	3 x LED (red/yel green)
or and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor use only	Indoor use only
to +55 °C	–10 to +55 °C	–30 to +50 °C	–30 to +50 °C	–30 to +50 °C	–30 to +50 °C	–30 to +50 °C	0 to + 50 °C	0 to + 50 °C
	IP65	IP54	IP65	IP55	IP55	IP55	IP30	IP30
BS plastic	PC/ABS plastic	Cast metal with security lock	Polycarbonate case, fully encapsulated electronics with stainless steel frame	ABS base with clip on ABS front cover	ABS base with fully encapsulated electronics and clip on ABS front cover	High impact polycarbonate outer casing, with encapsulated electronics	Stainless steel housing with ABS base reader head	Stainless steel h ing with ABS ba reader head
r (RAL9006)	Silver (RAL9006)	Grey	Black and stainless steel	White	White	Black	Stainless steel	Stainless steel
147 x 30 mm	48 x 147 x 30 mm	80 x 140 x 40 mm	100 x 128 x 18 mm	40 x 140 x 18.5 mm	86 x 86 x 14 mm	68 x 73 x 13.5 mm	64 x 250 x 64 mm	70 x 250 x 60 m
	Membrane keys	Stainless steel keys	No	No	No	No	No	No
	CE	CE	CE	CE	CE	CE	CE	CE
universal rain r	SH1 universal rain cover	SH2 rain cover IS391 spy-proof cover BB3 flush mounting kit	None	BB6 flush mounting kit	None	None	None	None
5100-PR 5100-BL 5100-TG	ABR5100-PR, ABR5100-BL ABR5100-TG	IB41-EM, IB42-EM IB44-EM, IB45-EM	IB41-EM, IB42-EM IB44-EM, IB45-EM	IB41-EM, IB42-EM IB44-EM, IB45-EM	IB41-EM, IB42-EM IB44-EM, IB45-EM	IB41-EM, IB42-EM IB44-EM, IB45-EM	IB41-EM, IB42-EM IB44-EM, IB45-EM	IB41-EM, IB42-E IB44-EM, IB45-E
7171-8AD	6FL7171-8AE	S54501-F1-A1	S24246-F3901-A1	S24246-F3913-A1	S24246-F3902-A1	S24246-F3903-A1	S24246-F8504-A1	S24246-F8505-

Proximity 125 kHz

	IB41-EM	IB42-EM	IB44-EM	IB45-EM
ted ISO cards com- nt with EM4102 ing technology. be used with the ers xx500-EM, 0-EM and PD40- Cards also include netic stripe and number on back.	Blank printable ISO card compliant with EM4102 reading technology. Can be used with the readers xx500-EM, PD30-EM and PD40-EM. Cards also include magnetic stripe and card number on back.	Keyring tag with Siemens logo, compliant with EM4102 reading technology. Can be used with the readers xx500-EM, PD30-EM and PD40-EM. Card number on front.	Adhesive tag with Siemens logo, compliant with EM4102 reading technology. Can to be attached to existing magnetic stripe cards when adding EM4102 readers to an existing magstripe installation. Card number on back.
	1	1	1
86 x 0.76 mm	54 x 86 x 0.76 mm	29.95 x 36.35 x 7.25 mm	Diameter 30 x 3 mm
246-D4904-A1	S24246-D4901-A1	S24246-D4902-A1	S24246-D4903-A1

	IB928	IB911	IB970
	Active Cotag clamshell card including lithium battery. Suitable for use with all Cotag readers in this brochure. Card number on back.	Active Cotag keyring tag including lithium battery. Suitable for use with all Cotag readers in this brochure. Card number on back.	Active Cotag tag. Suitable with BC5516- loop reader. number on ba
	1	1	1
	53.89 x 85.85 x 2.89 mm	31.24 x 49.89 x 9.7 mm	100.45 x 51.6 27.02 mm
	24246-D5203-A1	S24246-D5204-A1	S24246-D520

	Cotag							
	PP500-Cotag	HD500-Cotag	PR500-Cotag	SP500-Cotag	PM500-Cotag	HF500-Cotag	BC5511-Cotag	BC5516-Cotag
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
nown QUE	Cotag	Cotag	Cotag	Cotag	Cotag	Cotag	Cotag	Cotag
er and Fits pean fol- 251 ied nd five	Heavy-duty card and PIN reader. Position indicator light and illuminated keypad make it easy to use in dark places. Tamper switch.	Heavy-duty card-only reader. Vandal-proof, impact and fire resistant. Popular both in vulnerable locations and modern office environments.	Card-only reader. Slim and compact.	Card-only reader. Compact design. Designed for mounting in single-gang back boxes.	Card-only reader. Designed for panel mounting. Suitable for most remote call-point locations.	Hands-free reader. Able to read through wood, concrete, glass, and most other materials, but not metal.	Hands-free reader. Designed for split-mounted applications. Provides a higher level of security, particularly for outdoor use.	Loop reader kit. Consists of a BC270 loop coupler and a BC5311 reader interface. Used for applications such as "invisible" hands-free access control and Automatic Vehicle Identification (AVI).
	Active card: 12 cm Passive card: 3 cm	Active card: 26 cm Passive card: 8 cm	Active card: 32 cm Passive card: 10 cm	Active card: 29 cm Passive card: 9 cm	Active card: 23 cm Passive card: 8 cm	Active card: 102 cm Passive card: 34 cm	Active card: 90 cm Passive card: 35 cm	Active card: 100–300 cm (depending on the loop)
	BC-Link, Clock&Data or Wiegand	BC-Link, Clock&Data or Wiegand	BC-Link, Clock&Data or Wiegand	BC-Link, Clock&Data or Wiegand	BC-Link, Clock&Data or Wiegand	Clock&Data or Wiegand	Clock&Data or Wiegand	Clock&Data or Wiegand
	12 to 24 VDC	10.6 to 32 VDC	10.6 to 32 VDC	10.6 to 32 VDC	10.6 to 32 VDC	10 to 35 VDC	10 to 35 VDC	10 to 35 VDC
DC	39 mA @ 12 VDC	37 mA @ 12 VDC	36 mA @ 12 VDC	32 mA @ 12 VDC	33mA @ 12VDC	200 mA @ 12 VDC	290 mA @ 12 VDC	300 mA @ 12 VDC
low/	3 x LED (red/yellow/ green), 1 x buzzer	3 x LED (red/yellow/ green), 1 x buzzer	3 x LED (red/yellow/ green), 1 x buzzer	3 x LED (red/yellow/ green), 1 x buzzer	3 x LED (red/yellow/ green), 1 x buzzer	3 x LED (red/yellow/ green), 1 x buzzer	3 x LED (red/yellow/ green), 1 x buzzer	–
	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor use only	Indoor for the reader interface and outdoor for the reader	Indoor for the reader interface and indoor or outdoor for the loop coupler
	–30 to +50 °C	–30 to +50 °C	–30 to +50 °C	–30 to +50 °C	–30 to +50 °C	0 to +50 °C	–40 to +70 °C (HF100) 0 to +50 °C (BC5311)	–40 to +70 °C (BC270) 0 to +50 °C (BC5311)
	IP54	IP65	IP55	IP55	IP55	IP54	IP55	IP66 (BC270)
hous- se	Cast metal with security lock	Polycarbonate case, fully encapsulated electronics with stainless steel frame	ABS base with clip on ABS front cover	ABS base with fully encapsulated electronics and clip on ABS front cover	High impact polycarbonate outer casing, with encapsulated electronics	UV-resistant ABS plastic	UV-resistant ABS plastic	UV-resistant ABS plastic
	Grey	Black and stainless steel	White	White	Black	Light grey	Light grey	Light grey
mm	80 x 140 x 40 mm	100 x 128 x 18 mm	40 x 140 x 18.5 mm	86 x 86 x 14 mm	68 x 73 x 13.5 mm	220 x 265 x 29.3 mm	BC5311: 110 x 195 x 40 mm HF100: 220 x 265 x 29.3 mm	BC270: 80 x 160 x 56 BC5311: 110 x 195 x 40 mm
	Stainless steel keys	No	No	No	No	No	No	No
	CE	CE	CE	CE	CE	CE	CE	CE
	SH2 rain cover IS391 spy-proof cover BB3 flush mounting kit	None	BB6 flush mounting kit	None	None	None	None	None
EM EM	IB928, IB911, IB968 IB961, IB958M	IB928, IB911, IB968 IB961, IB958M	IB928, IB911, IB968 IB961, IB958M	IB928, IB911, IB968 IB961, IB958M	IB928, IB911, IB968 IB961, IB958M	IB928, IB911, IB970 IB968, IB961, IB958M	IB928, IB911, IB970 IB968, IB961, IB958M	IB928, IB911, IB970
A1	S54501-F1-A2	S24246-F4703-A1	S24246-F4706-A1	S24246-F4704-A1	S24246-F4705-A1	S24246-F4106-A1	S24246-F4701-A1	S24246-F4702-A1

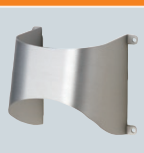
	Cotag				Smart Card 13.56 MHz		Access
0	IB968	IB961	IB958M		ABP5100-PR	ABP5100-BL	
vehicle for use Cotag Card ack.	Passive Cotag clam-shell card. Suitable for use with all Cotag readers in this brochure except BC5516-Cotag. Card number on back.	Passive Cotag keyring tag. Suitable for use with all Cotag readers in this brochure except BC5516-Cotag. Card number on back.	Passive Cotag printable ISO card. Suitable for use with all Cotag readers in this brochure except BC5516-Cotag. Includes a magnetic stripe with CR80 ISO format (track 2) for use in magstripe readers. Card number on back.		Pre-printed Mifare Classic 1k ISO card. Suitable for use with all the Smart Card readers in this brochure.	Blank printable Mifare Classic 1k ISO card. Suitable for use with all the Smart Card readers in this brochure.	**Description**
	1	1	1		10	10	**Quantity in order**
57 x	54 x 85.6 x 1.6 mm	40.50 x 55.90 x 4.00 mm	54 x 86 x 0.76 mm		54 x 86 x 0.76 mm	54 x 86 x 0.76 mm	**Dimensions** (W x H x
0-A1	S24246-D5201-A1	S24246-D5202-A1	S24246-D5205-A1		6FL7820-8KB10	6FL7820-8KB20	**Order no.**

Smart Card 13.56 MHz

	AR6181-MX	AR6182-MX	AR6181-MS	AR6182-MS	AR6381-MS	AR6382-MS	AR6111-MX	AR6201-MX
							■	
							■	
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■		■
	Mifare Classic 1k & 4k (CSN, S/B, MAD); DESfire (CSN); Mifare UltraLight & my-D prox (CSN, B); STM LRI512, my-C, my-D vic, I-Code SLI, Tag-IT HFI (CSN)	Mifare Classic 1k & 4k (CSN, S/B, MAD); DESfire (CSN); Mifare UltraLight & my-D proximity (CSN, B); STM LRI512, my-C, my-D vic, I-Code SLI, Tag-IT HFI (CSN)	Mifare Classic 1k & 4k (CSN, sector/block)	Mifare Classic 1k & 4k (CSN, sector/block)	Mifare Classic 1k & 4k (CSN, sector/block)	Mifare Classic 1k & 4k (CSN, sector/block)	Mifare Classic 1k & 4k, Mifare UltraLight, my-D proximity, my-C, my-D vicinity, I-Code SLI, Tag-IT HFI, STM LRI512 (all CSN)	Mifare Classic 1k & 4k, Mifare UltraLight, my-D proximity, my-C, my-D vicinity, I-Code SLI, I-Code1, I-Code EPC, Tag-IT HFI, LRI512
	Card-only reader. Square design. Smart two-part construction makes it very easy to mount. Supplied with surface mounting frame.	Card and PIN reader. Square design. Smart two-part construction makes it very easy to mount. Supplied with surface mounting frame.	Card-only reader. Designed to fit most standard square flush mounting boxes. Supplied with surface mounting frame.	Card and PIN reader. Designed to fit most standard square flush mounting boxes. Supplied with surface mounting frame.	Card-only reader. Mullion design.	Card-only reader. Mullion design.	Card-only reader. Rectangular design. Economical. Configuration can be changed with a configuration card. Supplied with surface mounting frame.	Enrollment reader. Designed to read and write cards. Can be connected to a PC. Includes external power supply.
	7 cm	7 cm	4 cm	4 cm	4 cm	4 cm	7 cm	7 cm
	RS485-monitored CerPass/UCI protocol, Omron (Clock&Data) or Wiegand	RS485-monitored CerPass/UCI protocol, Omron (Clock&Data) or Wiegand	RS485-monitored CerPass/UCI protocol, Omron (Clock&Data) or Wiegand	RS485-monitored CerPass/UCI protocol, Omron (Clock&Data) or Wiegand	RS485-monitored CerPass/UCI protocol, Omron (Clock&Data) or Wiegand	RS485-monitored CerPass/UCI protocol, Omron (Clock&Data) or Wiegand	Clock&Data emulation from magnetic card (ISO7811-2, 5-bit) or Wiegand	RS232 interface for connection to a personal computer.
	12 to 24 VDC	12 to 24 VDC	12 to 24 VDC	12 to 24 VDC	7 to 12.25 VDC	7 to 12.25 VDC	9 to 15 VDC	Power supply included
	165 mA @ 12 VDC	165 mA @ 12 VDC	64 mA @ 12 VDC	64 mA @ 12 VDC	127mA @ 12VDC	127 mA @ 12 VDC	80 mA @ 12 VDC	–
	1 x LED (red/yellow/green), 1 x buzzer	1 x LED (red/yellow/green), 1 x buzzer	3 x LED (red/yellow/green), 1 x buzzer	3 x LED (red/yellow/green), 1 x buzzer	3 x LED (red/yellow/green), 1 x buzzer	3 x LED (red/yellow/green), 1 x buzzer	2 x LED (red/green) 1 x buzzer	1 x LED (red/yellow/green), 1 x buzzer
	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor and outdoor use	Indoor use only
	–20 to +60 °C	–20 to +60 °C	–20 to +70 °C	–20 to +70 °C	–20 to +70 °C	–20 to +70 °C	–25 to +60 °C	–25 to +60 °C
	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP22
	PC/ABS plastic	PC/ABS plastic	PC/ABS plastic	PC/ABS plastic	PC/ABS plastic	PC/ABS plastic	Synthetic ABS/PBT	PC/ABS plastic
	Silver (RAL 9006)	Silver (RAL 9006)	Silver (RAL 9006)	Silver (RAL 9006)	Silver (RAL 9006)	Silver (RAL 9006)	Silver (RAL 9006)	Silver (RAL 9006)
	With mounting frame 85.5 x 91 x 40 mm W/o mounting frame 85.5 x 91 x 23 mm	With mounting frame 85.5 x 91 x 40 mm W/o mounting frame 85.5 x 91 x 23 mm	With mounting frame 85.5 x 91 x 40 mm W/o mounting frame 85.5 x 91 x 23 mm	With mounting frame 85.5 x 91 x 40 mm W/o mounting frame 85.5 x 91 x 23 mm	48 x 147 x 30 mm	48 x 147 x 30 mm	76 x 120 x 17 mm	85.5 x 91 x 40 mm
	No	Membrane keys	No	Membrane keys	No	Membrane keys	No	No
	CE, FCC, UL	CE, FCC, UL	CE	CE	CE	CE	CE, FCC, UL	CE, FCC
	SH1 universal rain cover	SH1 universal rain cover	SH1 universal rain cover	SH1 universal rain cover	SH1 universal rain cover	SH1 universal rain cover	SH1 universal rain cover	None
	ABP5100-PR ABP5100-BL	ABP5100-PR ABP5100-BL	ABP5100-PR ABP5100-BL	ABP5100-PR ABP5100-BL	ABP5100-PR ABP5100-BL	ABP5100-PR ABP5100-BL	ABP5100-PR ABP5100-BL	ABP5100-PR ABP5100-BL
	6FL7170-8BK	6FL7170-8BL	6FL7170-8AH	6FL7170-8AJ	6FL7171-8AK	6FL7171-8AL	6FL7170-8DK	6FL7170-8CK

sories

Accessories

	SH1	SH2	SH4	IS391	BB3	BB4	BB6
							
	SH1 is a universal protective cover for card readers. It is recommended for outdoor installations.	SH2 is a protective cover for the PP500-EM, PP500-Cotag and M43. It can be used for both new and existing installations. There are cuttings for cables.	SH4 is a protective cover for the BC43. There are cuttings for cables to simplify the process of adding it to an existing installation.	IS391 is a spy-proof cover designed for use with the PP500-EM, PP500-Cotag and M43 when a higher level of security is required.	BB3 is a flush mounting kit designed to provide an unobtrusive and aesthetically appealing installation of the PP500-EM, PP500-Cotag and M43.	BB4 is a flush mounting kit designed to provide an unobtrusive and aesthetically appealing installation of the BC43.	BB6 is a flush mounting kit designed to provide a discreet and secure installation of PR500-EM and PR500-Cotag. It hides the reader.
	1	1	1	1	1	1	1
x D)	210 x 225 x 160	104 x 168 x 90	140 x 200 x 90	120 x 104 x 95	117 x 197 (external) 85 x 175 x 33 (recess)	145 x 255 (external) 115 x 230 x 43 (recess)	117 x 200 (external) 85 x 175 x 33 (recess)
	S24246-Z3652-A1	S24246-Z3554-A1	S24246-Z3655-A1	S24246-Z3551-A1	S24246-Z3552-A1	S24246-Z3653-A1	S24246-Z3553-A1

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The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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