

ID-engine[®] SD-Series

Universal Contactless Smartcard and RFID Read Write Devices

RF-STANDARDS

- ⇒ ISO14443A/B 106 to 848kbit/s
- ⇒ ISO15693
- ⇒ NFC (initiator)

ENCRYPTION

- ⇒ Mifare[®] Classic
- ⇒ Mifare[®] DESFire[®] (DES & AES)
- ⇒ my-d[®]
- ⇒ SAM (ISO7816) optional
- ⇒ Legic[®]

INTERFACES

- ⇒ USB
- ⇒ RS232
- ⇒ CMOS
- ⇒ Magstripe
- ⇒ Clock/Data
- ⇒ Wiegand

On request:

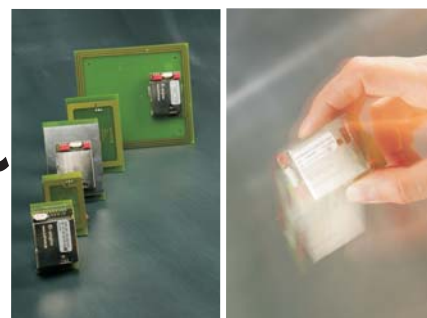
- ⇒ RS485

SPECIAL FEATURES

- ⇒ Unified-Reader-Interface
- ⇒ VHL-Instruction Set
- ⇒ PC/SC driver Win2k/XP
- ⇒ SDK

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Smartcard,
RFID,
e-passport



The ID-engine family of reader modules offers support of all major 13,56 MHz- RFID- and contactless Smartcard systems.

With the BALTECH *Unified Reader Interface (URI)*, different card types can be supported **without changing the application software!** Project individual settings are stored in the reader configuration, which can be created with the ID-engine Explorer software tool. Alternatively, BALTECH offers project configuration services to keep the customers rid of diving into Smartcard details.

Configurations can be loaded into the ID-engine readers through the serial interface or ConfigCards. This powerful and convenient functionality is the reason for ID-engine readers being more than just a reader but a secure, flexible sub-solution for Smartcard- and Smart Label projects.

Low Level communication as well as APDU exchange is also supported.

ID-engine-readers can be operated in two basic modes:

►Host driven

The host system (PC, terminal, controller...) controls the card communication through the USB, RS232- or CMOS-level interface by using BALTECH URI concept or card system dependent low level instructions.

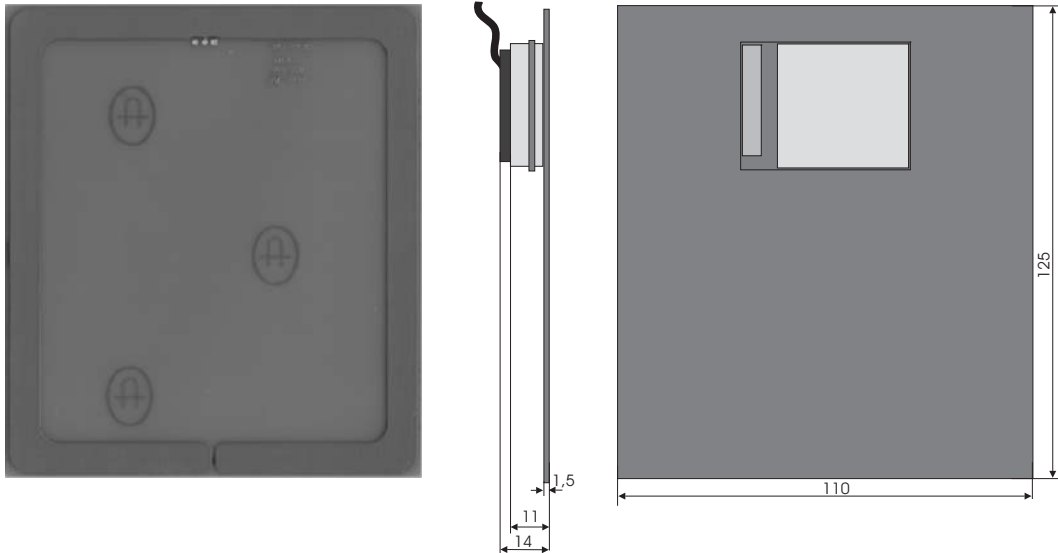
►Read-Only

The reader is working autonomously. All interfaces including MAG, C&D and Wiegand are supported. Actions are defined by powerful configuration capabilities (e.g. address of data, authentication keys, data conversion....)

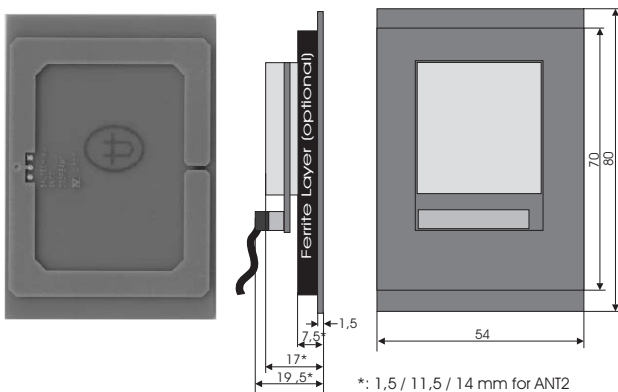
ID-engine Standard Antennas

The ID-engine core modules are available with the standard antennas as shown below. The antennas are electrically shielded. The -F-Versions are on top of this magnetically shielded, so they are mountable on metal or above other electronics modules without the need to be re-tuned. Besides the standard antennas, BALTECH offers customized antenna design on request.

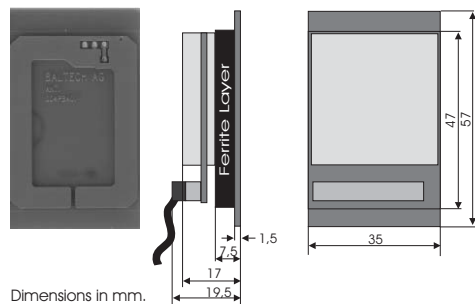
ANT4: R/W distance up to 200 mm. Scale 1:2



ANT2F/ANT2: R/W distance up to 150 mm. Scale 1:2



ANT1F: R/W distance up to 100 mm. Scale 1:2



Typical Read/Write Distances (in mm)			
ID-engine	Antenna		
	ANT1F	ANT2/-2F	ANT4
Cards 85 x 54 mm			
Mifare	40	60	100
Legic	40	60	100
Legic Supertag	60	80	130
ISO14443 A/B	40	50	100
ISO15693 (I-Code, my-d,...)	80	100	200
Baltech Key-Fob			
BKF Mifare	30	45	40
BKF Legic	30	45	40
BKF ISO15693	50	60	60
Card Specification: Antenna coil area: 2700 mm ² min. No electrically conductive material and no other contactles chip implemented. Information subject to change w ithout notice. Typical values depending on environmental conditions card variations and reader variations			

Technical Data

Supply Voltage: 4,65...5,5 VDC
 Supply Current: 250 mA max
 Operating Temperature: -20...+70°C
 Serial Interface speeds: CMOS: 9600 ...576000 Baud
 RS232: 9600...115200 Baud, USB: Full Speed USB 2.0

Our aim is your success in using contactless technology.
 Talk to a partner - talk to us.