ID-engine XE

RFID | NFC
Ethernet multi-frequency desktop reader

ID-engine XE is the desktop reader for easy integration into Ethernet environments. Its strength is scalability – both as network size grows and as security needs increase.

Smooth network integration

- The ultra-compact housing with integrated 2-port switch features a 1.8 m cable with a 5-volt DC socket, a PoE-enabled network port, and another Ethernet port to easily connect to a PC (or other network device).
- IP addresses can be assigned dynamically via DHCP or statically.
- Use SLP to locate readers in the network. Alternatively, readers that are connected to a PC can be located via UDP introspection. With this method, you also get a mapping of readers to PCs without any additional effort.

Autonomous operation to reduce network load

In large networks with many readers, you can run the readers autonomously to optimize performance: Instead of a permanent connection that the host maintains to the readers, the readers establish temporary connections to the host as needed. This reduces the network load to a minimum.

PKI encryption for high security needs

- In addition to symmetric AES encryption, ID-engine XE also supports asymmetric encryption based on Public Key Infrastructure (PKI).
- With our free software tool BALTECH PKI Certificate Manager, you can generate certificates and keys without expert knowledge and distribute them to readers with just a few clicks.

Front stickers based on your own design

Optionally, you can order individually designed front stickers to adapt the readers to your design requirements.

What all BALTECH readers have in common:

- **Comprehensive RFID support**
  All common card systems and key fobs

Learn more in the data sheet *„Supported card types“.*

- **Autonomous operation – highly customizable**
  Configure RFID and host interface, check routines, and I/O behavior with our software tools – no expert knowledge needed.
- **Card-type-independent command set „VHL“**
  Develop custom applications with minimal effort.
- **Custom hardware and firmware development**

Learn more in the data sheet *“Cross-product properties”.*

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Technical data

Mechanical

Dimensions	84 x 48 x 17 mm; fixed cable 1.8 m
Weight	160 g net; 300 g incl. packaging; 450 g incl. AC/DC 5 V power supply
Housing material	ABS/PC

Power supply

Supply voltage	4.8...5.5 VDC
I max. supply current	750 mA
I typ. supply current	500 mA
PoE	IEEE 802.3af compliant
I max. supply current PoE	100 mA
I typ. supply current PoE	70 mA

User interface

LED	Red/Green/+Mix 3-color LED
Beeper	2700 +/- 300 Hz

Environmental

Operating temperature	-25...+45 °C, wider temperature range on request
Operating humidity (rel.)	5...90% non-condensing
MTBF	100,000 h

RFID interface

13.56 MHz	Read range: 25...80 mm typ; Field strength: Hmin = 1.5 A/m @ 25 mm, Hmin = 0.15 A/m @ 80 mm Standards: ISO 14443 A/B, ISO 15693, NFC
125 kHz	Read range: 20...80 mm typ; Standards: LF 125 kHz ASK, FSK, PSK
RFID scan duration	Full sequential cycle 600 ms (multi-frequency product line)

Host interfaces

Ethernet	100 Mbit/s 2-port switch, 1 port with PoE Connector box at cable end: 2 RJ45 sockets plus coaxial DC 5 V supply socket

SAM slot

Slot for a Secure Access Module (SAM), which serves as a secure storage location for project keys and handles encrypted communication with project cards (learn more at docs.baltech.de/sam).

ID0 SAM slot	Optionally built-in 3.3 V 50 mA (peak 100 mA) ISO 7816 interface for MIFARE SAM AV2, -3 and HID iClass SE Processor. Further SAM support on request

More details

For more technical data, please visit docs.baltech.de/id-engine-xe

For an overview of standard variants and prices, refer to the ID-engine price list.