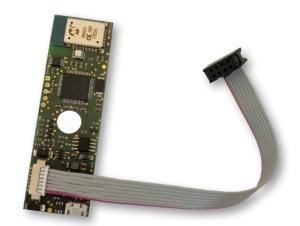# Bluetooth® Upgrade module
SE 1150

Card Reader upgrade module for adding Bluetooth®
Identification to access control systems

Functional description

Designed for integration into access control systems as an add-on to the existing card reader.

The Bluetooth® upgrade module works with the SEID apps for iOS or Android which can be downloaded from Apple App Store or Google Play.

Connection to the access control panel is available via Wiegand, Clock/Data and RS485 interface depending on the actual firmware and configuration.

In-field configuration is available via a USB interface that allows for both firmware update and changing of configuration.

Product versions	
SE 1150	Bluetooth® Upgrade Module

CARD TECHNOLOGY	DATA TYPES	DATA	DATA FORMAT
BLE4	SEID data from App	48 Bit	26,32,34,37,48 Bit

The custom format allows for verification of valid data received on bit length and selecting part of the card number by use of offset and data length. Output data can be formatted as decimal or hexadecimal and can be truncated.

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How to order

When ordering a card reader please specify: product number & configuration in the following manor:

Version	SE 1150	Bluetooth® Upgrade Module
Configuration	SE 1150 SFN	Format ID: xx, I/O = High/Low

Selecting data format and interface type

The firmware in the Bluetooth® Upgrade Module allows for multiple output formats in order to interface seamlessly with the access controller.

The Clock/Data interface outputs the card number and PIN data using the ABA/Track 2 protocol.

The Wiegand interface outputs the card number and PIN data using common Wiegand formats including both 4 and 8 bits (Dorado) outputs for PIN pad data.
The RS485 interface is bi-directional half-duplex for use with OSDP compatible access controllers or can be supplied with support for custom protocols.

On site configuration requires seucu software, which is freely downloadable from *www.securityengineering.dk*
The current format list is available on the website.

Audio & visual indication

The Bluetooth® Upgrade Module is equipped with a full RGB color LED for visual indication.
Standard firmware allows for external control of Red & Green LED.

Firmware

The card reader can be firmware updated in field using the seufu.exe utility, which is freely downloadable from *www.securityengineering.dk*

Standard firmware supports Wiegand or Clock/Data Interface.
Alternative firmware is available with RS485 interface.

Data

Dimensions	75 x 23 x 5 mm (L x W x H)
Connection	7 way ribbon cable
Cable	Fixed mount / 100mm
Commodity code	8471.90.00.00
Country of Origin	DK
ECCN code (US)	N
Export list number (EU)	N

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