

# 8 CD 2.0 AES



- The most secure access control reader in the market
- Ultimately secure data encryption between the reader and the host system
- Convenient RS-485 interface enables long cabling
- Eco-sensitive construction

8 CD 2.0 AES is an extremely secure access control reader with an AES data encryption between the reader and the host system. 8 CD 2.0 AES is practically impossible to be cracked as the data line between the reader and the host is secured by an AES cipher block chaining encryption. The encrypted message varies each time which makes attempting security breaches very difficult. AES encryption is always in use between the reader and the host. This reader can be configured to read MIFARE® UID without encryption to support existing card bases, although the communication between the reader and the host is always AES encrypted. For MIFARE® DESFire applications there is TDES or AES encryption available in the over the air interface. The reader operates on RS-485 interface which enables more flexible installations because of the possibility for longer cabling. The RS-485 interface is operated by the host system, which makes the access control system easier to manage.

## Technical specifications

Operating Frequency	13,56 MHz
Voltage	24VDC (+10VDC .... +30VDC)
Current Consumption	20 mA @ 24 VDC, max 60mA
RFID chip support	MIFARE® DESFire EV1: UID + Application files , MIFARE® Classic: UID + Sectors, MIFARE® Ultralight UID + Pages, MIFARE® Plus UID security levels 1 and 3, MIFARE® SmartMX (MIFARE® Classic emulation mode), NFC (UID), Mifare Classic 7 Byte UID + sectors. Mifare DESFire EV2: UID+application files
Keypad	Capacitive keypad with LED backlights
Available with housings	Quattro N, Basic, Slim, Slim Pin. Quattro Pin SD on request.
Dimensions of housing (hwxwd)	Quattro N & SD: 85,1 x 85,1 x 24 mm, Basic: 110 x 43 x 24 mm, Slim: 141 x 43 x 19 mm
Material of housing	Plastic
Installation method	Screws
Colour	Black
Customized versions	Yes
Protection class	IP67: with the pigtail cable option, IP54: with the connector option
IK rating	Basic: IK-10, Slim: IK-09, Slim Pin: IK-09, Quattro N: IK-09
Inflammatory class	Horizontal specimen UL94 HB, vertical specimen UL94 V-2
Operational temperature range	-40 °C - +55 °C
Storage temperature range	-40 °C - +55 °C
I/O's	2 FET outputs (for tamper control and general), max 500 mA, 1 input for an exit button
RS-485	Idesco RS-485 with AES encryption
EMC	Meets CE requirements
Field strength	According to EN300330
Cable	L1YY 3m, delivered only with pigtail reader
Encryption	Air interface: AES or 3DES, from reader to host: AES
Connector option	Basic, Slim & Slim Pin, Quattro N, Quattro SD (pigtail as a default)
LED	Three-colour LED
LED control	By protocol
Buzzer	Yes
Buzzer control	By protocol
Optical Tamper	Yes, configurable
Configuration	Idesco DESCoder tool + configuration card



Eco 20 is a new generation of Idesco products. Eco 20 stands for less power consumption, improved connectivity with other products and smaller carbon footprint through sustainable manufacturing materials and methods.

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