

### Product Information

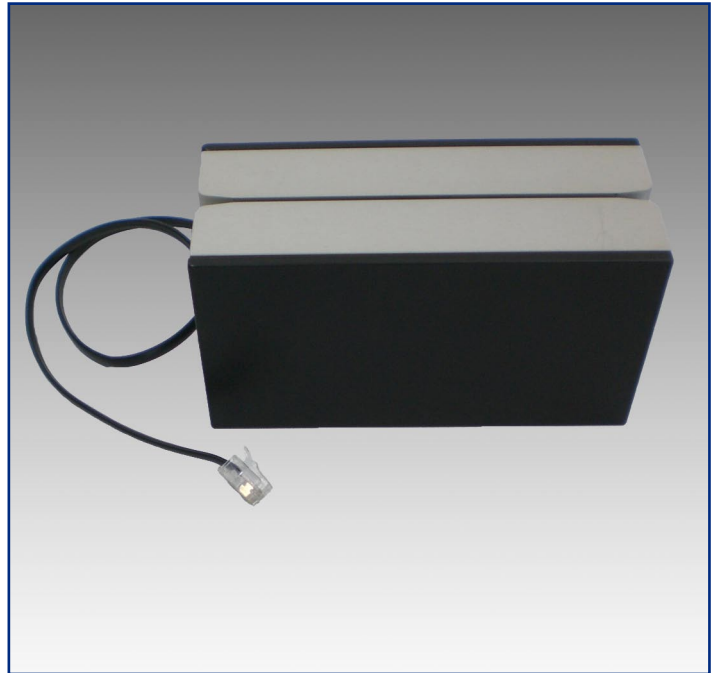
- Processing of magnetic data carrier with ISO and/or central tracks
- Anodized aluminum housing for outdoor-applications
- RS-232 interface

### Produktinformation

- Verarbeitung magnetischer Datenträger mit ISO und/oder zentraler Lage
- Eloxiertes Aluminiumgehäuse für Outdoor-Applikationen
- RS-232 Schnittstelle

### Information sur le produit

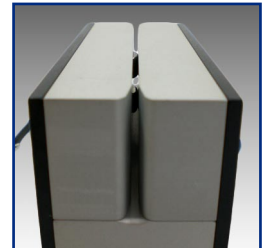
- Élaboration ou établissement de supports de données magnétiques dans les cartes ISO et/ou en position centrale
- Boîtier aluminium anodise pour applications outdoor
- Interface RS-232



**MAGNETIC SWIPE  
READER**

**MAGNETISCHER  
DURCHZUGSLESER**

**LECTEUR MAGNETIQUE**



CCS Challenge Card Systems GmbH  
Rombacher Hütte 12a  
44795 Bochum  
Germany  
Tel. +49 (0)234 94391 - 0  
Fax +49 (0)234 94391 - 99  
info@ccs-cardtec.com  
www.ccs-cardtec.com

**CCS**  
built-in reliability

## Dimensions

W 120 mm H 65 mm D 50 mm

## Power Supply

5 V DC / 0.5 W max. or 24 V DC / 0.7 W max.

## Cards

Thickness: 0.16 - 0.86 mm  
Format: 54 x 85.6 mm  
54 x 120 mm  
Material: paper, compound, PVC

## Interface

V.24 / RS-232: 9 600 to 115 200 Baud  
(RXD, TXD, GND)  
Communication protocol on request

## Environment

Range of temperature: 0 - 50 °C  
Air humidity (RH): 20 - 80 %  
non condensing  
Vibration: 10 - 55 Hz  
2 mm amplitude  
along axis x, y and z  
for max. 30 minutes

## Microprocessor System

1 x ATMEL ATmega 128 (Flash Memory)

## Electronic Control

Singel chip controller

## Coercivity

LOCO (300 Oe) / HICO (2 750 or 3 500 Oe)

## Magnetic Characteristics

Track ISO 2/3 and central  
or ISO 1/2 and central  
F2F

## Bit Densities

40 - 210 dpi

## Maintenance and Service

Every 3 months or every 150 000 tickets:  
Check magnetic head(s)

## Reliability

MTBF\*: > 20 000 h  
MCBF\*: > 200 000 tickets  
MTTR: < 30 min. in workshop

*\* without wear parts*

