

## Product Information

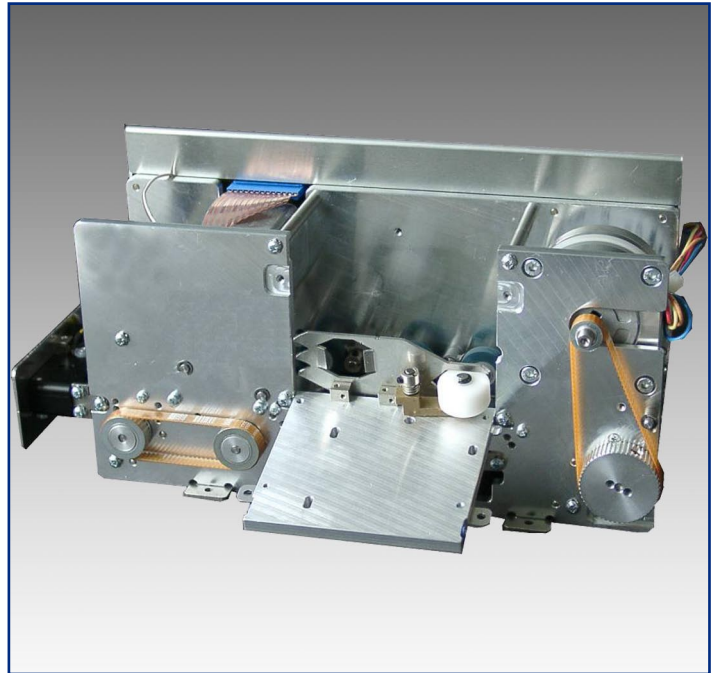
- Processing of magnetic data carriers with ISO track and/or central track and/or smart cards
- Direct thermal printing on thermal-sensitive surfaces, graphic printing
- LOCO/HICO (ISO 1/2/3 and/or central)
- RS-232 interface
- Possibility of adapting different muzzles of the KGB®-series
- Possibility of adapting different feeding modules of the KGB®-series
- Flash Memory
- Integrated CSC antenna (optional)
- Barcode reader (optional)

## Información sobre el producto

- Transformación de datos magnéticos con banda ISO y/o banda central y/o tarjetas chip
- Impresión térmica directa en superficies termicamente sensitivas, impresión gráfica
- LOCO/HICO (ISO 1/2/3 y/o pista central)
- RS-232 interfaz
- Posibilidad de conexión con diferentes boquillas de la serie CCS KGB®
- Posibilidad de conexión con diferentes módulos de alimentación de papel de la serie CCS KGB®
- Flash Memory
- CSC antena integrada (opcional)
- Lector código de barras (opcional)

## Information sur le produit

- Traitement de titres à pistes magnétiques, ISO et/ou centrée et/ou cartes à puce
- Impression thermique directe sur supports thermosensitifs, impressions graphiques
- LOCO/HICO (ISO 1/2/3 et/ou centrale)
- Interface RS-232
- Possibilité de connexion de différentes bouches de la série KGB®
- Possibilité d'adaptation de différents modules d'approvisionnement de la série KGB®
- Flash Memory
- Antenne CSC intégrée (facultatif)
- Lecteur de code à barres (facultatif)



### MAGNETIC READER/WRITER

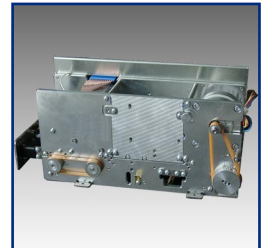
with thermal printing module

### LECTOGRABADORA MAGNÉTICA

con módulo de impresión térmica

### LECTEUR/CODEUR MAGNETIQUE

avec module d'impression thermique



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 / Weight**

W 116 mm H 143 mm D 276 mm / 3.2 kg

**Power Supply**

24 V DC (5 V DC internal)

Text printing: 150 W max.

Graphic printing: 200 W max.

**Cards**

Thickness: 0.16 - 0.86 mm

Format: 54 x 85.6 mm/54 x 120 mm

Material: paper, compound, PVC

**Card Transport Speed**

Normal transport: 350 - 500 mm/s

Printing depending

on paper quality: 50 - 100 mm/s

**Print Head**

Type: Bevel

Resolution: 8 dot/mm

Max. print width: 48 mm

**Character Set**

PICA, other character sets on request.

All character sets can be printed with double height and/or double width or with enlargement (factor 2, 4 and 8). Each character set includes the full IBM set of 20h-FFh.

Semi-graphic characters are allowed.

**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)

4 x Single chip processor with firmware

**Memory**

128 kB Flash Memory

128 kB RAM, 32 kB EEPROM

**Coercivity**

LOCO or HICO

**Magnetic Characteristics**

Central track/ISO 1, 2, 3

F2F, others on request

ABA, IATA,THRIFT, others on request

**Bit Densities**

75 - 210 bpi, others on request

**Optional Modules**

CCS 2851 KGB®: Smart card unit

CCS 2852 KGB®: Barcode reader

CCS 2854 KGB®: Barcode scan engine

**Optional Devices**

CCS 4002/2 HBL KGB®: Cutting device

CCS 4007 - X02 KGB®: Burster with parking unit

CCS 4007 - X04 KGB®: Burster with double parking unit

CCS 4008 - X01 KGB®: Burster with parking unit

CCS 4405 - X01 KGB®: Parking unit

CCS 4405 - X02 KGB®: Double parking unit

CCS 4406 KGB®: Ticket terminator

CCS 4502 KGB®: Cutting device

CCS 4814 KGB®: Motorized muzzle

CCS 4818 KGB®: External contactless smart card reader/writer

CCS 4850 KGB®: Muzzle

**Frontal**

Detection by photocell

**Reliability**

MTBF\*: > 20 000 h

MCBF\*: > 200 000 tickets

MTTR: < 0.5 h in workshop

*\* without wear parts*

