

125KHZ RFID READERS

L110-R 125kHz RS232 RFID Card Reader, EM4100, Slim Pad

The L110-R is a slim 125 kHz card pad with an RS232 (DB9) interface, for kiosks, controllers and PCs that read card numbers from a serial port instead of a keyboard. It reads EM4100 and TK4100 cards and key fobs at up to 80 mm and sends a 10-digit decimal number at 9600 bps by default.

- 125 kHz IDs over serial — EM4100, TK4100 and SMC4001 card and fob IDs sent to a DB9 RS232 port.
- 9600 bps out of the box — 19200 and 115200 bps are selectable when the host needs them.
- STX ... ETX frame — 0x02 marks the start and 0x03 the end of each read, so your parser can find message boundaries.
- Same numbers as the USB pad — the default 10-digit decimal output matches the L110-U, so USB and serial readers can share one card database.
- Slim 10 mm pad — approx. 104 × 68 × 10 mm and 155 g, with a 1450 mm cable.
- Read-only by design — it outputs the card ID only and never writes to the card.



General	
Model	L110-R
Frequency	125 kHz
Form factor	Slim desktop card pad with RS232 (DB9) cable
Housing	ABS
Color	Black

Cards & reading	
Supported cards	EM4100, TK4100, SMC4001 and EM4100-compatible cards and key fobs
Card operation	Read-only (card ID number)
Read range	Up to 80 mm (depends on card and environment)
Read time	< 200 ms
Read interval	< 0.5 s

Interface & output	
Interface	RS232, DB9 connector
Baud rate	9600 bps (default); 19200 / 115200 bps selectable
Default output	10-digit decimal card number
Frame	Starts with STX (0x02), ends with ETX (0x03)
Output options	Custom output format on request
Host	PC or controller with an RS232 (DB9) serial port
Indicators	Red/green LED (red = standby, green = card read) and buzzer

Physical & environment	
Dimensions	Approx. 104 × 68 × 10 mm
Weight	Approx. 155 g
Cable length	1450 mm
Power supply	5 V DC
Operating temperature	-10 °C to +70 °C
Storage temperature	-20 °C to +80 °C
Humidity	< 90 % RH

Works with

- ✓ EM4100, TK4100 and SMC4001 125 kHz cards and key fobs
- ✓ Windows or Linux hosts with an RS232 (DB9) COM port
- ✓ Serial terminals and applications that read a COM port at 9600, 19200 or 115200 bps

Not designed for

- ✗ Writing, encoding or copying cards (read-only reader)
- ✗ 13.56 MHz MIFARE and NFC cards — use the H110-R
- ✗ Typing into a text field like a keyboard — use the L110-U
- ✗ Wiegand door controllers — use a Wiegand reader such as the L410-W

OEM / ODM options (confirmed per order)

- ◆ Baud rate set to 9600, 19200 or 115200 bps before shipment on request
- ◆ USB keyboard version in the same slim housing (L110-U)
- ◆ Private-label marking and packaging — scope confirmed in your quotation
- ◆ Card-number output format customized on request, for example hex instead of decimal
- ◆ 13.56 MHz RS232 version for MIFARE cards (H110-R)

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Specifications describe the standard version and may change without notice. Read range depends on the card or tag, mounting and environment. Pricing, configuration, lead time and terms are confirmed in your quotation.