

USB-C / OTG PHONE RFID READERS

L220-C USB-C 125kHz EM4100 RFID Reader for Android Phones

The L220-C is a plug-in 125kHz RFID reader for Android phones and tablets with a USB-C port and OTG. It reads EM4100, TK4100 and compatible ID cards and key fobs at 0–30 mm, which built-in phone NFC cannot do, and types the 10-digit card number into any app.

- 125kHz on a phone — reads EM4100, TK4100 and SMC4001 ID cards and key fobs that 13.56MHz phone NFC cannot detect.
- Types the card number — the 10-digit decimal number appears at the cursor in any Android app, with nothing to install.
- Same default as the desktop reader — 10-digit decimal, like our L110-U USB reader, so phone and PC stations can share one format.
- Quick tap reads — 0–30 mm face-on, 0–10 mm from the side, 0.2 s read time.
- No battery — draws 5 V, 100 mA from the phone; 35 × 35 × 7 mm and about 20 g.



General	
Model	L220-C
Frequency	125 kHz
Form factor	Plug-in reader with USB-C plug, for phones and tablets
Color	Black or white

Cards & reading	
Standard	EM4100 (read-only ID)
Supported cards	EM4100, TK4100, SMC4001 and EM4100-compatible 125kHz ID cards and key fobs
Read/write	Read-only (card ID)
Read range	0–30 mm front and back, 0–10 mm from the side
Read time	0.2 s
Read interval	0.5 s

Interface & output	
Interface	USB Type-C plug (USB OTG)
Output	Keyboard emulation: card number typed at the cursor
Default format	10-digit decimal (4 bytes)
Custom format	On request
Host systems	Android with USB OTG; Windows XP / 7 / 10 through an OTG adapter
App or SDK	None required on Android

Physical & environment	
Power	5 V, 100 mA from the host
Indicator	2-color LED (blue: power, green: status)
Dimensions	35 × 35 × 7 mm (without plug)
Weight	Approx. 20 g
Package	71 × 71 × 19 mm, approx. 50 g packed
Operating temperature	-20 °C to +70 °C

Works with

- ✓ EM4100, TK4100 and SMC4001 125kHz ID cards and key fobs
- ✓ Other EM4100-compatible 125kHz read-only ID cards
- ✓ Android phones and tablets with a USB-C port and USB OTG support
- ✓ Windows XP / 7 / 10 PCs through an OTG adapter

Not designed for

- ✗ Writing, encoding or copying cards (read-only reader)
- ✗ 13.56MHz MIFARE and NFC cards — use the H220-C
- ✗ 125kHz proximity formats that are not EM4100-compatible (not listed)
- ✗ 134.2kHz FDX-B animal tags — use the A220-C
- ✗ iPhone and iPad (iOS not listed for this model)

OEM / ODM options (confirmed per order)

- ◆ Output format other than the default 10-digit decimal, on request, to match your access-control or attendance software
- ◆ Logo and private-label packaging on request; feasibility and terms confirmed in your quotation
- ◆ Housing color: black or white

Henrium · henrium.com · sales@henrium.com

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.