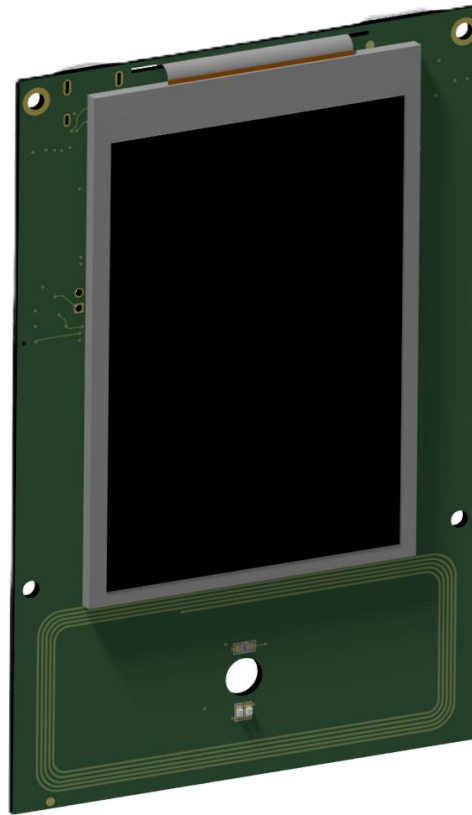


# 881 READER


**TX-188**

## 881-XL



### AUSFÜHRUNG

- + Low-power RFID/NFC-Leser
- + Unterstützt alle gängigen 13,56-MHz-Protokolle
- + Kompatibel zu allen ddm-Lesegeräten
- + Integrierte Antenne
- + Serielle TTL, USB-C, RS232
- + 3,5" IPS-TFT Display
- + QR-Code-Generator

### ABMESSUNGEN

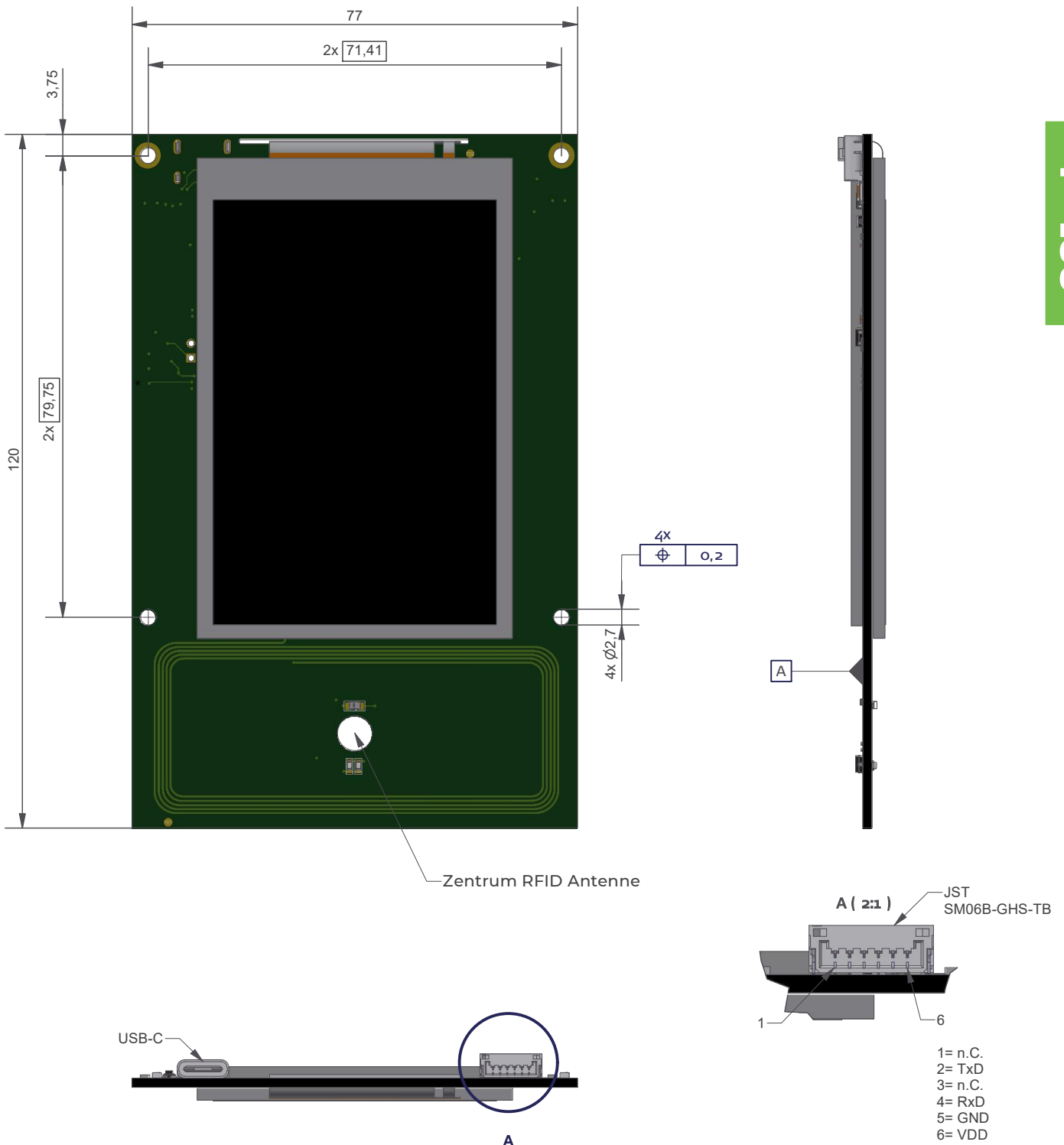
120 x 77 x 8,4 mm

### CONSTRUCTION

- + *Low-power RFID/NFC reader*
- + *Supports all common 13.56 MHz protocols*
- + *Compatible to all ddm devices*
- + *Integrated antenna*
- + *Serial TTL, USB-C, RS232*
- + *3,5" IPS-TFT Display*
- + *QR-Code-Generator*

### DIMENSIONS

120 x 77 x 8,4 mm



Unit: mm

General tolerance  $\pm 0.5$

Abmessungen können je nach Ausführung variieren.  
In den Abbildungen oben sind all konfigurierbaren  
Optionen ausgewählt.

*The dimensions of the product can vary depending on your configuration.  
In the drawings above, all features and all selectable options are  
included.*

**ELEKTRISCHE DATEN | ELECTRICAL DATA**

<b>ALLGEMEIN GENERAL</b>	Leistungsaufnahme:	3 W	<i>Power consumption</i>
<b>SCHNITTSTELLEN INTERFACES</b>	Serielle TTL-Schnittstelle	3,3 V	<i>Serial TTL-Interface</i>
	RS232 Schnittstelle	7...24V	<i>Serial RS232-Interface</i>
	USB Schnittstelle	5V	<i>USB-Interface</i>
<b>RFID</b>	Frequenz	13,56 MHz (HF)	<i>Frequency</i>
	Antenne	Internal or external; 50 Ohm	<i>Antenna</i>

**PROZESSOR | PROCESSOR**

- latest processor generation
  - Arm® Cortex®-M33
  - low-power in Standby with RTC (370nA)
  - 512-Kbyte flash memory
  - 274-Kbyte SRAM
- Options for security applications
  - Secure firmware upgrade
  - 2 AES coprocessor
  - Public key accelerator
  - HASH hardware accelerator
  - true random number generator
  - 96-bit unique ID
  - active tamperers

**NFC- PROZESSOR | NFC-PROCESSOR**

- full NFC frontend
- dynamic Power Control
- Low-power card detection
- Zero-Power-Wake-Up

**RFID PROTOKOLLE | RFID PROTOCOLS**

<b>ISO 14443 A</b>	MIFARE Classic MIFARE Mini	MIFARE DESFire MIFARE DESFire Light	MIFARE Ultralight
<b>ISO 14443 B</b>		Calypso ( 2025)	
<b>ISO 18092</b>	NFC Forum NFC Peer-to-Peer	Sony FeliCa NFC Active and passive communication mode	
<b>ISO 15693</b>		iCODE	

**SUPPORTED OPERATING  
SYSTEMS FOR TEST  
APPLICATION**

Microsoft and Linux  
ddm hopt+schuler Software (Device Portal)

**UMGEBUNGSBEDINGUNGEN | ENVIRONMENTAL CONDITIONS**

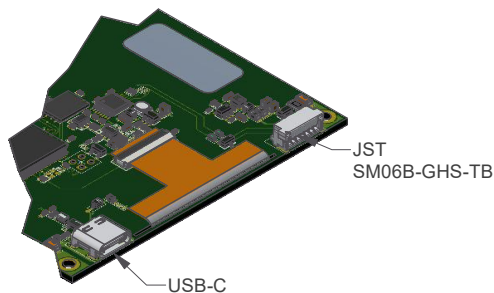
<b>KLIMATISCHE BEDINGUNGEN CLIMATIC CONDITIONS</b>	Lagertemperatur	- 30°C ... + 80°C	<i>Storage temperature</i>
	Betriebstemperatur	- 20°C ... + 70°C	<i>Operating temperature</i>
	Luftfeuchtigkeit	10 ... 100% relative Luftfeuchtigkeit, nicht kondensierend	<i>Humidity</i>
	Luftdruck	70 ... 106 kPa	<i>Air pressure</i>
<b>MTBF</b>	Stunden	500.000	<i>Hours</i>

Pos. 5 SCHNITTSTELLE | INTERFACE

5

8	8	1	-		L	0	0	4	0	0	0	0
---	---	---	---	--	---	---	---	---	---	---	---	---

- 0 Serial TTL-Interface +3.3V
- 1 USB-C
- 2 USB + RS232
- 3 RS232

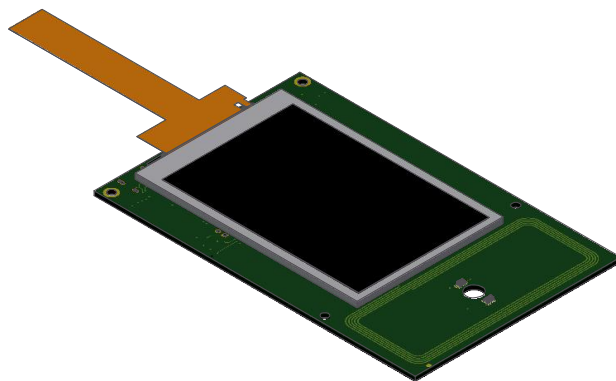


Pos. 6 BAUFORM | DESIGN

6

8	8	1	-		L	0	0	4	0	0	0	0
---	---	---	---	--	---	---	---	---	---	---	---	---

L



Pos. 8 EXTERNE ANTENNE | EXTERNAL ANTENNA

8

8	8	1	-	L	0		0	4	0	0	0	0
---	---	---	---	---	---	--	---	---	---	---	---	---

- 0 internal only
- 2 RF-connector AMC,  
*internal antenna n.c.*

Pos. 10 ANTENNENKABEL | ANTENNA CABLE

10

8 8 1 - L 0 0 4 0 0 0 0

Large

- 0 without
- 1 15 cm
- 2 30 cm

Pos. 11 DISPLAY | DISPLAY

11

8 8 1 - L 0 0 4 0 0 0 0

Display: 3,5" IPS TFT  
 Color Deph: 262k colors  
 Resolution: 320x480  
 Viewing Direction: ALL  
 LCM Luminance: 1000 CD/M2  
 Gray Scale: 8 Bit  
 Lifetime: min. 20.000 h

4

Pos. 13 Firmware | Firmware

13

8 8 1 - L 0 0 4 0 0 0 0

0 Standard

Pos. 14 KONFIGURATION | CONFIGURATION

14

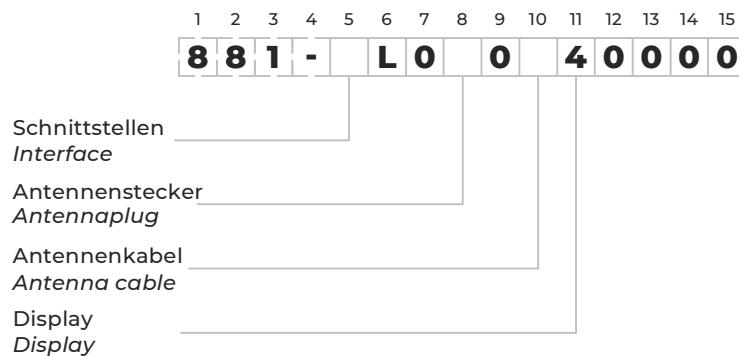
8 8 1 - L 0 0 4 0 0 0 0

0 Standard

**Anschrift | Address**

Firma: <i>Company:</i>	_____	Datum: <i>Date:</i>	_____
Adresse: <i>Address:</i>	_____	Tel.: <i>Phone:</i>	_____
Name: <i>Name:</i>	_____	Fax: <i>Fax:</i>	_____
Kundennr.: <i>Customer No.:</i>	_____	E-Mail: <i>E-Mail:</i>	_____

**Bestellschlüssel | ordering code**



**Muster und 3D-Daten | Samples and 3D Data**

Bitte nutzen Sie die nebenstehenden Links und QR-Codes, um Ihre individuellen Muster und 3D-Daten anzufordern.

[www.hopt-schuler.com](http://www.hopt-schuler.com)

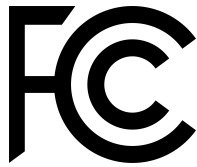


Please use the links and QR-codes beside to require your specific samples and 3D Data.

[sales@hopt-schuler.com](mailto:sales@hopt-schuler.com)



**FCC** Specific FCC certification for certain configurations available. All readers are FCC compatible.



**CE** Conformité Européenne



### RoHS/REACH

*RoHS 3 + REACH conformity explanation*

Hiermit bestätigen wir, dass das Produkt  
*Hereby we confirm that the product*

keinerlei giftige Substanzen enthält, die in der RoHS II Directive 2011/65/EU  
und in der REACH - Richtlinie (EC) Nr. 1907/2006 spezifiziert sind  
*does not contain any substances, which are specified in the RoHS 3 Directive (EU) 2015/863  
and in the REACH - Directive (EC) No. 1907/2006.*

Die RoHS II Directive 2011/65/EU - Konfirmität wird bestätigt!  
Die REACH - Richtlinie (EC) Nr. 1907/2006 - Konformität wird bestätigt!  
*The RoHS 3 Directive (EU) 2015/863 conformity is confirmed!  
The REACH - Directive (EC) Nr. 1907/2006 conformity is confirmed!*

**ISO 9001** Qualitätsmanagement

**ISO 14001** Umweltmanagement