

M2SMART®SE WITH RFID

The smart solution for mobile RFID processes

- ✓ Android™ Industrial+ independent of third party services
- ✓ Security patches and upgrades over the entire product lifetime
- ✓ Patented sliding mechanism for customized modules
- ✓ Different frequencies like LF, HF and UHF
- ✓ Different power classes available
- ✓ Tool-free module change
- ✓ Large touch screen
- ✓ Different equipment variants
- ✓ Long battery life



Industrial
Automation



Track & Trace



Intralogistics



Warehouse
Logistics



GERMAN
INNOVATION
AWARD '21
WINNER



DESIGN
AWARD
2020



INNOVATION BW
2020

Innovationspreis Baden-Württemberg
Dr.-Rudolf-Eberle-Preis
Anerkennung 2020



Flexible and modular applicable
for your processes

Various RFID modules, as well as integrated HF-RFID, complement the M2Smart®SE with powerful readers for professional use.

Especially in industrial environments, where different RFID technologies are often used side by side, the modular M2Smart®SE in combination with various RFID modules is the right choice. The change from one RFID module to another takes place in seconds and the device is in use almost without interruption. Even individual RFID modules can be created using a series of standard housings.

The M2UHF-RFID module transforms the M2Smart®SE Mobile Handheld Computer into an industrial UHF-RFID handheld. The module as midrange variant has a read range of 6 meters and an output power of 10 to 26.5 dBm or 10 to 27 dBm.

As a supplement to the M2UHF-RFID midrange module, it is possible to attach any RFID module from TSL (including longrange UHF-RFID) to the M2Smart®SE via the plug-on adapter incl. ePop-Loq®.

Transform the M2Smart®SE quickly and easily into a longrange reader with only one base device.

Optionally already integrated into the basic device, an HF-RFID/NFC reader is also available - of course combinable with all other RFID modules!

The technical features of the M2Smart®SE are tailored to the requirements in the industrial sector: Intuitive operability, quick-change battery with long runtime, robust housing design with IP65 for rough everyday use as well as the operating system Android™ Industrial+, which is optimized especially with regard to security and supported by ACD as manufacturer for many years.

Numerous expansion options with the help of the patented module interfaces open up a wide range of further application possibilities.

M2Smart®SE

Display

Type:	TFT color display
Size:	5" (16:9)
Resolution:	720 x 1280 pixels (vertical)/1280 x 720 pixels (horizontal)
Touchscreen:	Capacitive
Background lightning:	LED backlight

Computer core

CPU:	NXP® i.MX8M Mini, 4x Cortex A53 (4x 1.8 GHz) 1x Cortex M4 (1x 400 MHz)
Memory:	16 GB Flash, 2 GB RAM Optional: 32 GB Flash, 4 GB RAM

Interfaces

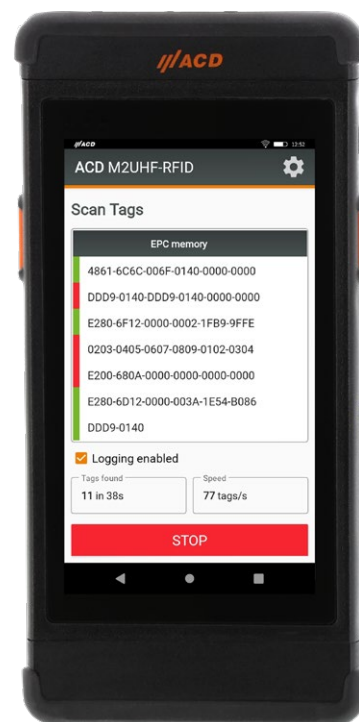
Communication:	WLAN according IEEE 802.11a/b/g/n/ac/d/h/e/i/r/k/w/v (2.4 GHz/5 GHz) incl. BT compatible short-range radio 5.0
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General information

Operating system:	Android™ Industrial+
Power supply:	Quick-change battery, li-ion
Battery capacity:	22.8 Wh (6000 mAh/3.8 V)
Protection class:	IP65
Certification:	CE, UKCA, FCC, IC, cCSAus, SRRRC, CCC
System components:	DS2Smart®
Power supply:	15 V DC via DS2Smart® docking station

Dimensions, Weight

Dimensions:	174 x 82 x 28 mm (L x W x H)
Weight:	Approx. 390 g



M2Smart®SE with RFID

M2Smart®SE with integrated HF RFID/NFC reader

Frequency range:	13.56 MHz
Supported protocols:	NFC-IP Modes: Reader NFC-Forum tag type 1 to 5, P2P activ Initiator and Target, P2P passiv Initiator and Target, Reader/Writer mode, Peer to Peer mode and Card emulation Reader (PCD-VCD): ISO/IEC 14443A/B, ISO/IEC15693, MIFARE Classic/DESFire, Sony FeliCa CARD (PICC): T4T-ISO/IEC14443A, ISO/IEC14443B, NFC FORUM T3T
Certification:	CE, UKCA, FCC, IC, cCSAus, SRRC, CCC
Special feature:	Combinable with all RFID modules from ACD
Dimensions:	174 x 82 x 28 mm (L x W x H)
Weight:	Approx. 390 g
Protection class:	IP65



M2UHF-RFID module for the M2Smart®SE

Frequency range EU:	865 to 868 MHz
Frequency range Worldwide:	902 to 928 MHz
Reading range:	Up to 6 meters
Antennas type:	Integrated Linear Polarized
RFID Standards:	EPCglobal UHF Class 1 Gen 2 ISO 18000-63 (formerly 18000-6C) DRM (Dense Reader Mode) Support
Output power:	10 dBm to 27 dBm (EU and China), 10 dBm to 26.5 dBm (USA)
Radiated power:	9 dBm to 26 dBm (EIRP), 7 dBm to 24 dBm (ERP)
Certification:	CE, UKCA, FCC, IC, cCSAus, SRRC
Dimensions with module:	210 x 82 x 32 mm (L x W x H)
Weight with module:	Approx. 450 g
Protection class:	M2Smart®SE: IP65 M2UHF-RFID: IP65
M2UHF-RFID App:	ACD M2UHF-RFID App with various settings and the functions read, writing and locating of UHF-RFID tags



M2Smart®SE with RFID

ePop-Loq® adapter for attaching TSL RFID reader to the M2Smart®SE

Plug-on adapter via the two interfaces of the M2Smart®SE incl. ePop-Loq® for the fast and reliable connection of various RFID modules from TSL.

The M2Smart®SE can be charged together with the TSL RFID reader in the ePop-Loq® docking station.

Components: M2Smart®SE
ePop-Loq® Adapter
RFID reader

Connection M2Smart®SE/Adapter: Physical connection through ePop-Loq®
ePop-Loq® enables the transfer of data from the reader to the Mobile Handheld Computer
Connection is released when large forces act on the device (e.g. when dropped)

Features: Compatible with all TSL ePop-Loq® readers
In cooperation with Technology Solutions Ltd. www.tsl.com



M2Smart®SE with customer-specific RFID modules

Possibility to develop customized RFID modules; completely according to your specifications. Modules with LF, HF or UHF RFID are possible and can be easily plugged onto the M2Smart®SE. Choose from our construction kit and create your individual RFID module.

Three standard housings in different sizes are available to you for easy integration. We offer different stages in the development of your module:

- In-house development and production
- ACD develops and produces on your behalf
- Joint development in close consultation and cooperation
- And any combination; feel free to contact us

In addition, we offer you any assistance (for approvals or similar) and the usual support. Customer-specific branding is also possible, even for ACD's standard RFID products.

Types: LF/HF/UHF RFID

Frequency range: According to reader module

Read range: According to reader module





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Learn more here:

