Mobile RFID
C9 RED

PRODUCT DESCRIPTION

The powerful C9 RED is a true revolution in rugged handheld computing. Its 5.5 inch touch screen together with resolution of 720*1440 display shall match high standards in logistics, express and retail. Capable of capture, extract, and analyze data in extrem and remote environments with its IP65 housing and a operating time of up to 8 hours*, the iDTRONIC handheld computer is perfectly suitable for field applications such as aviation, public safety, construction, field sales and the maintenance sector.

The Android™ 13 "Tiramisu" - powered C9 RED operates on a high performance Cortex A53 2.0 GHz octa-core processor with 4 GB RAM/64 GB ROM memory. The device is only 20.4 mm thick and weights just 400 grams including battery and wrist strap. A variety of handheld configurations with different barcode modules are available. The C9 RED is available with UHF: 865 – 868 MHz / 920 – 925 MHz, HF - NFC: 13.56 MHz, only NFC (13.56 MHz), LEGIC (13.56 MHz) or LF: 125 or 134.2 kHz. It can be combined with an 2D Barcode imager which allows easy inventory control and reporting.

Thanks to the built-in 13 megapixel rear camera with Auto-focus lens + LED flash and a 5 megapixel front camera, damage reporting in the maintenance area never have be easier. The C9 Red from iDTRONIC offers connectivity wherever you need it. It features double insurance of 4G & WIFI network and highly secured Android 13.0 system shall provide the high speed data communication and perfect security guarantee. Beside the hardware, the C9 RED product family offers an extensive range of documentation, accessories and warranty extensions that support your business applications in the best way.

APPLICATIONS

· **Logistics Applications**
· **Access Control**
· **Asset Tracking**
· **Maintenance**

FEATURES

· **UHF, HF - NFC, LEGIC or LF Reader**
· **Optional: 2D Barcode Reader**
· **5.200 mAh Battery***
· **Android™ 13 "Tiramisu"**
· **4G LTE | Bluetooth | WiFi**
· **5.5" Gorilla Glass Touchscreen**
· **13 MP Rear | 5 MP Front Camera**
· **Autofocus with LED Flash**
· **IP65 Protection Class**
· **Android Studio or Eclipse**
· **SDK Included**

RFID OPTIONS

· **UHF (EPC C1 GEN2 | ISO 18000-6C)**
· **HF (ISO 14443A, ISO 15693)**
· **NFC (NFC-IP1, NFC-IP2)**
· **LEGIC (13.56 MHz)**
· **LF (125 kHz | 134.2 kHz)**

iDTRONIC

TECHNICAL DATA

PHYSICAL CHARACTERISTICS

Dimensions	170.8 × 81 × 20.4 mm ±2 mm
Weight	400 g (including battery & wrist strap)
Display	Though 5.5 in. TFT-LCD (720 × 1440) Touch screen with backlight
Backlight	LED backlight
Expansions	2 PSAM, 2 SIM, 1 TF
Battery	Rechargeable li-ion Polymer 3.8 V, 5.200 mAh*
Camera	Rear 13 megapixel, front 5.0 megapixel Auto-focus with LED flash

PERFORMANCE CHARACTERISTICS

CPU	Cortex A53 2.0 GHz octa-core
Storage	3 GB RAM | 32 GB ROM or 4 GB RAM | 64 GB ROM, MicroSD (max 265 GB expansion)

USER ENVIRONMENT

Operating Temperature	−20 °C to +50 °C
Storage Temperature	−20 °C to +70 °C
Humidity	5% RH to 95% RH (non-condensing)
Drop Specifications	5ft./1.5 m drop to concrete across the operating temperature range
Protection Class	IP65, IEC compliance
ESD	±15 kv air discharge, ±8 kv direct discharge

PROGRAMMING ENVIRONMENT

Operating System	Android™ 13 "Tiramisu"
SDK	Online available
Language	Javascript
Environment	Android Studio or Eclipse

COMMUNICATION

WLAN	2.4 GHz/5.0 GHz Dual Frequency, IEEE 802.11 a/b/g/n/ac
WWAN	TDD-LTE Band: 38,39,40,41 FDD-LTE Band: 1,2,3,4,7,17,20 WCDMA (850/1900/2100MHz) GSM/GPRS/Edge (850/900/1800/1900MHz)
WPAN	Bluetooth Class v2.1+EDR, Bluetooth v3.0+HS, Bluetooth v.4.2
GPS	GPS (embedded A-GPS), accuracy up to 5 m

PSAM SECURITY (OPTIONAL)

Protocol	ISO 7816
Baudrate	9600, 19200, 38400,43000, 56000, 57600, 115200

2D BARCODE IMAGER

Honeywell N6703 2D Scan Engine
Newland NLS-CM60/Newland NLS-N1

Symbologies	PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode, Postal Codes, US PostNet, US Planet, UK Postal, Australian Postal, nJapan Postal, Dutch Postal. etc.

RFID READERS	UHF	HF	NFC	LE-GIC	LF
Frequency	865 – 868 MHz 920 – 925 MHz	13.56 MHz			125 kHz 134.2 kHz (FDX-B/ HDX)
Protocol	EPC C1 GEN2 / ISO 18000-6C	ISO 14443A, 15693	NFC-IP1 NFC-IP2	LE-GIC Prime, LE-GIC Advant	ISO 11784 ISO 11785
Antenna Gain	Circular (2 dBi)	-			-
Reading Range	up to 2 m**	2 to 5 cm**			2 to 10cm**

SUPPORTED STANDARDS | TAGS

ISO 18000-6C	Standard ISO 18000-6C (EPC Class 1 Generation 2) E.g.: Alien Higgs 2/3/4, Impinj Monza, NXP UCODE, etc.
ISO14443A and compatible	**Read/write:** MIFARE® DESFire®EV1 2K / 4K / 8K, MIFARE® Classic Mini /1K /4K, MIFARE Ultralight®, MIFARE Ultralight® C, MIFARE® Plus S / X, MIFARE® Pro X, NTAG 21x **Read UID only:** all other ISO14443A RFID tags
ISO15693 and compatible	EM4135, EM4043, EM4x33, EM4x35, I-Code SLI / SLIX, M24LR16/64, TI Tag-it HF-I, SRF55Vxx (my-d vicinity
LEGIC	LEGIC RF-Standard: **Full read/write operation:** LEGIC Advant; LEGIC Prime **Read UID only (SM4200 chip):** MIFARE family (Classic, Mini, DESFireEV1,Plus S/X, Pro X, Smart MX, Ultralight, Ultralight C), Infineon SLE, NTAG21x **Read UID only:** EM4x33, EM4x35, I-Code SLI/ SLIX, M24LR16/64, Infineon SRF55Vxx (my-d vicinity), TI Tag-it HF-I, reads UID/CSN of Inside Secure tags, e.g. HID iCLASS **ISO 18092 / NFC:** Passive peer-to-peer mode initiator, NFC Tag 2, 3, 4 **Sony Felica:** Encryption not supported
LF: 125 kHz	ISO11785A and compatible
LF: 134.2 kHz	ISO11786A and compatible

* battery power varies per product, duration and application

**reading range depending on tag, tag orientation and environmental conditions

iDTRONIC

ORDER CODES

VERSIONS	ORDER CODES
UHF	
Mobile RFID C9 RED - UHF	R-HH-C9R-UHF
HF	
Mobile RFID C9 RED - HF	R-HH-C9R-HF
NFC	
Mobile RFID C9 RED - NFC	R-HH-C9R-NFC
LEGIC	
Mobile RFID C9 RED - LEGIC	R-HH-C9R-LEGIC
LF: 125 KHZ	
Mobile RFID C9 RED - LF: 125 kHz	R-HH-C9R-LF
LF: 134.2 kHz	
Mobile RFID C9 RED - LF: 134.2 kHz	R-HH-C9R-134

BARCODE OPTIONS	ORDER CODES
2D Barcode Scanner	
Mobile RFID C9 RED - 2D Barcode Scanner	R-HH-C9R-2D

ACCESSORIES	ORDER CODES
Desktop Cradle	
Mobile RFID C9 RED - Desktop Cradle	R-HH-C9R-DTC
USB-C Data Cable	
Mobile RFID C9 RED - USB-C Data Cable	R-HH-C9R-PSC
Wall Power Supply	
Mobile RFID C9 RED - Wall Power Supply	R-HH-C9R-POS
Standard Battery	
Mobile RFID C9 RED - Standard Battery	R-HH-C9R-PSC

PRODUCT PICTURES