

MOBILE COMPUTER 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™ 10 - powered C9 RED operates on a high performance Cortex A73 2.0 GHz octa-core processor with 3 GB RAM/32 GB ROM memory (Optional: 4 GB RAM/64 GB ROM). 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 10.0 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™ 10 "Q"
- 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 14443 A, ISO 15693)
- NFC (NFC-IP1, NFC-IP2)
- LEGIC (13.56 MHz)
- LF (ISO 11784/11785)

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 A73 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™ 10 "Q" |
| SDK | Handheld-Wireless Software Development Kit |
| 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 |

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 | LEGIC | 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 | LEGIC Prime, LEGIC Advant | ISO 11784 ISO 11785 |
| Antenna Gain | Circular (2 dBi) | - | | | - |
| Reading Ranges | up to 2 m* | 2 to 5 cm* | | | 2 to 10 cm* |

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. |
| ISO 14443 A 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 |
| ISO 15693 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: MIFARE family (Classic, Mini, DESFireEV1, Plus S/X, Pro X, Smart MX, Ultralight, Ultralight C), Infineon SLE, NTAG21x |
| LEGIC | 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 |
| ISO 11784 ISO 11785 | Read only: EM4100 and EM4200 |

PSAM SECURITY (OPTIONAL)

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|----------|--|
| Protocol | ISO 7816 |
| Baudrate | 9600, 19200, 38400,43000, 56000, 57600, 115200 |
| Slot | 2 slots (maximum) |

APPLICATION EXAMPLES

ACCESS CONTROL



Access controls are widespread nowadays. Public organizers, sports events or trade fairs use this technology.

The identification of trade fair visitors and exhibitors on the basis of the trade fair pass can be easily determined by the powerful RFID scanner.

Especially with weather-related outdoor use in front of exhibition halls, the device withstands no problems thanks to its IP65 protection class. Temperature fluctuations do not affect the C9 RED from -20 to +50 ° C.

ASSET TRACKING



The tracking and assignment of assets within industrial applications is important. In automatic processes the right asset has to be identified fast for a specific procedure. Also it has to be available.

The C9 RED identifies the assets availability with its RFID immediately. The data like usage time and life-cycle will get automatically transferred to the external data server for statistics.

This increases the workflow and the efficiency of the respective process. The assets are always available and ready for use.

MAINTENANCE



Maintenance processes within workshops have to be organized conscientious. Customer inquiries for workshop appointments have increased in the last years.

The tracking of the parts, accessories, etc have to be on the right place at the right time. Availability must be guaranteed.

The C9 RED identifies with the serial number of the device the right part or accessoire and thus ensures a smooth maintenance process.

The customer satisfaction will be increasing.

PRODUCT PICTURES



ORDER CODES

| VERSIONS | ORDER CODES |
|------------------------|----------------|
| C9 RED (UHF) | R-HH-C9R-UHF |
| C9 RED (HF) | R-HH-C9R-HF |
| C9 RED (NFC) | R-HH-C9R-NFC |
| C9 RED (LEGIC) | R-HH-C9R-LEGIC |
| C9 RED (LF: 125 kHz) | R-HH-C9R-LF |
| C9 RED (LF: 134.2 kHz) | R-HH-C9R-134 |
| BARCODE OPTIONS | ORDER CODES |
| 2D Barcode Scanner | R-HH-C9R-2D |
| ACCESSORIES | ORDER CODES |
| Desktop Cradle | R-HH-C9R-DTC |
| USB-C Data Cable | R-HH-C9R-PSC |
| Wall Power Supply | R-HH-C9R-POS |
| Standard Battery | R-HH-C9R-PSC |