



**SMART MULTIFREQUENCY
MOBILE COMPUTER HF550X-R**
with integrated
NFC + UHF RFID Reader
865...868 MHz UHF Class 1 Gen 2
13.56 MHz NFC
Bluetooth BLE 5.0
Android 10, Wi-Fi, WWAN
ISO14443
ISO18000-6

Product:	SMARTPHONE with integrated Multifrequency 865...868 MHz Class 1 Gen 2 UHF RFID and NFC Reader, 1D/2D Barcode Imager and Bluetooth interface	
RFID TAGs supported:	UHF Class 1 Gen 2 (EU) RFID (incl. EPC) and NFC TAGs	
Read Range:	UHF: up to 50 cm NFC: up to 5 cm (Depends on RFID TAG type and shape)	On request option: External Sledge UHF reader with > 3 m read range.
Frequency*:	UHF: 865...868 MHz NFC: 13.56 MHz	* = At room temperature 20°C
ISO Standards:	UHF: ISO18000-6	NFC: ISO14443A/B
Certification:	CE	RoHS ✓
Part Description:	HF550X-R-SMART-MOBILE-COMPUTER-READER-NFC-UHF-EU	Part-No.: 123457243

arfidex GmbH | Adlerstraße 2 | D-63322 Rödermark | Germany | Phone: +49 (0) 6074 861930

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SPECIFICATIONS

DATA CAPTURE	
Scanning	1D/2D Imager Barcode
Camera	Rear : 13MP with flash Front : Auto focus
NFC	ISO 14443 Type A and B; F; FeliCa, and ISO 15693 cards, MiFare
RFID	(Optional- WLAN SKU Only) UHF RFID Read Range : up to 50cm)
SENSOR	
Light Sensor	Ambient Light
Motion Sensor	Proximity, Gyro, Accelerometer, E-Compass
USER ENVIRONMENT	
Operating Temp	-10°C to 50°C / 14°F to 122°F
Storage Temp	-40°C to +70°C / -40°F to +158°F
Humidity	95% non-condensing
Drop Spec	1.2m / 4ft. drop per MIL-STD 810G With Protective boot : 5ft/1.5m per MIL-STD-810G to concrete across operating temperature range
Tumble Spec	300 tumbles, 1.6 ft./0.5 m at room temperature without protective boot 500 tumbles, 1.6 ft./0.5 m at room temperature with protective boot
Sealing	WiFi SKU : IP54 WWAN SKU : IP68
Vibration	4G peak, 5 Hz to 2 kHz, 1 hour duration per axis
Thermal Shock	-40° C to 70° C / -40° F to 158° F rapid transition 10 cycles (1 cycle = 1.25 hours at -40°C and 1.25 hours at 70°C)
Electrostatic Discharge (ESD)	+/-15kVdc air discharge +/-8kVdc direct discharge +/-8kVdc indirect discharge

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SPECIFICATIONS

PERFORMANCE CHARACTERISTICS	
CPU	Qualcomm Snapdragon™ 660 octa-core, 2.2 GHz
Operating System	Android 10 ; Upgradeable to Android 14
Memory	4 GB RAM / 32 GB UFS 4 GB RAM / 64 GB UFS (Optional)
PHYSICAL CHARACTERISTICS	
Dimensions (L x W x D)	154.4 x 74.8 x 11.65mm
Weight	205g
Display	5.45" HD+ (1440 x 720), TFT-IPS
Imager Window	Corning® Gorilla® Glass
Touchpanel	Capacitive multi-touch / Stylus, Glove, Wet
Backlight	LED backlight
Power	Standard Battery 3.8V / 4000mAh, 15.2 Watt Hours BOS™ PowerManager Station
Expansion Slot	MicroSD 32GB SDHC, up to 128GB SDXC
SIM / SAM	Hybrid Dual SIM Slot (2 Nano SIM or 1 Nano SIM /1 Micro SD) - 2'nd Nano SIM is supported by micro SD Card Slot
Interface	USB Type C Connector (USB 2.0) Docking Connector (Charging) Rear 10-pin connector
Notification	Audible tone; multi-color LEDs; vibration
Keypad	On-screen keypad and Enterprise Keyboard power button; volume up/down buttons dual-action side scan triggers
Voice and Audio	Dual noise-cancelling microphones; High-quality speaker phone, 3.5mm headset jack
PTT Hot Key	Support – available Active Key

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SPECIFICATIONS

WIRELESS WAN DATA AND VOICE COMMUNICATIONS	
Radio	(Optional) Worldwide
Frequency Band	- 4G: B1/B2/B3/B4/B5/B7/B8/B18/B19/B20/B26/B28 - 3G: B1/B2/B4/B5/B8/B9/B19
GPS	(for WWAN only) A-GPS, GLONASS, BEIDOU, Galileo
WIRELESS LAN	
Radio	IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w/mc IPv4, IPv6, Wi-Fi™ certified 2x2 MU-MIMO
Data Rates	5GHz: 802.11a/n/ac — up to 866.7 Mbps 2.4GHz: 802.11b/g/n — up to 300 Mbps
Security and Encryption	WEP (40 or 104 bit) ; WPA/WPA2 Personal (TKIP, and AES); WPA/WPA2 Enterprise (TKIP, and AES) - EAPTTLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PE APv0- MSCHAPv2, PE APv1-EAP-GTC, EAP Fast and LEAP
WIRELESS PAN	
Bluetooth	Bluetooth 5.0 BLE , Class 2 Bluetooth Low Energy (BLE)
COMMUNICATION AND MESSAGING	
VoIP / PTT	

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SPECIFICATIONS

ACCESSORIES	
In-box	SIM tooling pin
Additional	1 or 4 slot charging cradle
	1 or 5 slot ethernet cradle
	Wrist Strap / Neck Strap,
	Protective Film
	Trigger Handle
	UHF RFID Reader Sled (w/RFR90x)
	Rugged Boot

OPTION

UHF RFID Reader Sled if long read range > 3m is required.



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FEATURES

The **UHF NFC TRUE SMARTPHONE STYLE AND SIZE RFID reader with ergonomics design** is used by system integrators/companies to read UHF Class 1 Gen 2 RFID and HF/NFC labels and tags, and to send the data in real time to the cloud database by using Bluetooth™ wireless technology. You can collect UHF tag data offline and send it via Bluetooth, WWAN, WiFi or USB to the host.

Get real pocket-power with true smartphone-style ergonomics

Forget the notion that industrial mobile computers are big and heavy. With its beautiful design and compact pocket size and slim(11.65 mm thick), HF550X offers the best grip to reduce work fatigue.

Enterprise-class data capture

The HF550X-R is equipped with a 1D/2D scanner (dual action side scan trigger) that can capture barcodes quickly in any environment, and provides uninterrupted and reliable connection of various accessories through the interface port.

Supports wide range of wireless connections

2X2 MU-MIMO enables faster and more reliable Wi-Fi connectivity than wired, Bluetooth 5.0 supports connectivity to peripherals at a wider, faster speed with lower power. LTE is also available, ensuring connectivity to the outside world.

Powerful durability and lifecycle

HF550X-R is IP67 for rain or dusty use and has a 1.2m drop specification. In addition, unlike consumer smartphones with very short lifecycles, HF550X offers up to eight years(4+4) of maintenance service support to save on maintenance costs compared to commercial smartphones.

Supports fingerprint function for enhanced job security and authentication

HF550X provides fingerprint registration to enhance job security and facilitate authentication.

Business Optimization solution BOS™ software support

Bluebird Business Optimizing Solutions (BOS™) is designed to help enterprise organizations from app development to terminal deployment for business performance and convenience.

Power every minute of every workday

With a 4000 mAh battery available for 1.5 times the shift time, it reduces the business downtime caused by terminal charging.

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Applications:

- ◆ Access Control (Registration of attendees/visitors by guards on exhibitions, conferences, events etc.)
- ◆ Digital Transformation (Giving physical objects digital identities)
- ◆ Healthcare
- ◆ Industrial ID
- ◆ Inventory (Asset Management)
- Laundry
- Logistics
- ◆ Maintenance, Service, Inspection
- ◆ Promotion
- ◆ Rental
- ◆ Textiles
- ◆ Verifying Dual Frequency RFID NFC TAG readings
- ◆ Waste Management

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