DATECS

LineaPro 7 UHF
User Manual

LEGAL NOTICE

Address: 4 Datecs Street, Sofia 1592, Bulgaria
Phone: +359 2 816 55 50
Fax: +359 2 816 55 65
E-mail: export@datecs.bg

REVISION HISTORY

Version	Data	Change description
1.0.0	07.04.2020	First Release
1.1.0	28.05.2020	Added notice in section "GETTING STARTED" while is using RF function

CONTENTS

REGULATORY

FCC ID: YRW-LINEAPRO7UHF

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
    1. This device may not cause harmful interference, and
    2. This device must accept any interference received, including interference that may cause undesired operation.

Any change or modification to the product not expressly approved by Datecs Ltd could void the user's authority to operate the device.
This device complies with portable RF exposure requirements in accordance with FCC rule part 2.1093 and KDB 447498 D01

TECHNICAL SPECIFICATIONS

Keyboard and Buttons	Two Scan buttons Battery status button Reset device button
Contactless Card Reader (optional)	Supports: ISO/IEC 14443 Type-A/MIFARE - MIFARE MINI - MIFARE CLASSIC-1K, MIFARE CLASSIC-4K - MIFARE ULTRALIGHT, ULTRALIGHT-C - MIFARE PLUS 2K/4K - MIFARE DESFire - and other ISO/IEC 14443 Type-B - supports most of the cards ISO/IEC 15693 - supports most of the cards JIS X 6319-4 - compatible with FeliCa ISO/IEC 18000-3 mode 3 - NFC
UHF RFID Reader (optional)	Supported protocols: ISO 18000-6C/EPC Global Gen II Frequency range: US 902–928 MHz Power Range: 13-27dBm
1D Barcode Reader	1D Opticon MDL1000* - Laser Barcode Scan Engine (optional)
Supported Symbology 1D	JAN/UPC/EAN incl. add on, Codabar/NW-7, Code 11, Code 39, Code 93, Code 128, GS1-128(EAN-128), GS1 DataBar (RSS), IATA, Industrial 2of5, Interleaved 2of5, ISBN-ISMN-ISSN, Matrix 2of5, MSI/Plessey, S-Code, Telepen, Tri-Optic, UK/Plessey Postal code: Chinese Post, Korean Postal Authority code Composite codes, MicroPDF417, PDF417
2D Barcode Reader	2D Newland EM3096 CMOS Imager 752 x 480 pixels (optional) 2D Newland EM3296 CMOS Imager 640 x 480 pixels (optional) 2D Newland EM3396 CMOS Imager 752 x 480 pixels, AIMER Laser Diode (optional) 2D Opticon MDI-4000* CMOS Imager 640 x 480 pixels (optional) 2D Honeywell N660x series CMOS Imager 844 x 640 pixels (optional) 2D Motorola SE4710/PL3307 CMOS Imager 1280 x 800 pixels (optional) 2D Motorola SE4750/PL3307 CMOS Imager 1280 x 960 pixels (optional)
Supported 1D and 2D Symbology	BARCODE 1D: JAN/UPC/EAN incl. add on, Codabar/NW-7, Code 11, Code 39, Code 93, Code 128, GS1-128 (EAN-128), GS1 DataBar (RSS), IATA, Industrial 2of5, Interleaved 2of5, ISBN-ISSN-ISMN, Matrix 2of5, MSI/ Plessey, S-Code, Telepen, Tri-Optic, UK/ Plessey POSTAL CODE: Chinese Post, Intelligent Mail Barcode, Korean Postal Authority code, POSTNET 2D CODE: Aztec Code, Aztec Runes, Chinese Sensible code, Codablock F,

	Composite codes, Data Matrix (ECC200), Passport MRZ (OCR-B), Maxi Code (mode 2~5), MicroPDF417, Micro QR Code, PDF417, QR code
Connectivity	Apple 9 pin connector Pass-through sync through USB type-C SAM card holder (Optional)
Device Compatibility	Apple iPhone 8, Apple iPhone 7, Apple iPhone 6S, Apple iPhone 6
LED Indication	4 LEDs for battery status
Audio Features	Electro-Magnetic Buzzer
Power Supply	DC 5V through USB type-C DC 5V through single or 5 station charger
Battery	Rechargeable Li-Ion Battery 3.6V / 2330mAh Precise battery management by Fuel Gauge microcontroller for remaining battery capacity
Certificates	MFi, CE, FCC, RCM
Dimension W x H x D, mm	76.9 x 156.7 x 26.3
Weight, g	166
Operational temperature range	-10 °C to +40 °C / 5 to 90% RH
Storage temperature range	-20 °C to +50 °C / 5 to 90% RH
Compatible Accessories	Single charger (GT1) 5 stations charger (GT5) Holsters

* Specification can be change without any notice.

Use only original equipped DATECS cable USB-A to USB-C (Z05C000000-05) for charging Apple device.

Use only UL approved USB adapters. The minimum requirements of USB adapter is 5V/2.1A!

Waste Electrical & Electronic Equipment

The symbol means that according to local laws and regulations your product shall be disposed of separately from household waste at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

GENERAL VIEW

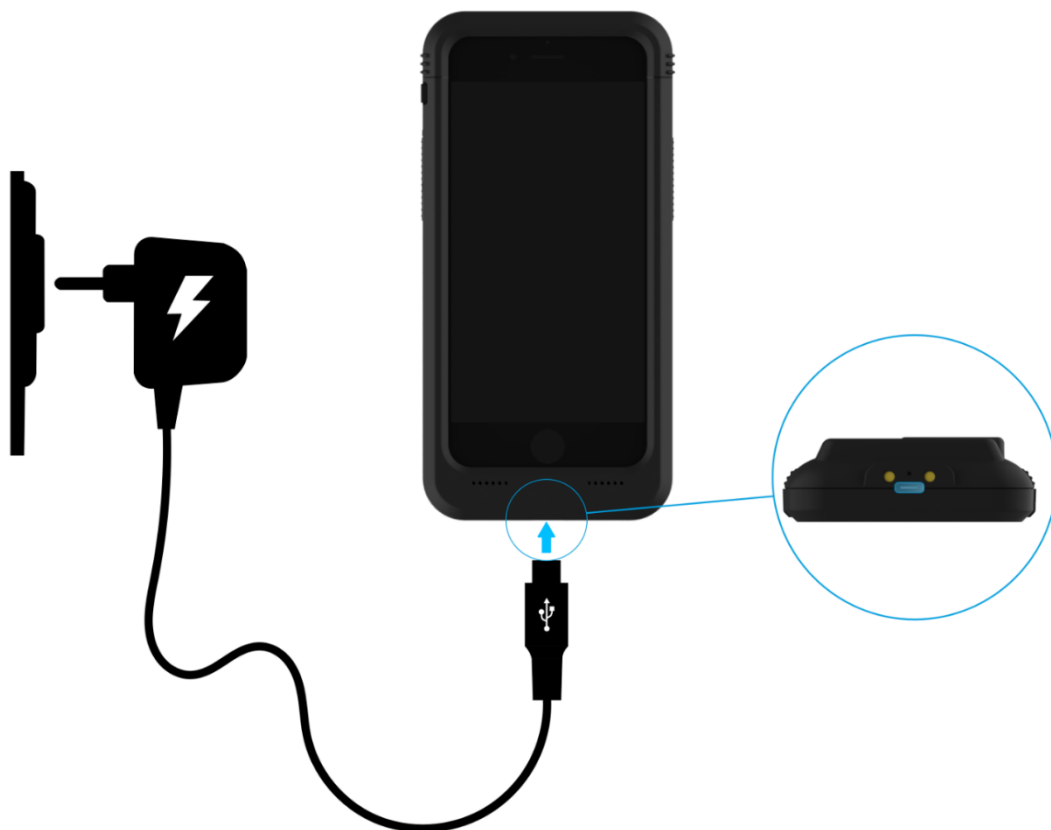|	
1. Barcode engine	**7. Volume buttons of Apple device**
2. On/Off button of Apple device	**8. Back Cover**
3. Left and Right scan buttons	**9. RFID HF Reader**
4. USB type-C connector	**10. Battery status button and LED indication**
5. Charging pads	**11. RFID UHF Reader**
6. Reset button	

GETTING STARTED

LineaPro 7 UHF has rechargeable Li-ion battery. Can be charge from USB port or Charging pads.

> ⚠️ **Before first use, battery must be fully charged.**
> **If the device is fully discharged, charging time to fully charged would be approx. 4 hours and 30min.**

Depends of the settings, LineaPro 7 UHF can pass-through input power supply from USB connector or External features connector to Apple device. Charging current to Apple device can be selected. For more information please refer to section "**Charging Apple device**".

Charging form USB adapter:

> ⚠️ **Charging current to LineaPro 7 UHF own battery can be select between two values "LOW" and "HIGH", from iOS application.**
> **Do not use RF transmit function (RFID HF or UHF) of the device, while is provided external power supply from USB port or charging pads.**

Battery LED indications

For checking battery level, can be pressed status button.

 LED 1 is lights – battery level is between 1 -25%

 LED 1 and 2 LED are light – battery level is between 26 - 50%

 LED 1, LED2 and LED3 are light – battery level is between 51 - 75%

 LED 1, LED 2, LED 3 and LED 4 are light – battery level is above 76%

ATTACHING APPLE DEVICE TO LINEAPRO 7 UHF

Take LineaPro 7 UHF and lift the back cover, insert the iPhone 7 and close the back cover as shown on picture below:

OPERATION MODES

For start operating with LineaPro 7 UHF is need to be attached Apple device and installed application for iOS. For downloading the latest SDK please contact with your distributor.

For turn On LineaPro 7 UHF press one of the scan buttons and unlock Apple device screen.

Scanning barcodes

LineaPro 7 UHF can scan 1D and 2D barcodes. To scan barcode first, activate the scanner (by pressing and holding the scan button). Then position the scanning engine to the center of the barcode by aiming and the illumination box is over the outer edges of the barcode, as shown on the picture below. Slowly pull back or forward the unit, while increasing or decrease the distance between the barcode and the scanning head, until the barcode has been read by the scanner. Barcode data will have shown on the use application for iOS.
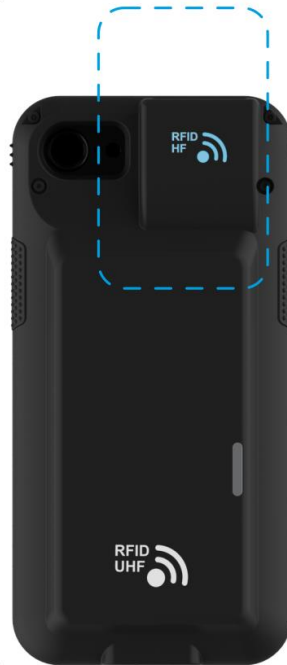
LineaPro 7 UHF support different types of scanning modes:
- Single Scan
- Multi Scan
- Motion Detect
- Multi Scan without duplicates

HF Contactless cards reading

The LineaPro 7 UHF has a contactless card reader. Contactless card reader is located on the bottom side. Contactless card must be placed there (showed on the picture below). For list of supported standards, please refer to sections "TECHNICAL SPECIFICATIONS".

UHF Contactless cards/tags reading

The LineaPro 7 UHF has a contactless card reader. Contactless card reader is located on the bottom side. Contactless card must be placed there (showed on the picture below). For list of supported standards, please refer to sections "TECHNICAL SPECIFICATIONS".

Transferring data between Apple device and PC or MAC

LineaPro 7 UHF is supporting sync function when USB cable is plugged.
Sync can be enable or disabled by setting. If "pass-through sync", was disabled, when USB cable is plugged to LineaPro 7 UHF will be charge only.

> ⚠ **To enter in sync mode can be used this way:**
> **Holding scan button and plug the USB cable. After that scan button must be release.**

Turn off device function

When is pressed this turn off, LineaPro 7 UHF is going to sleep mode immediately.

Charging Apple device

LineaPro 7 UHF can charge Apple device, when power source (USB adapter) is attached to USB connector or LineaPro 7 UHF is placed on Datecs charging station. Charging current to Apple device can be selected from application:
- 500mA (Default)
- 1000mA

LineaPro 7 UHF can charge Apple device from his own battery. Only is need to be activated function "Automated Charge", to be start charging battery level of LineaPro 7 UHF must be above 20%.

Updating Firmware

Firmware of LineaPro 7 UHF can be update with newer version. Press "Update Firmware" from application, first will be shown current firmware version and to which version can be updated, then press update.

Firmware of LineaPro 7 UHF barcode engine can be update with newer version. Press "Update Barcode Engine Firmware" from application. First will be shown current firmware version and to which version can be updated, then press update.

CARE, MAINTENANCE AND WARRANTY

- **Keep the LineaPro 7 UHF side of the reach of small children.**
- **Keep the LineaPro 7 UHF dry. Precipitation, humidity and liquid contain minerals that will corrode electronic circuits.**
- **Do not use or store LineaPro 7 UHF in dusty or dirty areas.**
- **Do not drop or knock LineaPro 7 UHF**

- **Do not open the LineaPro 7 UHF. Only qualified personnel can open the device and make repair. If the LineaPro7 UHF is not working, please contact with your dealer.**
- **Allowing unqualified personnel to service your LineaPro 7 UHF may result in damage to your LineaPro 7 UHF and will void your warranty.**

FCC Warning

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any inte rference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interferenceto radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Specific Absorption Rate (SAR) information:

This LineaPro 7 UHF meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. FCC RF Exposure Information and Statement the SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types: LineaPro 7 UHF has also been tested against this SAR limit. This device was tested for typical body-worn operations with the back of the device kept 10mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories