



# DualRunners 2D

2D Barcode and RFID HF 13.56 MHz reader/encoder  
dedicated to traceability in mobile environments



- Highly performant on very small and dense 2D data
- Superior Imager reading quality, can read data on screens (PDA, mobile phones, ...)
- Huge battery autonomy
- Bluetooth Class 1 ( up to 100 meters )
- Real-time clock : ideal for proof of visit or time management
- Withstand multiple drops onto concrete with its protective boot
- Interfaces with a large variety of Bluetooth® devices : PDA / mobile phone / laptop / tablet PC...

- Transportation
- Pharmacy and Medical Applications
- E-Ticketing
- Asset Tracking : barrels, tanks, vegetables
- Parcel Delivery

# BDR-FS Specifications

## COMMUNICATION

Bluetooth® 2.0 + EDR  
Class 1 (100m)  
SPP profile  
Modes : Slave or Master

## USER INTERFACE

Two tricolors LEDs (green, orange, red)  
Buzzer (85 dBA)

## USING MODES

Real Time With or without "No Data Loss" mode  
Batch 20,000 UPC codes capacity  
Flash Memory 1 MByte

Real time clock to timestamp captured data can be activated

## READING MODES

Trigger Possibility to switch ON beam via Bluetooth®  
Autoscan Beam always on  
Smart Autoscan Save power consumption

No duplicate scan available function

## BARCODE CAPABILITIES

Reading technology CMOS / Imager (IT5180SF Honeywell)  
Reading distance 5 to 22 cm (1.9 to 8.6 in) for barcode scanning  
Scan angle 40°

## SUPPORTED BARCODES

Linear barcodes Code 2 of 5 standard, Code 2 of 5 industrial  
Codabar / Monarch, Code 39, Interleaved 2 of 5,  
Code 93, Code 11, Code 2 of 5, IATA Code 2 of 5,  
Matrix 2 of 5, UCC / EAN 128, UPC-E  
Code 128, UPC-A,  
GS1 Databar Omnidirectionnel (ex-RSS-14)  
GS1 DataBar Stacked Omnidirectionnel (RSS-14 Stacked)  
GS1 DataBar Expanded (RSS expanded)  
GS1 DataBar Expanded Stacked (RSS Expanded Stacked)  
GS1-128 (UCC / EAN 128)

Stacked barcodes Code49, PDF417,  
Micro PDF417  
Codablock.

Postal barcodes Postnet, PosiCode, Planet Code, Canadian post,  
Kiw (Netherlands) Post, Japanese Post,

Matrix barcodes QR Code, DataMatrix, MaxiCode, Aztec Code  
Australian Post, British Post, Code 16K,  
Korea Post, Telepen, China Post

## RFID TECHNOLOGY

Reading technology RFID HF 13.56 MHz  
Reading distance Contact

## SUPPORTED RFID PROTOCOLS

ISO/IEC 14443-A (NXP Mifare 'Classic' 1K / 4K, Ultra Light, etc)  
ISO/IEC 14443-B (ST SR, etc)  
ISO/IEC 15693 (NXP ICODE-SLI, TI Tag-it, ST LRI64, ST LRI 2K)  
ISO/IEC 15693 (KSW Variosens®)  
NXP ICODE-1  
Inside Contactless PicoTAG  
ASK CTS256B/CTS512B  
NFC

## POWER

Battery 1 X 2200 mAh Li-ion rechargeable  
Autonomy 8,000 data  
Charging time 4 hours for a full charge  
2h30 for a charge at 80%

## PHYSICAL

Length 123 mm (4.84 in)  
Width 52 mm (2.05 in)  
Height 33 mm (1.3 in)  
Weight 144g (5.1 oz)

## ENVIRONMENT

Operating temperature 0°C - +40°C (+32°F - +104°F)  
Storage temperature -10°C - +60°C (+14°F - +140°F)  
Operating humidity 5 - 95% (Non condensing)  
Shock Several drops onto concrete  
(with protective boot)  
Ambient light Full darkness to sunlight

## General features

### Ideal for mobile applications

- DualRunners 2D has a slick design, is small and lightweight (fits neatly in one hand and can be easily attached to a belt via the key retractable reel accessory).
- Very reliable, efficient, durable.
- Thanks to its PDA stylus, BDR-FS can also be used as a stylus on PDA

### Rugged product

DualRunners 2D, with its 3 mm of plastic casing protected by an additional layer of elastomer and the optional protective boot, is particularly adapted to harsh environments and remain fully functional even after multiple drops on concrete.

### Extremely durable battery

BDR-FS can read more than 8,000 barcodes or Tag ID over 24 hours of continuous use.

Battery monitoring : Check in real time the battery status of the reader on your mobile device

### Superior reading quality

Can decode damaged or low quality barcodes; superior reading performance for RFID Tags also. Thanks to its Smart Focus technology, it is very aggressive on very small 2D barcodes.

### "No Data Loss" mode and Auto-Reconnection

When DualRunners is connected to a host, scanned barcodes are transmitted in real time to this host. Barcodes are stored in internal memory until they are acknowledged by the application.

If you scan barcodes out of the radio range, they will be stored in memory

### Internal time clock

Every data can be date and time stamped.

### Batch mode

If used in batch mode, DualRunners 2D can store up to 20,000 Tags ID or UPC codes with timestamp.

### Intuitive user interface

- Same button to switch on, connect and scan barcodes.
- Multi color led for connection and battery status.
- Sound beeps for successful scanning (loud volume option available for noisy environment).

### Platforms compatibility

Baracoda provides you with an easy-to-use middleware (BaracodaManager) and SDK to ease the integration on the following mobile platforms: PC (including Windows 7); PPC 2002/2003 WMS / WM6; Windows phone; CE.NET; Symbian series 9 (mobile phones) and Java phones (BlackBerry and JSR82)

### Plug and Scan Solutions

For instant replacement of corded scanners, Baracoda supplies advanced Bluetooth Serial (RS232) and USB adapters with its wireless scanners. Just plug & scan - there is no need for driver installation.

## Package content

- 1 Scanner with rechargeable battery
- 1 PDA stylus
- 1 Charger (5V, 500mA)
- 1 CD with all the documentation and software needed.

Non contractual data - v1.5 February 2010

## Available accessories



Protective boot



Key retractable reel



Holster



Cradle 1 bay

Only to be used with DualRunners AND Protective Boot



Car Charger



Neck Lanyard