



# DualRunners 2D

2D Barcode and RFID HF 13.56 MHz reader  
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

## STANDARD - REGULATORY

Bluetooth® 2.0 + EDR certified  
SPP profile

## USER INTERFACE

Two tricolors LEDs (Orange, Green, Red)  
Buzzer (85dBA)

## BLUETOOTH RANGE

Class 1: up to 330 ft (100m)

## OPERATING MODES

Real Time (with or without timestamp)  
Batch (with or without timestamp): up to 20,000 Tags ID or UPC codes  
Mode No Data Loss with buffer: up to 20,000 Tags ID or UPC codes

## READING MODES

Flash Memory 1 MByte.  
Switch (option : Laser beam ON via Bluetooth)  
Smart Autoscan  
Option: "No duplicate scan"

## BARCODE CAPABILITIES

Reading technology CMOS / Imager (IT5180SF Honeywell)  
Reading distance 2 to 8 in (5 to 22 cm)  
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 LR, etc)  
NXP ICODE-1  
Inside Contactless PicoTAG  
ASK CTS256B/CTS512B  
NFC

## POWER

Battery 1 X 2000 mAh Li-ion rechargeable  
Autonomy up to 5,000 data  
Charging time 4h for a full charge  
2h30 for a charge at 80%

## PHYSICAL

Length 4.84 in (123 mm)  
Width 2.05 in (52 mm)  
Height 1.3 in (33 mm)  
Weight 5.3 oz (150g)

## ENVIRONMENT

Operating temperature 32°F - +104°F (0°C - +40°C)  
Storage temperature +14°F - +140°F (-10°C - +60°C)  
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 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, with their 3 mm of plastic casing protected by an additional layer of elastomer and the optional protective boot, are particularly adapted for harsh environments and remain fully functional even after multiple drops on concrete.

### Extremely durable battery

BDR-FS Evolution can read more than 5,000 data  
Battery monitoring possible: visualise in real time from the mobile device the battery level status of the DualRunners

### 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 2D is connected to a host, scanned data are transmitted in real time to this host. Data are stored in internal memory until they are acknowledged by the application.  
If you scan data out of the radio range, they will be stored in memory and automatically downloaded when getting back into the range.

### 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 data.
- Multi color led for connection and battery status.
- Sound beeps for successful scanning (loud volume option available for noisy environments).

### Platforms compatibility

Baracoda provides a user-friendly middleware (BaracodaManager) and also supplies developers with state of the art SDK to ease the integration on the following platforms:  
PC ; PPC 2002/2003; WM5/6; CE.NET; Palm OS, Symbian serie 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 v.1.2 - May 2009

## Available accessories



Protective boot



Key retractable reel



Only to be used with DualRunners  
AND Protective Boot  
Cradle 1 bay or 4 bays



Car Charger



Neck Lanyard