A fresh approach to food labelling

Track food accurately and efficiently from production to delivery with Brother label and thermal printing solutions.

brother.co.uk/food-labelling

Labelling is fundamental to the food traceability system

BestDeli

Premium cheese - 287g:
(£1.80 per 100g)

Best before end: 24/05/13

£5.17

European guidelines for food labelling

EU Regulation (no. 169/2011) and individual country legislation applies to food packaging and labelling, much of it harmonised.

Labelling rules vary according to the product and the packaging type; in general, full and clear information must be visible on the packaging.

Typically, labels must show: use-by date, origin of product, allergens, quantity, name of food, ingredients, nutritional value, name and address of the manufacturer, packer or seller, storage conditions and cooking instructions (if relevant).

Food traceability

Food traceability is the tracking of food through all stages of production so corrective action can be taken when a problem arises. The primary concern is safeguarding the consumer and minimising public health risks.

If food is labelled inaccurately, it can lead to the closure of a business or a life threatening risk to the consumer.

Brother has a wealth of experience in food labelling and understands the importance of transparency for the consumer. Efficient and accurate labelling processes ensure customer safety and satisfaction.

Print solutions for food labelling

Labelling is fundamental to the food traceability system and the use of handwritten labels is not considered best practice. Barcodes can store a lot of information, making it easier to pass on to other food establishments. This not only increases safety for the consumer but also allows for streamlined operations between food wholesalers and the shop floor.

Brother food labelling print solutions allow workers to be efficient and accurate with their workflow. Not only are customers able to choose food products in full confidence, but businesses can be assured they are providing the best possible service with reduced health risks.

Inaccurately labelled food can pose a serious health risk to the consumer

Warehouse/food wholesale labels

Food products at the warehouse need to be labelled before being distributed to supermarkets and other retail outlets. At this stage in the journey, the information contained in labelling includes the price, and depending on the product, the barcode, allergens and ingredients.

Key applications:

- Barcode or product reference number
- Expiry dates
- Allergy content
- Contents of the pack
- Customer specifications
- Instructions or warnings for the staff.

In-store labels

Price labels are typically made up on the shop floor. Staff are required to label the food products on location using a trolley before placing on the shelf. Supermarkets rely on their reputation and when food is labelled incorrectly in store, they risk losing the trust of their customers.

Key applications:

- Barcode
- Expiry dates
- Allergy content
- Contents of the pack
- Price reduction.

Fresh food and deli counter labels

Food is labelled at point of sale, in a supermarket bakery, fish counter or delicatessen. The information needs to display price, ingredients, allergens and expiry dates. As these products are often sold in unmarked packaging such as paper bags, this information is absolutely key to informing the customer about their purchase.

Key applications:

- Barcode
- Expiry dates
- Allergy content
- Contents of the pack
- Price and weight information.

Food preparation labels

Restaurants have an obligation to label fresh food as it arrives, and also from when it is defrosted.
As food is taken from the fridge or freezer use by dates must be added to ensure it is prepared and cooked within the allotted time.

Key applications:

- Barcode
- Expiry dates
- Allergy content
- Contents of the pack.
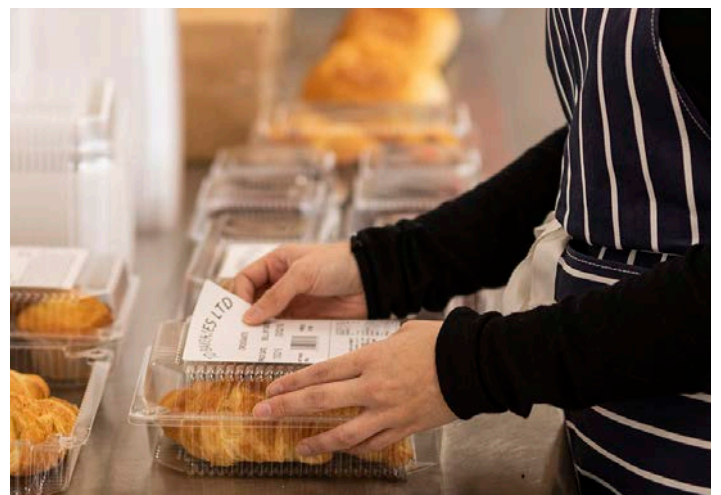
Levels of vegetarianism have seen rapid growth in Europe and in recent years, veganism has become increasingly popular. Germany was the leading market for vegan food and drink product launch activity in 2016, with 18% of all global food and drink product launches. And an estimated 3.5 million British people – 7% of the population – now claim to follow a plant-based diet.

However, the presence of animal products in a food is sometimes not obvious, for instance, gelatine in sweets, or L-cysteine used as a softening agent. Consumers expect the food industry to accurately label products to help them make more informed choices.

https://www.efsa.europa.eu/en/efsajournal/pub/5077

The World Allergy Organisation (WAO) estimate of allergy prevalence in the whole population by country ranges between 10% and 40%, while more than 150 million Europeans suffer from chronic allergic diseases.

In the UK, about ten people die every year from food-induced anaphylaxis, and there are also about 1,500 asthma deaths, some of which might be triggered by food allergy.

It is vital that food products are sold with adequate labelling about which allergens they contain, so that serious outcomes as a result of food consumption can be avoided.

https://www.allergyuk.org/information-and-advice/statistics

Incidents of food safety failures and cover-ups such as the 2013 horsemeat scandal have caused consumers to question the traceability of their food more than ever before.

In the Netherlands, eggs exported in Europe were contaminated with insecticide, and there was the chicken packaging controversy in the UK where a supplier deliberately changed use-by-dates to artificially stretch the shelf-life of the meat.

Alarmed by the news of these food safety lapses, customers increasingly want the reassurance of information about the origin, shelf-life and contents of their food at point of sale.

https://www.theguardian.com/business/2017/sep/28/uks-top-supplier-of-supermarket-chicken-fiddles-food-safety-dates

After monitoring food poisoning cases in 37 European countries in 2016, a European Food Safety Authority (EFSA) report found that infections such as campylobacteriosis, listeriosis and salmonellosis were becoming more prevalent. These conditions are often caused by poorly cooked, spoiled or incorrectly stored food.

With information about use-by-dates, cooking and storage instructions, consumers can take steps to avoid bacterial contamination and food poisoning.

https://www.efsa.europa.eu/en/efsajournal/pub/5077

Benefits of printed food labelling

Food safety compliant

Clear and concise labelling

Reduce human errors associated with illegible handwriting

Reduce food wastage with stock rotation and price markdown labels

Standalone - no PC required

Less worker downtime

Produce GS1 standard barcodes to help improve visibility and efficiency through the supply chain

Easy set up with durable print technology

The food labelling chain

Stage 1: Provenance **Stage 2:** Packaging and logistics **Stage 3:** Restaurant or shop

Food prep labels

Pack labels

Stage 1

Stage 2

Fresh food labels

Delivery labels

Price reduction

Stage 3

Price labels

Bakery labels

Fresh food labels
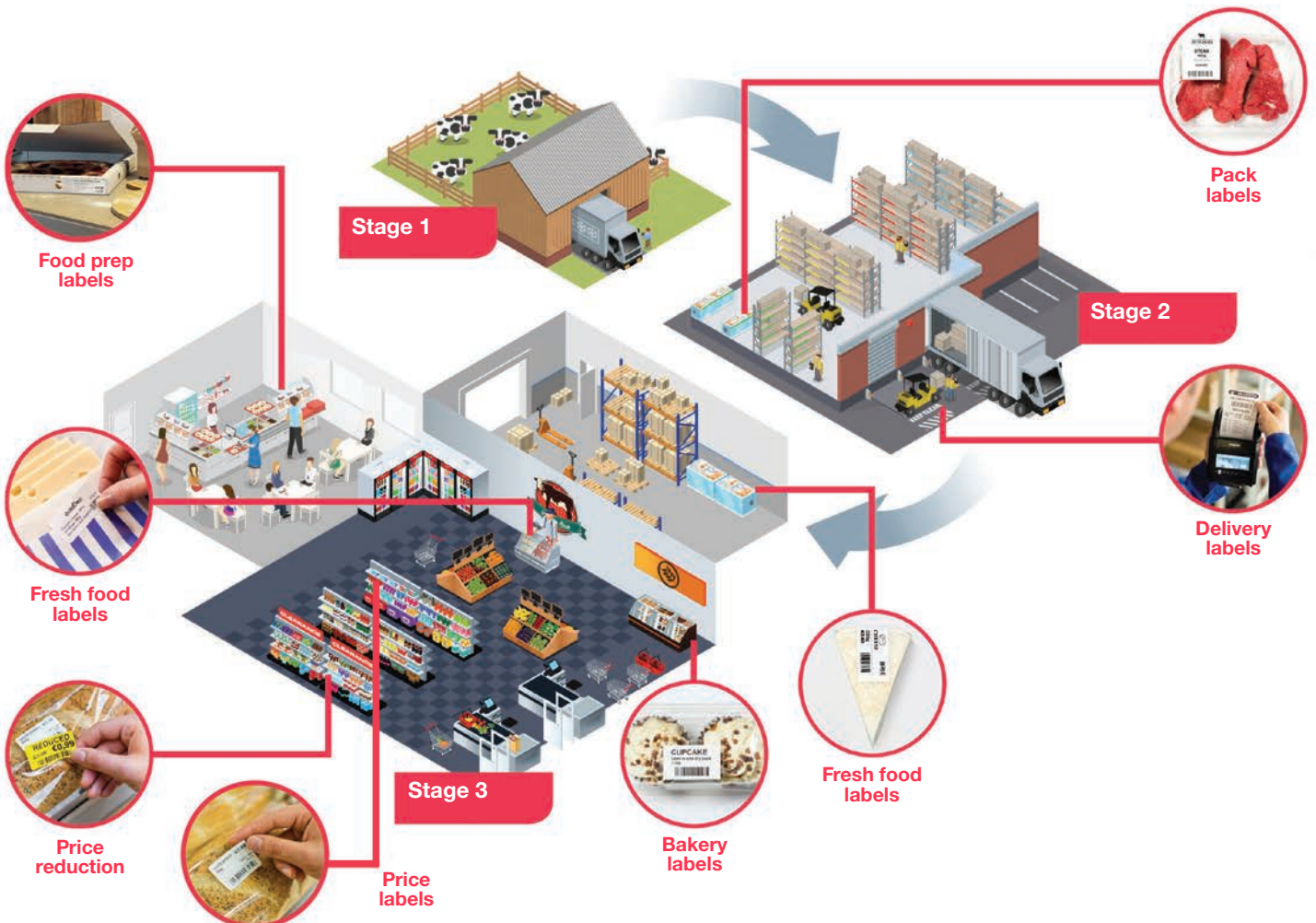
Problem:

😞 Software issues can delay the job

😞 Rolls need replacing too often

Solution:

>> 😊 Standalone operation. No PC required and easy configuration

>> 😊 Ribbon length of up to 300m for increased productivity

> " The only thing I would say is the ink running out, having to change that and order replacements. It could be improved if it had bigger ink rollers. "
>
> *UK, Specialist food shop, Hongsheng mx5500*

Problem:

☹ Quality of the print could be improved

☹ Slow print speed

Solution:

» ☺ High resolution outputs

» ☺ Fast print speeds across the entire mobile range

> " Our printer is not talking to the printer that will print them off. That is a technical issue not to do with the label. To improve this you would need to speak to the technical department. "
>
> *UK, Manage restaurants*
> *PA to MD/Office Manager*

TD-2000 series

Up to 2 inch desktop thermal printer

Unlike standard direct thermal printers, the TD-2000 series offers the performance features and media capacity of a desktop printer, but with the option to go completely portable.

Optional touch display unit*
Standalone operation for a variety of applications. Product codes and food information can be stored without the need for a PC.

Optional Wi-Fi and Bluetooth connectivity*
Hassle-free communication with a wide variety of mobile devices.

Spindle-less design for easy roll drop in
Simply drop in larger diameter rolls meaning less downtime for food labelling staff.

Wired ethernet and USB as standard*
Easily connect to a single PC on a food counter, or connect to multiple devices using the integrated wired Ethernet.

Compact footprint
Fits easily on carts, crowded work surfaces and food counters.

Portable long life Li-ion battery*
Go completely portable so food can be labelled around the store.

* Not applicable for TD-2020

TD-2000 series optional accessories

Customise your solution

Brother has designed and engineered a wide range of accessories to help customise a solution to meet your specific requirement. Brother accessories help food staff to utilise the standalone and portability options.

Power and additional options

PA-WI-001
Wi-Fi WLAN interface
TD-2120N
TD-2130N

PA-BI-001
Bluetooth interface
TD-2120N
TD-2130N

PA-SCA-001
Serial adapter
TD-2020
TD-2120N
TD-2130N

PA-TDU-001
Touch panel display
TD-2120N
TD-2130N

PA-BB-001
Battery charging unit*
TD-2120N
TD-2130N

*Requires PA-BT-4000LI

PA-BT-4000LI
Li-ion rechargeable battery*
TD-2120N
TD-2130N

*Requires PA-BB-001

PA-LP-001
Label peeler*
TD-2120N
TD-2130N

Consumables

RD-S07E5
Die-cut labels roll
Label size:
51mm x 26mm
Quantity:
1,552 per roll
Colour: white

**Complete
TD-series**

RD-S05E1
Continuous receipt roll
Size: 58mm x 86m
Colour: white

**Complete
TD-series**

TD-2000 series
brief summary

	TD-2020	TD-2120N	TD-2130N
	2 Inch		
Printing			
Print technology	Direct thermal		
Print speed	152mm/sec		
Resolution	203dpi		300dpi
Max. print width	56mm		
Min. print length	6mm		
Max. print length	1000m		
Media sensor type	Gap (transmissive), Bar (reflective)		
Media sensor location	Gap (fixed), Reflective (adjustable)		
Tear off release mode	✔	✔	✔
Connectivity			
USB	✔	✔	✔
Serial	✔	✔	✔
Wired LAN		✔	✔
USB host port		✔	✔
Bluetooth		✔	✔
Wireless LAN		✔	✔
General			
Dimensions (mm)	110 (w) x 215 (d) x 172 (h)		
Weight	1.32kg	1.34kg	
Control panel	3 button 2 LED		
LCD		✔	✔
Operating system support	Windows XP/Vista 7/8/10, Linux	Windows XP/Vista 7/8/10 Windows Server 2008/2008R2 Windows Server 2012/2012R2, Linux	
Supported commands	P-touch Template, ESC/P, Raster, ZPL II emulation		

TD-4D series

Up to 4 inch desktop direct thermal printers

High specification, high speed label printers for food labelling, featuring complimentary barcode label design software.

Powerful 'P-touch Editor'
Free label design software for designing, uploading and printing food label templates.

Easy set up
Automatic media configuration.

Speed and efficiency
Fast print speeds of up to 8ips for increased productivity.

Simple to operate
Easy to use for speed and efficiency.

Seamless integration
Print from a variety of retail management systems.

Media capacity
Accepts up to 4"/102mm wide labels.

TD-4T series

Up to 4 inch desktop thermal transfer printers

Brother's 4 inch thermal transfer label printers bring you improved operational efficiency with impressive ribbon capacity. Combined with seamless integration and modular design, print from virtually anywhere in the workplace.

Durable print technology
Printable with wax, wax/resin and resin ribbon.

Seamless integration
Print from a variety of retail management systems.

Printer command support
Supports FBPL-EZD (EPL, ZPL, ZPLII, DPL) emulation.

Less worker downtime
Print over 25m of labels from one roll.

Speed and efficiency
Fast print speeds of up to 6ips.

Customisable
Optional peeler, full/partial cutter and external roll holder.

TD-4D Accessories
and consumable supplies

Brother has designed and engineered a wide range of accessories to help customise the solution to meet your specific labelling requirements.

TD-4D Additional options

PA-LP-002	PA-CU-001	PA-HU2-001	PA-HU3-001	PA-PR2-001	PA-PR3-001
Label peeler	**Cutter**	**Thermal print head (203dpi)**	**Thermal print head (300dpi)**	**Platen roller (203dpi)**	**Platen roller (300dpi)**
TD-4410D TD-4420DN TD-4520DN TD-4550DNWB	TD-4410D TD-4420DN TD-4520DN TD-4550DNWB	TD-4410D TD-4420DN	TD-4520DN TD-4550DNWB	TD-4410D TD-4420DN	TD-4520DN TD-4550DNWB

TD-4D Consumables

RD rolls	Size	Quantity	Colour	Item no
Continuous receipt roll	102mm x 27.7m	n/a	White	RD-M01E5
Continuous receipt roll	76mm x 35.3m	n/a	White	RD-P08E5
Continuous receipt roll	58mm x 86m	n/a	White	RD-S07E5
Continuous receipt roll	58mm x 12m	n/a	White	RD-R03E5
Continuous label roll	102mm x 44.7m	n/a	White	RD-S01E2
Die cut labels roll	102mm x 50mm	843 labels	White	RD-S03E1
Die cut labels roll	102mm x 152mm	72 labels	White	RD-M03E1
Die cut labels roll	102mm x 152mm	281 labels	White	RD-S02E1
Die cut labels roll	76mm x 26mm	1,564 labels	White	RD-S04E1
Die cut labels roll	76mm x 44mm	335 labels	White	RD-P09E1
Die cut labels roll	51mm x 26mm	1,564 labels	White	RD-S05E1
Die cut labels roll	51mm x 26mm	450 labels	White	RD-Q04E1

TD-4T Accessories
and consumable supplies

Brother accessories help users equip their device to cope with the specific requirements of use.

TD-4T Additional options

PA-LP-003
Label peeler*

TD-4420TN
TD-4520TN

PA-CU-002
Full and partial cutter*

TD-4420TN
TD-4520TN

PA-RH-001
External roll holder

TD-4420TN
TD-4520TN

* Dealer option

For additional consumable options please contact your account manager.

TD4 series
brief summary

	TD-4410D	TD-4420DN	TD-4520DN	TD-4550DNWB	TD-4420TN	TD-4520TN
	4 Inch					
Printing						
Print technology	Direct thermal				Thermal transfer/ direct thermal	
Print speed	203mm/sec		152mm/sec		152mm/sec	105mm/sec
Resolution	203dpi		300dpi		203dpi	300dpi
Max. print width	104.1mm		108.4mm		108mm	105.7mm
Min. print length	Continuous: 6.4mm, peeler: 12.7mm, Cutter: 20mm, tear: 27mm				Peeler: 25.4.mm, cutter: 25.4mm tear: 50mm	
Max. print length	3,000mm				25,400mm	11,430mm
Media sensor type	Gap (transmissive), Bar (reflective)					
Media sensor location	Gap (fixed), Reflective (adjustable)					
Tear off release mode	Standard: Continuous, tear off Optional: peeler, cutter					
Connectivity						
USB	✔	✔	✔	✔	✔	✔
Serial	✔	✔	✔	✔	✔	✔
Wired LAN		✔	✔	✔	✔	✔
USB Host Port				✔	✔	✔
Bluetooth				✔		
Wireless LAN				✔		
General						
Dimensions (mm)	180 (w) x 224 (d) x 155 (h)				204 (w) x 280 (d) x 177.5 (h)	
Weight	2.08kg				2.5kg	
Control panel	3 button, 3 LED			7 button, 3 LED	1 button, 1 LED with 3 colours	
LCD			✔			
Operating system support	Windows 7/8/8.1/10 Linux		Windows 7/8/8.1/10, Windows Server 2008/2008R2/2012/2012R2/2016 Linux		Windows 7/8/8.1/10, Windows Server 2008/2008R2/ 2012/2012R2/2016 OS X 10.10.x,10.11.x macOS 10.12.x, 10.13.x, 10.14.x Linux	
Supported commands	P-touch template, ESC/P, Raster, ZPL II emulation, CPCL emulation				FBPL-EZD (EPL, ZPL, ZPL II, DPL) emulation	

RJ-2000 series

Up to 2 inch mobile thermal printers

Versatile connectivity for printing labels or receipts in the most rugged environments.

User flexibility
Compatible with a wide range of mobile devices and operating systems, making food labels easy to produce.

Easy to use
Mono LCD and three flat membrane keys.

Durable
IP54 rating; drop tested to 2.5m without the need for a case.

Easy to integrate
Simple integration into existing applications with free software and free software development kits (SDK) www.brother.eu/developer
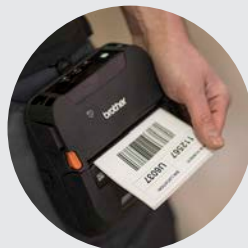
Customisable
Power options include rechargeable batteries, AC adapter, vehicle power battery chargers.

Lightweight
The lightest device ever, ideal for printing at any location within the store.

RJ-3000 series

Up to 3 inch mobile thermal printers

User flexibility
Compatible with a wide range of mobile devices and operating systems, including support for Apple AirPrint.*

Easy to use
3.3" colour LCD screen for more intuitive printing*

Durable
IP54 rating and drop tested; designed to withstand even the harshest of conditions in the warehouse.

Easy to integrate
Simple integration into existing applications with free software development kits (SDK).
www.brother.eu/developer

Customisable
Power options include rechargeable batteries, AC adapter or vehicle power kits.

Lightweight
Ideal for printing on the go at any location in a retail environment.

* RJ-3150 only

RJ-4200 series

Up to 4 inch mobile thermal printers

Ruggedness and connectivity to empower workers to create and amend labels at any location.

User flexibility
Compatible with a wide range of mobile devices and operating systems, including support for Apple AirPrint.*

Lightweight
Ideal for carrying on body in a retail store room, whether up a ladder or moving a food cage.

Easy to use
Mono LCD screen with back light. Great for dark warehouse conditions.

Customisable
Options include rechargeable smart battery, AC adapter, vehicle mounting kit and more.

Durable
IP54 rating and drop tested up to 2.1m; designed to withstand even the harshest of conditions.

Easy to integrate
Simple integration into existing applications with free software development kits (SDK). www.brother.eu/developer

* RJ-4250WB only

RJ series optional accessories

Customise your solution

Brother has designed and engineered a wide range of accessories to help customise the solution to meet your specific requirement. Brother accessories help users to equip their device in vehicle or on body, and cope with power and battery demands for extended use.

Power

PA-BT-003

Li-ion rechargeable battery

RJ-2030, RJ-2050, RJ-2140, RJ-2150

PA-BT-001A
PA-BT-001B

Li-ion rechargeable battery

RJ-3050, RJ-3150

A   B

PA-BT-006

Rechargeable Li-ion smart battery

RJ-4230B, RJ-4250WB

PA-CD-600CG

AC adapter

Complete RJ series

PA-CD-600UK

Car adapter (cigarette)

Complete RJ series

PA-CD-600WR

Car adapter (wired)

Complete RJ series

Additional options

PA-BC-002

Battery charging unit (wall mountable)

RJ-2030, RJ-2050, RJ-2140, RJ-2150

PA-BC-001

Battery charging unit

RJ-3050, RJ-3150

PA-BC-003

Single battery charger

RJ-4230B, RJ-4250WB

PA-CR-001

Charging cradle

RJ-3050, RJ-3150

PA-CR-002A

Car mount / charging cradle

RJ-4230B, RJ-4250WB

PA-SS-4000

Linerless platen roller

RJ-4230B, RJ-4250WB

PA-LPR-001

Shoulder strap

Complete RJ series

Media options

RD-R03E5

Continuous receipt roll

Size:
58 mm x 12 m
Colour: white

RJ-2000 and RJ-4200 series

RD-Q04E1

Die-cut labels roll

Label size:
51 mm x 26 mm
Colour: white
Quantity:
450 per roll

RJ-2140, RJ-2150 and RJ-4200 series

RD-P08E5

Continuous receipt roll

Width:
76 mm x 35.3 m
Colour: white

RJ-3000 and RJ-4200 series

RD-P09E1

Die-cut labels roll

Label size:
76 mm x 44 mm
Colour: white
Quantity:
335 per roll

RJ-3150 and RJ-4200 series

RD-M01E5

Continuous receipt roll

Width:
102 mm x 27.5 m
Colour: white

RJ-4200 series only

RD-M03E1

Die-cut labels roll

Width:
102 mm x 152mm
Colour: white
Quantity:
70 per roll

RJ-4200 series only

RJ series
brief summary

	RJ-2030	RJ-2050	RJ-2140	RJ-2150	RJ-3050	RJ-3150	RJ-4230B	RJ-4250WB
	2 Inch				3 Inch		4 Inch	
Printing								
Print technology	Direct thermal							
Print speed	152mm/sec				127mm/sec		127mm/sec*	
Resolution	203dpi							
Max print width	54mm (receipt)		54mm (receipt) 51mm (labels)		72mm		104mm	
Media types								
Receipt	✔	✔	✔	✔	✔	✔	✔	✔
Labels			✔	✔		✔	✔	✔
Connectivity								
USB	✔	✔	✔	✔	✔	✔	✔	✔
Wireless LAN		✔	✔	✔	✔	✔		✔
Bluetooth	✔	✔		✔	✔	✔	✔	✔
AirPrint		✔		✔	✔	✔		✔
MFI		✔		✔			✔	✔
General								
IP Rating	IP54							
Drop protection	2.5m				1.2m	1.8m	2.1m	
Weight (with battery)	465g		545g		610g	680g	850g	
Dimensions W, H, D (mm)	122 (w) x 57 (d) x 99.3 (h)		150 (w) x 73 (d) x 99.3 (h)		113 (w) x 80 (d) x 186 (h)	116 (w) x 82 (d) x 189 (h)	153 (w) x 159 (d) x 68 (h)	
Operating system support	Windows Vista 7/8/8.1/10						Windows 7/8/8.1/10	Windows 7/8/8.1/10 Windows Server 2008 / 2008 R2 / 2012 / 2012 R2 / 2016
Mobile OS	Android		Android/iOS				Android/ iOS	Android/ iOS
Supported commands	P-touch Template, ESC/P, Raster, ZPL II emulation, CPCL emulation							

*Print speed stated can only be achieved when used with battery.

brother

at your side