

Industrial thermal label printers

TJ Series

<https://brother.co.uk/TJ>





**Industrial label printers.
Built for you.
Built to last.**

Brother has been at the forefront of labelling technology for over 35 years, consistently focused on making processes more efficient across a wide range of industries.

Our experience in labelling and print has shaped the development of the TJ series — a range of industrial label printers built for high-volume performance, seamless integration, and long-term reliability.

Whether you're in manufacturing, logistics or warehousing, the TJ series delivers the speed, durability, and precision your operations demand.



TJ industrial label printers



Performance and durability you can rely on

The TJ series has been designed to ensure minimal downtime and maximum productivity through fast print speeds, large ribbon capacity and in-built durability, making it perfect for tough production environments.

With stress-free integration and various connectivity options, these durable printers are ready to meet a wide range of requirements. By using the correct ribbon and label combination, users can print labels that will withstand extremes in moisture, durability and chemical resistance.

Always ready when you are, TJ printers can produce thousands of labels a day to meet peaks in demand - whatever the environment.

Industrial label printers designed to meet your requirements

Designed for easy integration, the TJ series offers common printer language emulation, including ZPL2, and wide compatibility with Loftware, Bartender, and many WMS and ERP systems, helping to ensure a smooth fit into your existing workflow.

We are “At your side” with dedicated technical support to help you identify the right printer, accessories, and media for your needs. We also provide free demos and proof of concepts, giving you the confidence to move forward with your solution.

Transportation and logistics

Print easy-to-read text and barcodes, time after time, for your warehouse labelling needs.

With high quality printed labels it's easy to maintain compliance throughout the supply chain.

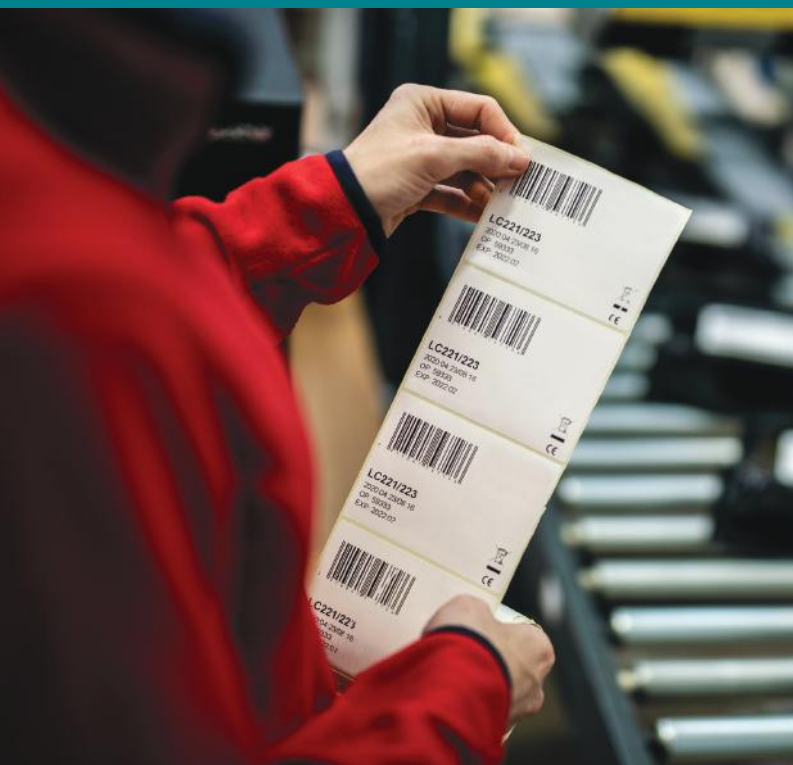
- Shipping and receiving labels
- Pallet labels
- Product identification labels
- Compliance labels
- Order preparation and picking labels
- Order fulfilment
- Inventory management
- Hazchem labels

Manufacturing

Our high-volume label printers offer fast print speeds to keep up with the relentless pace of the production line.

Experience performance you can depend on with our easy-to-integrate label printers.

- Packing labels
- Product and parts labels
- Compliance and ratings labels
- Work in progress (WIP) labels
- GHS labels
- Asset labels



Five-year warranty as standard

Brother TJ printers are always “At your side” with our industry leading five-year return-to-base warranty as standard, plus the option to add on-site service pack to minimise printer downtime.

Our experienced sales and technical support teams are also always on hand to ensure you have a print solution that meets your requirements.



Retail

Ensure a seamless customer experience with our industrial printers supporting your supply chain every step of the way, from product identification labels for sorting at fulfilment centres, through to shipping labels for delivery to the end customer.

- Shipping labels
- Returns labels
- Product labels
- Click and collect labels
- Inventory management

Healthcare

Brother offers a range of print solutions, from specimen labels through to medicine dosage labels.

Our industrial label printers provide efficient labelling solutions for the medical and pharmaceutical industries, built to meet demand while ensuring traceability.

- Laboratory and blood bank labelling
- Medicine labels
- Asset tracking
- Shipping labels



Essential features for efficient performance

Integrate with ease

No need to worry about integration, Brother industrial printers support various printer command languages, including ZPL2 emulation, and offer wide compatibility with Loftware, Bartender, and many WMS and ERP systems.

Reduce downtime and cut costs

Streamline workflows with easy media loading and fewer ribbon** replacements. With less disruption, colleagues stay focused and productive — leading to greater efficiency and long-term savings.

Built to last

These industrial-grade printers are engineered for durability, featuring a robust metal cover and frame. Designed to perform reliably in demanding production environments, they deliver years of hassle-free label printing.

Maximise productivity

Fast print speeds help you keep up with increasing demand, especially when scaling up for peak periods.

Selected models also feature an internal rewinder, allowing you to print labels and collect the finished roll when it suits your workflow — perfect for multitasking and maintaining momentum.

First-class user experience

A range of user interfaces are available including a touchscreen display for set up, print selections and diagnostics.

Connectivity as standard

Our comprehensive connectivity options offer USB, USB host, serial and ethernet. Wi-Fi and Bluetooth interfaces are also available as an add-on accessory*.

4-inch



TJ-4005DN



TJ-4020TN



TJ-4120TN



TJ-4021TN



TJ-4121TN



TJ-4420TN



TJ-4520TN



TJ-4422TN



TJ-4522TN

6-inch



TJ-6421TN



TJ-6521TN

* Purchased separately

** Excluding TJ-4005DN



**Enhance your printer
with optimised
accessories, supplies
and software**

TJ accessories and supplies

Accessories for 4-inch models

PA-CU-004 *

Cutter

TJ-4005DN
TJ-4020TN
TJ-4021TN
TJ-4120TN
TJ-4121TN



PA-CU-005 *

Cutter

TJ-4420TN
TJ-4520TN



PA-LP-005 *

Peeler

TJ-4005DN
TJ-4020TN
TJ-4021TN
TJ-4120TN
TJ-4121TN



PA-LP-006 *

Peeler

TJ-4420TN
TJ-4520TN



PA-WI-002

WLAN Interface (Wi-Fi)

TJ-4005DN
TJ-4020TN
TJ-4021TN
TJ-4120TN
TJ-4121TN



PA-WB-001

Dual interface (Wi-Fi and Bluetooth)

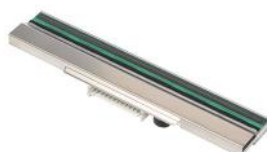
TJ-4420TN
TJ-4422TN
TJ-4520TN
TJ-4522TN



BPA-HA2L-004 *

Thermal print head (203dpi)

TJ-4005DN
TJ-4020TN
TJ-4021TN



BPA-HA2M-004 *

Thermal print head (203dpi)

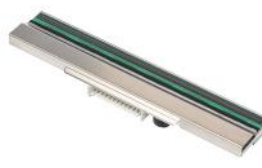
TJ-4420TN
TJ-4422TN



BPA-HA3L-004 *

Thermal print head (300dpi)

TJ-4120TN
TJ-4121TN



BPA-HA3M-004 *

Thermal print head (300dpi)

TJ-4520TN
TJ-4522TN



BPA-PRL-004 *

Platen roller

TJ-4005DN
TJ-4020TN
TJ-4021TN
TJ-4120TN
TJ-4121TN



BPA-PRM-004 *

Platen roller

TJ-4420TN
TJ-4422TN
TJ-4520TN
TJ-4522TN



Accessories for 6-inch models

PA-CU-008 *

Cutter

TJ-6421TN
TJ-6521TN



PA-LP-009 *

Peeler

TJ-6421TN
TJ-6521TN



PA-RW-001 *

Internal rewinder 5-inch OD

TJ-6421TN
TJ-6521TN



PA-WB-001

Dual interface (Wi-Fi and Bluetooth)

TJ-6421TN
TJ-6521TN



PA-GP-003 *

GPIO interface

TJ-6421TN
TJ-6521TN



Supplies for 4-inch models

Supplies	Part code	Description	Size	Compatible models
Labels	BUS-1J074102-203	Uncoated thermal transfer die cut labels	102mm x 74mm	TJ-4020TN, TJ-4021TN, TJ-4120TN, TJ-4121TN, TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN
	BUS-1J150102-203	Uncoated thermal transfer die cut labels	102mm x 150mm	
	BCS-1J074102-203	Coated thermal transfer die cut labels	102mm x 74mm	
	BCS-1J150102-203	Coated thermal transfer die cut labels	102mm x 150mm	
Ribbon	BWS-1D450-110	Standard wax ribbon	110mm x 450m	TJ-4020TN, TJ-4021TN, TJ-4120TN, TJ-4121TN, TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN
	BWS-1D600-110	Standard wax ribbon	110mm x 600m	TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN
	BWP-1D450-110	Premium wax ribbon	110mm x 450m	TJ-4020TN, TJ-4021TN, TJ-4120TN, TJ-4121TN, TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN
	BWP-1D600-110	Premium wax ribbon	110mm x 600m	TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN
	BSS-1D450-110	Standard wax/resin ribbon	110mm x 450m	TJ-4020TN, TJ-4021TN, TJ-4120TN, TJ-4121TN, TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN
	BSS-1D600-110	Standard wax/resin ribbon	110mm x 600m	TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN
	BSP-1D450-110	Premium wax/resin ribbon	110mm x 450m	TJ-4020TN, TJ-4021TN, TJ-4120TN, TJ-4121TN, TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN
	BSP-1D600-110	Premium wax/resin ribbon	110mm x 600m	TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN
	BRS-1D450-110	Standard resin ribbon	110mm x 450m	TJ-4020TN, TJ-4021TN, TJ-4120TN, TJ-4121TN, TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN
	BRS-1D600-110	Standard resin ribbon	110mm x 600m	TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN
	BRP-1D450-110	Premium resin ribbon	110mm x 450m	TJ-4020TN, TJ-4021TN, TJ-4120TN, TJ-4121TN, TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN
	BRP-1D600-110	Premium resin ribbon	110mm x 600m	TJ-4420TN, TJ-4520TN, TJ-4422TN, TJ-4522TN

Supplies for 6-inch models

Supplies	Part code	Description	Size	Compatible models
Labels	BUS-1J211148-203	Uncoated thermal transfer die-cut labels	148mm x 211mm	TJ-6421TN, TJ-6521TN
Ribbon	BWS-1D450-154	Standard wax ribbon	154mm x 450m	TJ-6421TN, TJ-6521TN
	BWP-1D450-154	Premium wax ribbon	154mm x 450m	
	BSS-1D450-154	Standard wax/resin ribbon	154mm x 450m	
	BSP-1D450-154	Premium wax/resin ribbon	154mm x 450m	
	BRS-1D450-154	Standard resin ribbon	154mm x 450m	
	BRP-1D450-154	Premium resin ribbon	154mm x 450m	



Software support features

Brother provides all the necessary tools required for software developers to integrate printing into their applications.

Label design software

Supplied as standard (via download), you can create your own custom labels by using these powerful software applications. Features include support for a variety of barcode protocols and advanced image dithering to print high quality grayscale images.

Printer commands

With support for ZPL2 emulation and a variety of additional printer command languages, developers can easily integrate printing into existing legacy systems (see specification tables for further details).

Software compatibility

With our TJ series, you have the ability to integrate into market-leading ERP systems and WMS platforms.

Device management

As most printer devices are either used remotely or away from the administrator, it is necessary to maintain control in the form of troubleshooting or updates. The Brother Printer Management Tool can accommodate this requirement, along with a variety of configuration tools and status reporting (Bluetooth connection mode not supported).

Software development kits (SDKs)

Brother can supply a selection of free-of-charge SDKs to give you an easy way of incorporating label printing directly from within your own software programs.

Available from: <https://www.brother.co.jp/eng/dev/>

Printer drivers are available for Windows OS. Software Development Kits (SDKs) can be provided to support Windows, Android and iOS operating systems.*

* Compatibility may vary dependent on model - check TJ series in detail pages for more information.





TJ series

TJ-4005DN	TJ-4020TN	TJ-4120TN	TJ-4021TN	TJ-4121TN
4-inch				

Printing / media

Print technology	Direct thermal	Direct thermal and thermal transfer			
Print resolution	203dpi	203dpi	300dpi	203dpi	300dpi
Print speed	6ips (152mm/sec) Peeler mode: 3ips Cutter mode: 2 - 6ips	10ips (254mm/sec) Peeler mode: 3ips Cutter mode: 2 - 10ips	7ips (178mm/sec) Peeler mode: 3ips Cutter mode: 2 - 10ips	10ips (254mm/sec) Peeler mode: 3ips Cutter mode: 2 - 10ips	7ips (178mm/sec) Peeler mode: 3ips Cutter mode: 2 - 10ips
Maximum print width	107mm	107mm	105.7mm	107mm	105.7mm
Maximum print length	25,400mm	25,400mm	11,430mm	25,400mm	11,430mm
Minimum print length	Continuous: 5mm Tear mode: 50mm Peeler mode: 25.4mm Cutter mode: 25.4mm				
Media sensor type	Gap (transmissive), black mark (reflective), head open (transmissive)	Gap (transmissive), black mark (reflective), ribbon encoder (reflective), ribbon end (transmissive), head open (transmissive)			
Media sensor location	Adjustable: Gap, black mark. Fixed: Head open	Adjustable: Gap, black mark Fixed: Ribbon encoder, ribbon end, head open			
Release mode	Standard: continuous, tear off optional: peeled, cut				

Media and ribbon

Media types	Continuous, die-cut, black mark, fan-fold, notch				
Media thickness	0.06 - 0.28mm				
Media width	Tear mode and peeler mode: 20 - 120mm Cutter mode: 20 - 114mm				
Media length	Tear mode: 50mm - 25,400mm Peeler mode: 25.4mm - 152.4mm	Tear mode: 50mm - 25,400mm Peeler mode: 25.4mm - 152.4mm	Tear mode: 50mm - 11,430mm Peeler mode: 25.4mm - 152.4mm	Tear mode: 50mm - 25,400mm Peeler mode: 25.4mm - 152.4mm	Tear mode: 50mm - 11,430mm Peeler mode: 25.4mm - 152.4mm
Maximum media diameter	203.2mm (8 inch)				
Core diameter	25.4mm - 76.2mm (1 - 3 inch)				
Ribbon types	–	Wax, wax resin, resin			
Ribbon width	–	40mm - 110mm			

Connectivity

USB	USB 2.0 high speed
USB host	Stand alone: USB keyboard, USB scanner Storage: USB pen drive, clone and setup
Serial	RS-232 (Max. 115200 bps)
Wired LAN	Ethernet 10/100 Mbps ARP, MAC, BOOTP, DHCP, DNS, WINS, FTP SERVER, HTTP server, SNTP client, SMTP client, SNMP V1, Telnet, LPR/LPD, RAW 9100, IPV4, ICMP, IGMP, TCP, UDP
Wireless LAN	Optional slot-in WLAN interface accessory
Wireless LAN mode	Compliant to IEEE 802.11 a/b/g/n with dual band support Supports Bandwidth in 5GHz: 20/40 MHz 802.11n Features: 802.11n HT20 Roaming without data lost in AP coverage Protocols: IPv4, ARP, ICMP, UDP, TCP, RAW, DHCP Client, DHCP FQDN Option, Unicast DHCP Offer
Wireless LAN security	Open, WEP-Open, WPA-PSK/WPA2 (AES and TKIP) Supports 802.11i security WPA2-Enterprise: EAP-FAST, EAP-TTLS, EAP-TLS, PEAPv0

TJ-4005DN

TJ-4020TN

TJ-4120TN

TJ-4021TN

TJ-4121TN

4-inch

Software

Label editing software	BarTender UltraLite (download only)
MAC printer driver	macOS 10.13x - 10.15x, macOS 11, macOS 12
Linux printer driver	Supported 32-bit and 64-bit OS: Ubuntu V11.04-16.04, Fedora 24, SUSE Linux Enterprise Server 12, CentOS Linux 7.2, Red Hat Enterprise 7.3
Windows printer driver	Supported 32-bit and 64-bit OS: Windows 8.1, 10, 11 Windows Server 2012 R2, 2016, 2019
Setting tool	BPM (Brother Printer Management Tool) Windows 8.1, 10, 11 Windows Server 2012 R2, 2016, 2019 standard versions
Windows SDK	Supported 32-bit and 64-bit OS: Windows 8.1, 10, 11 Windows Server 2012 R2, 2016, 2019
Android SDK	Brother Print SDK for Android™ TYPE B Supported OS: V8 or later
iOS SDK	Brother Print SDK for iPhone/iPad TYPE B Supported OS: V11 or later
Supported command	EPL2, ZPL2, DPL

General

Control panel	4 intuitive icon indicators, 1 status indicator, 2 buttons (pause, feed)			3.5-inch colour touchscreen display, 1 status indicator, 6 button navigation	
Touchpanel				●	●
Tear bar	●	●	●	●	●
Cutter (dealer installable)	Optional accessory				
Peeler (dealer installable)	Optional accessory				
Power supply	Internal universal switching power supply Input: AC 100-240V, 2A, 50 / 60Hz Output: DC24V, 3.75A, 90W				

Memory

SDRAM	128MB
FLASH	128MB

Environmental

Operating temperature	0 to 40°C
Operating humidity	25% to 85% non-condensing
Storage temperature	-40 to 60° C
Storage humidity	10% to 90% non-condensing

Weight and Dimensions

Weight (without media)	9.2kg	9.4kg
Dimensions	248mm (W) x 274mm (H) x 436mm (D)	

Included Items

In individual carton	Printer, AC power cord, documentation, USB cable	Printer, AC power cord, documentation, USB cable, 1" ribbon paper core
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TJ series

TJ-4420TN	TJ-4520TN	TJ-4422TN	TJ-4522TN	TJ-6421TN	TJ-6521TN
4-inch				6-inch	

Printing / media

Print technology	Direct thermal and thermal transfer					
Print resolution	203dpi	300dpi	203dpi	300dpi	203dpi	300dpi
Print speed	14ips (356mm/sec) Peeler mode: Max. 4ips Cutter mode: 2 - 14ips	12ips (305mm/sec) Peeler mode: Max. 4ips Cutter mode: 2 - 12ips	14ips (356mm/sec)	12ips (305mm/sec)	12ips (305mm/sec)	10ips (254mm/sec)
Maximum print width	104mm				168mm	
Maximum print length	25,400mm	11,430mm	25,400mm	11,430mm	14,732mm	6,604mm
Minimum print length	Continuous: 5mm					
Media sensor type	Gap transmissive (position adjustable), black mark reflective (position adjustable), head open transmissive, ribbon encoder reflective, ribbon end transmissive		Gap transmissive (position adjustable), black mark reflective (position adjustable), head open transmissive, ribbon encoder reflective, ribbon end transmissive, media near end		Gap (transmissive), black mark (reflective), head open (transmissive), ribbon encoder (reflective), ribbon end (transmissive)	
Media sensor location	Adjustable: Gap, black mark Fixed: Ribbon encoder, ribbon end, head open					
Release mode	Standard: Continuous, tear off Optional: Peeled, cut		Standard: Continuous, rewinding		Standard: Continuous, tear off Optional: Peeled, cut, rewind	

Media and ribbon

Media types	Continuous, die-cut, black mark, fan-fold, notch, perforated, tag, care label Peeler mode: Regular coated paper				Continuous, die cut, black mark, fan fold, notch	
Media thickness	0.06 - 0.28mm				0.06 - 0.268mm	
Media width	20 - 114mm				50.8 - 172.7mm	
Media length	Tear mode: 5mm - 25,400mm Peeler mode: 12.7mm - 152mm Cutter mode: 25.4mm - 2,286mm	Tear mode: 5mm - 11,430mm Peeler mode: 12.7mm - 152mm Cutter mode: 25.4mm - 1,016mm	5mm - 25,400mm	5mm - 11,430mm	Tear mode: 50mm - 14,732mm Peeler mode: 25.4mm - 152mm Cutter mode: 25.4mm - 2,286mm	Tear mode: 50mm - 6,604mm Peeler mode: 25.4mm - 152mm Cutter mode: 25.4mm - 1,016mm
Maximum media diameter	203.2mm (8 inch)				208mm (8.2 inch)	
Core diameter	38.1mm - 76.2mm (1.5 - 3 inch)					
Ribbon types	Wax, wax resin, resin					
Ribbon width	25.4mm - 114.3mm (1 - 4.5 inch)				50.8mm - 178mm (2 - 7 inch)	

Connectivity

USB	USB 2.0 high speed	
USB host	Stand alone: USB keyboard, USB scanner Storage: USB pen drive, clone and setup	
Serial	RS-232 (Max. 115200 bps)	RS-232 (Max. 115200 bps) Parallel: Centronics (36 pin)
Bluetooth	Optional slot-in Wi-Fi and Bluetooth dual interface accessory	
Bluetooth profile	v4.2 SPP (Bluetooth classic), GATT (Bluetooth low energy)	
Wired LAN	Ethernet, 10/100 Mbps ARP, MAC, BOOTP, DHCP, DNS, WINS, FTP SERVER, HTTP server, SMTP client, SMTP client, SNMP V1, Telnet, LPR/LPD, RAW 9100, IPV4, ICMP, IGMP, TCP, UDP	
Wireless LAN	Optional slot-in Wi-Fi and Bluetooth dual interface accessory	
Wireless LAN mode	Compliant to IEEE 802.11 a/b/g/n with dual band support Supports Bandwidth in 5GHz: 20/40 MHz Roaming without data lost in AP coverage Protocols: IPv4, ARP, ICMP, UDP, TCP, RAW, DHCP Client, DHCP FQDN Option, Unicast DHCP Offer	
Wireless LAN security	Open, WEP-Open, WPA-PSK/WPA2 (AES and TKIP) Supports 802.11i security WPA2-Enterprise: EAP-FAST, EAP-TTLS, EAP-TLS, PEAPv0	

TJ-4420TN	TJ-4520TN	TJ-4422TN	TJ-4522TN	TJ-6421TN	TJ-6521TN
4-inch				6-inch	

Software

Label editing software	BarTender UltraLite (download only)
MAC printer driver	macOS 10.13x - 10.15x, macOS 11, macOS 12
Linux printer driver	Supported 32-bit and 64-bit OS: Ubuntu V11.04-16.04, Fedora 24, SUSE Linux Enterprise Server 12, CentOS Linux 7.2, Red Hat Enterprise 7.4
Windows printer driver	Supported 32-bit and 64-bit OS: Windows 10, 11 Windows Server 2016, 2019, 2022
Setting tool	BPM (Brother Printer Management Tool) Windows 10, 11 Windows Server 2016, 2019, 2022 standard versions
Windows SDK	Supported 32-bit and 64-bit OS: Windows 10, 11 Windows Server 2016, 2019, 2022
Android SDK	Brother Print SDK for Android™ TYPE B Supported OS: V8 or later
iOS SDK	Brother Print SDK for iPhone/iPad TYPE B Supported OS: V12 or later
Supported command	EPL2, ZPL2, DPL

General

Control panel	LCD display, 1 status indicator, 6 button navigation		Colour touchscreen display, 1 status indicator, 6 button navigation			
Touch panel			●	●	●	●
Tear bar	●	●			●	●
Cutter (dealer installable)	Optional accessory	Optional accessory			Optional accessory	Optional accessory
Peeler (dealer installable)	Optional accessory	Optional accessory			Optional accessory	Optional accessory
Internal rewinder			●	●	Optional accessory	Optional accessory
Power supply	Internal switching power supply Input: AC 100-240V, 4-2A, 50-60Hz Output: DC 5V, 5A; DC 24V, 7A; DC 36V, 1.4A; Total 243W					

Memory

SDRAM	256MB
FLASH	512MB + (MicroSD Flash memory card reader or Flash memory expansion, up to 32GB)

Environmental

Operating temperature	0 to 40°C
Operating humidity	25% to 85% non-condensing
Storage temperature	-40 to 60° C
Storage humidity	10% to 90% non-condensing

Weight and dimensions

Weight (without media)	15.35kg	18.93kg	17.90kg
Dimensions	276mm (W) x 326mm (H) x 502mm (D)	276mm (W) x 412mm (H) x 502mm (D)	357mm (W) x 313mm (H) x 514mm (D)

Included items

In individual carton	Printer, AC power cord, documentation, USB cable, 1" ribbon paper core	Printer, AC power cord, documentation, USB cable
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brother

at your side

Contact:

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