

# RFID Printer Series

Improving accuracy and visibility



# Smart Labels. Smarter Business.

Empower operations with BIXOLON's advanced RFID labelling solutions.



Boost your business efficiency with BIXOLON's range of RFID label printers. Offering LCD displays with intuitive menus, simple calibration functions to read RFID labels and tag locations alongside UHF RFID printing and encoding capabilities. Establish optimal business solutions by adopting RFID labelling for a range of applications in retail, logistics, manufacturing, healthcare and more.



## Retail & Hospitality

RFID labelling enables faster, bulk item scanning without line-of-sight, ensuring accurate stock levels. Real-time tracking of assets and merchandise while reducing theft and the misplaced of items. Plus, elevates customer experience.

### Applications

- Inventory Accuracy & Visibility
- Loss Prevention
- Omni-channel Fulfillment
- Customer Experience



## Transportation & Logistics

Streamline shipment verification, while reducing errors in shipping and receiving. Supporting real-time updates of cargo status and improves delivery reliability. Assists with regulatory compliance and chain-of-custody requirements.

### Applications

- Parcel & Pallet Tracking
- Supply Chain Visibility
- Compliance & Security



## Warehouse & Manufacturing

With support for RFID labels, staff can monitor production stages in real time and improve workflow visibility. Defects are quickly and accurately identified, while components for recalls are efficiently tracked.

### Applications

- Receiving / Put-away Efficiency
- Inventory & Material Management
- Work-in-Progress (WIP) Tracking
- Quality Control & Traceability
- Tool & Equipment Tracking



## Healthcare

BIXOLON RFID printers improve patient safety by enabling accurate wristband and specimen labelling for real-time identification and traceability. They enhance asset and inventory management, help track medical equipment, and pharmaceuticals efficiently to prevent loss and ensure compliance.

### Applications

- Patient Safety & Identification
- Inventory Control
- Quality Care
- Pharmaceutical & Specimen Tracking



## Government / Education

Enabling public sector organisations to accurately track assets, documents, and equipment, improving efficiency and reducing losses. BIXOLON RFID printers enhance security and compliance by maintaining chain-of-custody for sensitive materials and support real-time visibility for audits and accountability.

### Applications

- Asset Tracking
- Security & Compliance
- Field Operations
- Document Management
- Book Identification



# Why BIXOLON RFID Printers?

## 1 Meet Industry Standards

BIXOLON RFID printers remain fully compliant with evolving industry encoding standards such as ISO/IEC and GS1.

## 2 Fast and Accurate

Leveraging extensive field experience, BIXOLON delivers RFID solutions that offer high-speed printing and precise data encoding.

## 3 Numerous RFID Label Types

All types of RFID Labels (ISO 18000-6C) are supported, with rapid and seamless transitions between different label types, enhancing operational efficiency.

## 4 Outstanding Durability

Built for reliability, BIXOLON printers combine rugged hardware with advanced technology to handle high workloads and deliver consistent RFID encoding.

## 5 User-Centred Function

Easy setup through automatic calibration of RFID labels optimise the printer for streamlined work processes, elevating productivity.

## 6 Professional Support

Our expert support team is readily available to resolve setup issues quickly, ensuring uninterrupted business operations.

## BIXOLON RFID Printer Lineup

BIXOLON's growing range of RFID label printers support UHF RFID print and encoding technology, offering a minimum pitch of 0.6 inches (16mm) RFID inlay which reduces the expense of choosing interfaces and media waste. Available as Mobile, Desktop and Industrial printing formats, these highly versatile, multi-functional printing solutions are packed with premium features to boost businesses efficiency by improving accuracy and visibility.



### XT5-40NR 4-inch Industrial RFID Label Printer

**Best for high-volume stock labelling and cross-docking in central fulfillment hubs or large warehouses**

- Print speeds of up to 14ips at 203 dpi
- 4.3-inch full-colour touch display
- USB, USB Host, Serial, Ethernet, Parallel, Bluetooth®, WLAN, GPIO
- Compatible with BIXOLON XPM™, XCM™ and SOTI® Connect



### XD5-40tR 4-inch Desktop RFID Label Printer

**For offices, shipping depots, or small warehouses handling low-to-mid volume labelling**

- Print speeds of up to 8ips at 203 dpi
- USB, USB Host, Serial, Ethernet, B/T, WLAN
- 2-inch Mono LCD display for easier setup and alert information
- Compatible with label design software; BIXOLON's Label Artist™ and Seagull's BarTender®



### XM7-40R 4-inch Mobile RFID Label Printer

**Enhancing efficiency for real-time stock audits, on-the-spot labelling of products, shipments or specimens**

- Print speeds of up to 5ips at 203 dpi
- Smart battery with capacity of 6800 mAh (USB Type-C® PD supported)
- USB, Serial, B/T, WLAN
- 1.8 m (6 ft.) drop rate and IP54 sealing
- Colour LCD display for easy setup

# Specifications

	XT5-40NR	XD5-40tR
<b>Print Characteristics</b>		
Print Method	Thermal Transfer or Direct Thermal	Thermal Transfer or Direct Thermal
Print Speed	XT5-40NR: Up to 14 ips (356 mm/sec), XT5-43NR: Up to 10 ips (254 mm/sec), XT5-46NR: Up to 5 ips (127 mm/sec)	XD5-40tR: Up to 6 ips (152 mm/sec), XD5-43tR: Up to 4 ips (102 mm/sec)
Print Resolution	XT5-40NR: 203 dpi, XT5-43NR: 300 dpi, XT5-46NR: 600 dpi	XD5-40tR: 203 dpi, XD5-43tR: 300 dpi
Print Width	XT5-40NR: 104 mm XT5-43NR: 105.7mm XT5-46NR: 105.6 mm	XD5-40tR: Up to 108 mm, XD5-43tR: Up to 105.7 mm
Print Length	XT5-40NR: Up to 4,000 mm, XT5-43NR: Up to 2,500 mm, XT5-46NR: Up to 1,000 mm	Up to 1,000 mm
Sensor	Transmissive (Adjustable), Reflective (Adjustable), Ribbon-End, Head Open	Transmissive (Fixed), Reflective (Adjustable), Head Open, Ribbon-End
<b>Media Characteristics</b>		
Media Type	Gap, Black Mark, Notch, Continuous, Fan-Fold	Gap, Black Mark, Notch, Continuous, Fan-Fold
Media Width	25 to 114 mm	15 to 118 mm
Media Roll Diameter	Up to 203 mm	Up to 127 mm
Media Thickness	0.06 to 0.30 mm	0.06 to 0.20 mm
Supply Method	Easy Paper Loading	Easy Paper Loading
Inner Core	38.1 to 76.2 mm, 25.4 mm (Optional)	25.4 to 38.1 mm
<b>Physical Characteristics</b>		
Ribbon Type	Wax, Wax/Resin, Resin, Outside, Inside	Wax, Wax/Resin, Resin, Outside
Ribbon Width	50 to 110 mm	33 to 110 mm
Ribbon Length	Up to 450 m	Up to 300 m
Core Inner Diameter	25.4 mm	25.4 mm, 12.7 mm
<b>Physical Characteristics</b>		
Dimensions (W x L x H)	STD: 269 x 490 x 324 mm (10.59 x 19.29 x 12.76 inch) Rewinder: 269 x 490 x 407 mm (10.59 x 19.29 x 16.02 inch)	210 x 284 x 188 mm (8.3 x 11.2 x 7.4 inch)
Weight	STD: 13.98 kg (30.82 lbs.) Rewinder: 17.98 kg (39.64 lbs.)	2.48 kg (5.46 lbs.)
Electrical	Internal Power Adapter 100-120 V/200-240 VAC, 50/60 Hz	EnergyStar® Certified, External Power Adapter 100-240 VAC, 50/60 Hz
Display	4.3-inch CTP Touch TFT LCD	FSTN LCD (200 x 100 pixels)
<b>Performance Characteristics</b>		
Memory	512 MB SDRAM, 512 MB Flash	256 MB SDRAM, 256 MB Flash
Interface	Ⓞ USB + Serial + Ethernet + 2 USB Host ports Ⓞ USB + Serial + Parallel or GPIO + Ethernet + 2 USB Host ports Ⓞ USB + WLAN + Ethernet + 2 USB Host ports Ⓞ USB + WLAN + Parallel + Ethernet + 2 USB Host ports Ⓞ USB + Bluetooth® + Ethernet + 2 USB Host ports Ⓞ USB + Bluetooth + Parallel + Ethernet + 2 USB Host ports ----- Ethernet: 10/100/1000 Mbps (1Gbps) WLAN: 2.4G/5GHz, 802.11a/b/g/n (Infrastructure, Ad-hoc, Wi-Fi Direct, SoftAP)-WEP40/104, WPA1/2 (PSK, EAP) GPIO: DB15 (Female), 5/24 V, 4 GPI, 8 GPO	Standard: USB + USB Host + Serial + Ethernet Optional: Ⓞ USB + USB Host + Serial + Ethernet + WLAN Ⓞ USB + USB Host + Serial + Ethernet + Bluetooth® ----- WLAN: 2.4G/5GHz, 802.11a/b/g/n (Infrastructure, Ad-hoc, Wi-Fi Direct, SoftAP)-WEP40/104, WPA1/2 (PSK, EAP) Ethernet: 10/100Mbps
Real Time Clock	Supported	Supported (Standard)
<b>Environment Characteristics</b>		
Temperature	Operating: 5 to 40°C (41 to 104°F) Storage: -20 to 60°C (-4 to 140°F)	Operating: 5 to 40 °C (41 to 104 °F) Storage: -20 to 60 °C (-4 to 140 °F)
Humidity	Operating: 10 to 80 % RH Storage: 10 to 90 % RH	Operating: 10 to 80 % RH Storage: 10 to 90 % RH
<b>Software</b>		
Emulation	SLCS™, BPL-Z™ (ZPL II®), BPL-E™ (EPL™), BPL-D™ (DPL)	SLCS™, BPL-Z™ (ZPL II®), BPL-E™ (EPL™), BPL-D™ (DPL, Optional)
Driver/Utility	Windows® Driver (Europlus/Seagull), Linux/Mac® CUPS Driver, Virtual COM USB/Ethernet Driver, Utility Program, OPOS/JPOS Driver, Device Driver for SAP®, Network Auto Installer	Windows® Driver (Europlus/Seagull), Linux/Mac® CUPS Driver, Virtual COM USB/Ethernet Driver, Utility Program, OPOS/JPOS Driver, Device Driver for SAP®, Network Auto Installer
Developer Tools	Android™/iOS®/Windows SDK, Linux SDK, Xamarin SDK, Web Print SDK, XI(Optional), Cordova Plugin, MAUI SDK, Flutter™ Plugin, React Native SDK	Android™/iOS®/Windows SDK, Linux SDK, Xamarin SDK, Web Print SDK, XI(Optional), Cordova Plugin, MAUI SDK, Flutter™ Plugin, React Native SDK
Design & Print	Label Artist-II™, Label Artist™ Web, Label Artist™ Mobile (Android, iOS), mPrint App (Android, iOS), Bartender Ultralite for BIXOLON	Label Artist-II™, Label Artist™ Web, Label Artist™ Mobile (Android, iOS), mPrint App (Android, iOS), Bartender Ultralite for BIXOLON
MDM (Optional)	BIXOLON Profile Manager-XPM™, XCM™ (Windows, Android), SOTI® Connect supported	BIXOLON Profile Manager - XPM™, XCM™ (Windows, Android), SOTI® Connect supported
<b>Fonts/Graphics/Symbolologies</b>		
Fonts	Bitmap Fonts (10 SLCS, 16 BPL-Z, 5 BPL-E, 9 BPL-D), Scalable Fonts (1 SLCS, 1 BPL-Z, 1 BPL-D), 23 Code page, Unicode supported (UTF-8, UTF-16LE, UTF-16BE)	Bitmap Fonts (10 SLCS, 16 BPL-Z, 5 BPL-E, 9 BPL-D), Scalable Fonts (1 SLCS, 1 BPL-Z, 1 BPL-D), 23 Code page, Unicode supported (UTF-8, UTF-16LE, UTF-16BE)
Downloadable Objects	Supporting user-defined fonts (TTF, TTE, FNT), graphics, formats and logos	Supporting user-defined fonts (TTF, TTE, FNT), graphics, formats and logos
Barcode Symbolologies	1D: Codabar, Code 11, Code 39, Code 93, Code 128, EAN-13, EAN-8, Industrial 2-of-5, Interleaved 2-of-5, Logmars, MSI, Plessey, Postnet, GS1 DataBar (RSS-14), Standard 2-of-5, UPC/EAN extensions, UPC-A, UPC-E, IMB, ISBT-128 2D: Aztec, Codablock, Code 49, Data Matrix, MaxiCode, MicroPDF417, PDF417, QR code, TLC 39	1D: Codabar, Code 11, Code 39, Code 93, Code 128, EAN-13, EAN-8, Industrial 2-of-5, Interleaved 2-of-5, Logmars, MSI, Plessey, Postnet, GS1 DataBar (RSS-14), Standard 2-of-5, UPC/EAN extensions, UPC-A, UPC-E, IMB, ISBT-128 2D: Aztec, Codablock, Code 49, Data Matrix, MaxiCode, MicroPDF417, PDF417, QR code, TLC 39
<b>Accessories/Supplies</b>		
Accessories	Power Cord	AC/DC Adapter, Power Cord, USB Cable, Holder Ribbon x 2, Core Paper (0.5-inch, 1-inch)
Options & Accessories	Peeler, Auto Cutter, Rewinder, 1-inch I.D. Core Media Supply Hanger, Serial Cable, Parallel Cable, USB Cable	Peeler, Auto Cutter, External Paper Supply, Serial Cable
Compatible Supplies	B-ribbon™	B-ribbon™, B-band™
<b>RFID</b>		
Frequency	UHF, 865 to 868 MHz (EU), 902 to 928 MHz (KR, USA)	UHF, 865 to 868 MHz (EU), 902 to 928 MHz (KR, USA)
Transmit Power	1W	1W
Modulation	ASK	ASK
Protocol	ISO 18000-6C (EPC Class1 Gen2)	ISO 18000-6C (EPC Class1 Gen2)
Auto Cutter	Optional	Optional
Tag Pitch	Min 16 mm	Min 16 mm

# Specifications

	XM7-40R
Print Characteristics	
Print Method	Direct Thermal
Print Speed	Up to 5 ips (127 mm/sec – Liner, Linerless)
Print Resolution	203 dpi
Print Width	Up to 104 mm
Sensor	Paper End, Gap, Black Mark, Paper Cover Open, Peel-off
Media Characteristics	
Media Type	Liner, Notch Optional: Linerless, RFID Tag
Media Width	50 to 112 mm
Media Roll Diameter	Up to 66 mm
Media Thickness	0.07–0.19 mm
Media Inner Core	19 mm, 12 mm
Supply Method	Easy Paper Loading
Physical Characteristics	
Dimensions (W x L x H)	158 x 186 x 82 mm (6.23 x 7.33 x 3.23 inch)
Weight	Including battery: 1,130 g (2.50 lbs.) Paper: 360 g (0.79 lbs.)
Electrical	EnergyStar® Certified, External AC/DC Adapter 100-240 VAC, 50/60 Hz, USB Type-C® Power delivery charging (Sink) support 7.2V Li-ion, 6800 mAh Smart Battery, Rechargeable
Peeler	Supported
Media Holder	Supported (Inner Core: 19 mm)
Display	TFT LCD (IPS, 240 x 320 pixels)
Performance Characteristics	
Memory	128 MB SDRAM, 256 MB Flash 256 MB SDRAM, 512 MB Flash (Optional)
Interface	Standard: USB 2.0 HS + Serial Optional: USB 2.0 HS + Serial + Bluetooth® or WLAN or Dual (Bluetooth + WLAN) ----- WLAN: 802.11a/b/g/n (Infrastructure, Ad-hoc, Wi-Fi Direct, SoftAP) - WEP40/104, WPA1/2 (PSK, EAP) ----- Easy Bluetooth Pairing™ via NFC
Environment Characteristics	
Temperature	Operating: -15 to 50°C (5 to 122°F) Storage: -30 to 70°C (-22 to 158°F)
Humidity	Operating: 10 to 80% RH
Sealing	IP54
Drop Rate	1.8 m (6 ft.)
Software	
Emulation	SLCS™, BPL-Z™ (ZPL II®)
Driver/Utility	Windows® Driver (Europlus/Seagull), Linux/Mac® CUPS Driver, Virtual COM USB Driver, Utility Program, OPOS/JPOS Driver, Device Driver for SAP®, Network Auto Installer
Developer Tools	Android™/iOS®/Windows SDK, Linux SDK, Xamarin SDK, Web Print SDK, Cordova Plugin, MAUI SDK, Flutter™ Plugin, React Native SDK
Design & Print	Label Artist-II™, Label Artist™ Web, Label Artist™ Mobile (Android, iOS), mPrint App (Android, iOS)
MDM (Optional)	BIXOLON Profile Manager - XPM™, XCM™ (Windows, Android) SOTI® Connect supported, Bartender Ultralite for BIXOLON
Fonts/Graphics/Symbologies	
Fonts	Bitmap Fonts (10 SLCS, 16 BPL-Z, 7 BPL-C™), Scalable Fonts (1 SLCS, 1 BPL-Z), 23 Code page, Unicode supported (UTF-8, UTF-16LE, UTF-16BE)
Downloadable Objects	Supporting user-defined fonts (TTF, TTE, FNT, CSF, CPF), graphics, formats, layouts and logos
Barcode Symbologies	1D: Codabar, Code 11, Code 39, Code 93, Code 128, EAN-13, EAN-8, Industrial 2-of-5, Interleaved 2-of-5, Logmars, MSI, Plessey, Postnet, GS1 DataBar (RSS-14), Standard 2-of-5, UPC/EAN extensions, UPC-A, UPC-E, IMB, ISBT-128 2D: Aztec, Codablock, Code 49, Data Matrix, MaxiCode, MicroPDF417, PDF417, QR code, TLC 39
Accessories/Supplies	
Included in the Box	Belt Strap, Smart Battery, AC/DC Adapter, Power Cord, Media Disk (Inner Core: 12 mm)
Options & Accessories	Case, Shoulder Strap, Single Battery Charger, Single Docking Cradle, Quad Battery Charger, Quad Docking Cradle, Vehicle Adapter, Vehicle Holder, RAM Mount Vehicle Holder, Serial/USB Cable, Fixed Serial/USB Cable, USB A to C Cable
Compatible Supplies	B-linerless™
RFID	
Frequency	UHF, 865–868 MHz (EU), 902–928 MHz (KR, USA)
Transmit Power	1W
Modulation	ASK
Protocol	ISO 18000-6C (EPC Class1 Gen2)
Tag Pitch	Min 16 mm

# Product and Services Portfolio

Applications	XT5-40NR	XD5-40tR	XM7-40R
Retail & Hospitality			
Inventory Accuracy & Visibility	●	●	●
Loss Prevention	●	●	●
Omnichannel Fulfillment	●	●	●
Customer Experience		●	●
Transportation & Logistics			
Parcel & Pallet Tracking	●	●	●
Supply Chain Visibility	●	●	●
Compliance & Security	●	●	●
Warehouse & Manufacturing			
Receiving / Put-away Efficiency	●	●	●
Inventory & Material Management	●	●	●
Work-in-Progress (WIP) Tracking	●	●	●
Quality Control & Traceability	●	●	●
Tool & Equipment Tracking	●	●	●
Healthcare			
Patient Safety & Identification		●	●
Inventory Control	●	●	●
Quality Care		●	●
Pharmaceutical & Specimen Tracking	●	●	●
Government / Education			
Asset Tracking	●	●	●
Security & Compliance	●	●	●
Field Operations	●	●	●
Book Identification	●	●	●