



The next innovation in mobile printing

4-Inch Mobile Thermal Printer

# PW4NX

## TECHNICAL INFORMATION

PRINTING SPECIFICATION		
Printing Method		Direct Thermal
Print Mode		Continuous, Tear-off, Dispenser, Linerless(Linerless Model Only)
Print Resolution		8 dots/mm (203 dpi)
Print Speed		Continuous, Tear-off: 2 to 6ips
		Linerless, Dispenser: 2 to 4ips
Max. Print Area		Width : 104mm
		Length: 1000mm
Processor		Dual CPUs with a 1 GHz
Printer Memory		8GB ROM, 1GB RAM ; Receive Buffer: 2.95MB
CONSUMABLES SPECIFICATION (Recommended to use printer supplies manufactured or certified by SATO)		
Sensor Type		Transmissive Sensor for Gap, Reflective Sensor for I-mark
Media Type		Roll media (face-out wound), Fan-fold media
Media Thickness		58 to 190.5 μm (0.058 to 0.1905 mm)
Roll Diameter		Maximum Outside Diameter: φ67 mm (φ2.6 inches)
Label Size	Continuous	Width : 38 to 111mm (41 to 114 mm Including liner)
		Length: 13 to 305 mm (16 to 308 mm Including liner)
	Tear-Off	Width : 38 to 111 mm (41 to 114 mm Including liner)
		Length: 16 to 305 mm (19 to 308 mm Including liner)
	Dispenser	Width : 38 to 111 mm (41 to 114 mm Including liner)
		Length: 16 to 254 mm (19 to 257 mm Including liner)
	Linerless (Linerless Model Only)	Width : 38 to 114 mm
		Length: 16 to 257 mm
FONTS / SYMBOLOGIES		
Internal Fonts	Standard Bitmap	U, S, M, WB, WL, XU, XS, XM, XB, XL, OCR-A, OCR-B
	Scalable Fonts	SATO CG Sleek, SATO CG Stream, 13 SATO Fonts, Multi-national Language Support (47 Languages / Unicode), Single and Double Byte Fonts (Korean, Chinese, Japanese)
	Encodingt	Major Latin and Pan-European Code Pages (WGL4), GB18030 (Simplified), KSX1001 (Korean), BIG5 (Traditional), JIS, SHIFTJIS, UTF-8 and UTF-16BE
Barcode	Linear	Code 39, Code 93, Code 128, CODABAR (NW7), EAN(JAN)8/13, GS1-Databar™, GS1-128 (UCC/EAN128), Interleaved 2/5, Industrial 2/5, Matrix 2/5, MSI, Bookland, Postnet™, UPC-A/E
	2D Symbologies	PDF417, Micro PDF, Maxi Code, GS1 Data Matrix, Aztec, QR Code, Micro QR Code and Composite Symbologies
INTERFACE CHARACTERISTICS AND INTEGRATION		
Standard Interfaces		USB 2.0 High Speed type B mini connector, Bluetooth® Ver.5.0 BLE, NFC, 802.11a/b/g/n/ac Dual Band WLAN (2.4 GHz, 5 GHz)
Remote Maintenance		SNMPv3, HTTP (Web Interface)
Supported Printer Protocols		Standard: SBPL (SATO Barcode Printer Language) ; Emulation Languages: SZPL, SCPL, SIPL
OPERATING CHARACTERISTICS		
Power Requirements		AC100V~AC240V, 50/60 Hz (AC Adapter) ; Output: DC 19V ±5% 2.37A
Environment	Operating	-15 to 50°C/10 to 90% RH (Without Condensation)
	Storage	-25 to 60°C/10 to 90% RH (Without Condensation)
Dimensions (W x D x H)		W 180 mm x D 195mm x H 85 mm (excluding protrusion)
Weight		1,440g (including battery weight , excluding media)
Display Panel		TFT color LCD 2.4 inches 240 x 320
MISCELLANEOUS		
Standards & Agency Approvals		Please contact your nearest SATO sales representative regarding agency approvals for your region
Functions – Useful features		Consistent High Speed 6ips, IP54, SATO AEP (Application Enabled Printing), SATO Online Services, Tutorial Videos on LCD, Multi Language Support LCD Message (31 Languages), Energy Saving, Large Status LED, USB Memory for Data Copy, Status Return, Alarm Sound
Functions – Self Diagnosis Checking		Thermal Head Check, Paper End Detection, Test Print, Cover Open Detection, Auto Power Off
ACCESSORIES		
Included in Package		Lithium-ion Smart Battery, Belt Clip
Optional		1-Bay Charging Cradle, 1-CH/ 4-CH Battery Charger, Lithium-ion Smart Battery, AC Adapter, DC Adapter, Cigarette-lighter Adapter, Hand Strap, Belt Loop, Shoulder Strap, Carrying Case, Printer Stand



## Durability Engineered for demanding environments

### Drop-resistant

Meet SATO's drop testing standards\* and do not damage easily from impact in the field.



\*Printer functions normally after being dropped on concrete from over 2 meters / 7 feet.

### IP54-rated for dust protection

Withstand use in dusty conditions as printer is designed to protect against dust ingress that interferes with its normal operation.



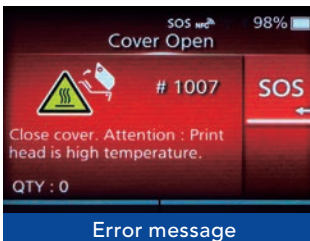
### IP54-rated for liquid protection

Withstand use near water fixtures as printer is designed to protect against water contact from any angle.



## Flexibility Ease of use with intuitive operation

### 2.4" color display LCD



Error message



Video tutorial

Equipped with a wide and clear 2.4-inch color display for easy reading. When a printer error occurs, the screen turns red to alert users and provides instructions for troubleshooting. On-screen video tutorials are also available to guide users through basic printer operations such as loading labels or replacing parts.

### Compact footprint and portability

Optional accessories for mounting printer vertically to save space and for easy carrying of printer from place to place.



Printer stand

Media loading possible while printer is propped up on stand.



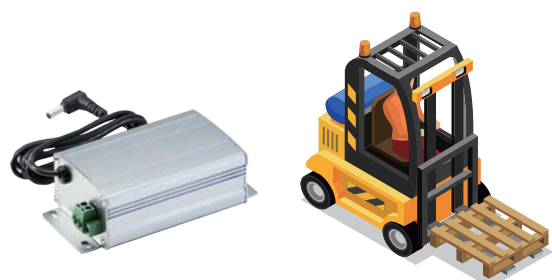
Hand strap

No need to detach printer stand when carrying unit by hand.

### Flexible power delivery

Optional DC adapter\* to let printer draw power from forklift or other electric vehicles.

\*For indoor use only. Cable for connecting adapter to vehicle battery not included.





# Compact in size, powerful in performance

## High Functionality

## Outperform other printers in its class

### High speed

Print as fast as desktop printers, achieving a maximum print speed of 152 mm/s (6 ips).



\*Based on a printing volume of 10 million labels (118 mm/4.6 inches in length), when compared with legacy models.

### High quality

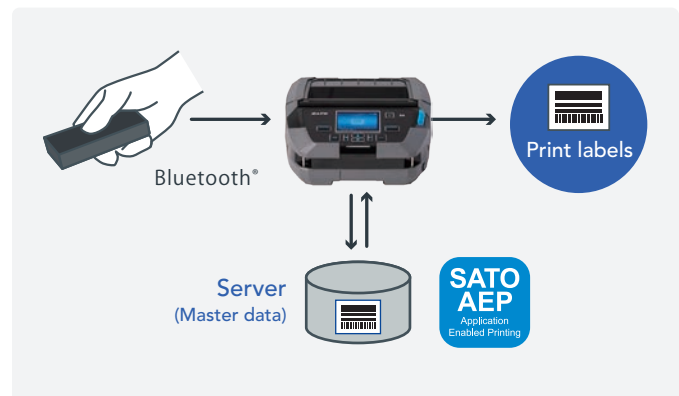
Deliver consistent print quality, with printer settings that users can change to maintain quality when battery is running low.



## Added functionality with SATO software/service

### SATO AEP (Application Enabled Printing)

An onboard intelligence that helps printers process data from wirelessly connected handheld scanners or other devices to realize stand-alone printing without computers.



### SATO App Storage

A cloud-based service for users to centrally manage and distribute label data and printing applications. This streamlines data management and ensures that all labels are printed with up-to-date data anytime, anywhere.



# Enabling a wide array of applications across industries

## Use PW4NX with material handling equipment

Mount printer to different material handling equipment for on-the-go printing in the warehouse.

This saves workers the hassle of traveling back and forth to print stations and allows them to label goods at the point of activity, contributing to higher warehouse productivity and labeling accuracy.



Picking cart



Forklift

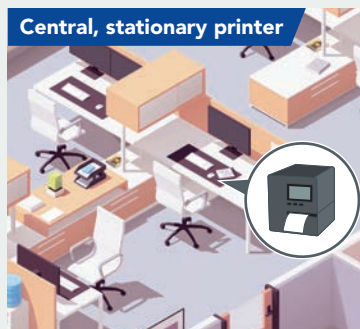


Roll cage

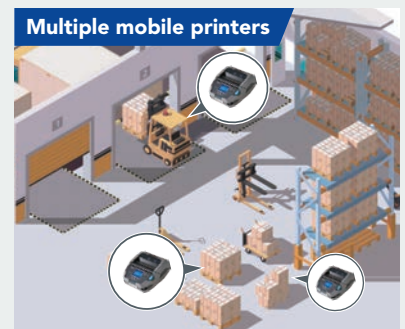
## Use PW4NX to transition to a distributed printing environment

Distribute print jobs among multiple mobile printers used at the point of label application, instead of relying on stationary printing from a single location.

This not only saves time and reduces errors but also allows workers to switch to other printers when one breaks down.



Central, stationary printer



Multiple mobile printers

## Use PW4NX for on-demand printing outdoors or near water fixtures

Meet business needs in diverse environments with the printer's IP54 dust and water-resistance rating (without case).



For outdoor ticketing, on-the-spot food labeling (in mobile kitchens), mobile point-of-sale receipt printing and couponing, and more.



For printing on the road, for example, to label parcels during unplanned pickups or deliveries. This mobility helps delivery drivers avoid delays and prevent mislabeling.

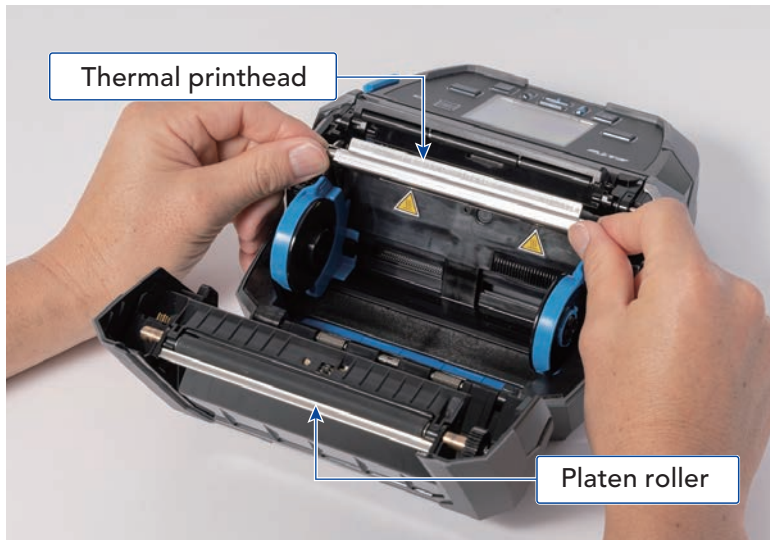


At loading/unloading docks or other worksites where some rain may enter.



For wet area applications at back-of-house locations such as kitchens.

## Hassle-free maintenance, for users servicing their own printers



Designed with user-replaceable parts\* to simplify and speed up printer maintenance.

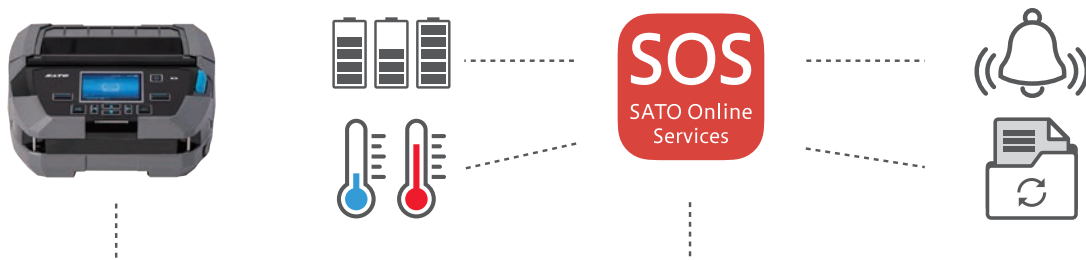
\*Toolless replacement possible for printhead.

## IoT-based maintenance service

### SOS (SATO Online Services)\*

A cloud-based service that monitors label printers 24/7 remotely to ensure their stable operation. Besides supporting preventative maintenance by alerting users when a part or battery is nearing replacement, SOS now also offers new functions for enhanced reassurance and convenience.

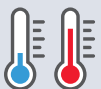
\*Contract required.



Battery asset management



Device call function



Visualization of  
temperature status



Remote updates