



WS408 / WS412 4-inch Thermal Desktop Printer | WS4 Series



Direct Thermal



Thermal Transfer

The WS4 Thermal Printer Maximizing Performance, Versatility and Investment



Ribbon Up
To 300M



Standard Ethernet
Serial & USB



Clear User
Indicators



Drop-In
Easy Load Media

Features

- User-Friendly Operation and Serviceability
- Printing Resolution of 203 / 300 dpi
- Thermal Transfer and Direct Thermal Models
- Standard Ethernet
- Prints Labels, Receipts, Tags and Wristbands
- Long 300m (984.2 ft) Ribbon - Face-in/out
- Emulations (SZPL®, SEPL®, SDPL®, SIPL®)
- Wireless Operation via Bluetooth™ or Wi-Fi™

Industries

- Logistics
- Transportation
- Retail
- General Office
- Government
- Entertainment
- Manufacturing
- Healthcare
- Hospitality



GENERAL SPECIFICATIONS / WS4 Series

PRINTING SPECIFICATIONS		WS408	WS412
Printing Method		Direct Thermal (DT) and Thermal Transfer (TT) Models	
Print Resolution		203 dpi (8 dots/mm)	300 dpi (12 dots/mm)
Maximum Print Area	Width	4.09" (104.0 mm)	4.09" (104.0 mm)
	Length	39.33" (999.0 mm)	39.33" (999.0 mm)
Print Speed		6 ips (Up to 152.4 mm/sec)	4 ips (Up to 101.6 mm/sec)
Printer Memory		Flash ROM: 16MB, RAM: 32MB	
Dimension		TT Model: W: 8.69" (220.6 mm) D: 10.96" (278.5 mm) H: 7.38" (187.5 mm) DT Model: W: 7.24" (183.8 mm) D: 8.89" (225.9 mm) H: 6.54" (166.0 mm)	
Weight		DT Model: 3.88 lbs. (1.74 kg) / TT Model: 5.46 lbs. (2.48 kg)	

MEDIA SPECIFICATIONS

Sensor Type

Adjustable I-Mark Sensor (Reflective), Label Gap Sensor (Transmissive), Label Taken Sensor (Dispenser Option)

Media Type

Roll or Fan-fold Die Cut Labels, Plain Paper Face Stock, Synthetics and Continuous Stock, Ticket

Media Thickness

0.002" – 0.007" (0.06 mm – 0.19 mm)

Media Roll Diameter

Diameter

Roll Max. Outside Diameter: 5.0" (127.0 mm),
Core Diameter: 1.0" / 1.5" (25.4 mm / 38.1 mm)

Media Width

0.88" (22.4 mm) to 4.53" (115.0 mm)

Media Length

Continuous

TT/DT: 0.31" (10.0 mm) to 39.21" (996.0 mm)

Tear-Off

TT/DT: 0.31" (25.4 mm) to 39.21" (996.0 mm)
DT Mode on TT Model: 1.18" (30.0 mm) to 39.21" (996.0 mm)

Cutter

TT/DT: 0.76" (25.4 mm) to 39.09" (993.0 mm)
DT Mode on TT Model: 1.37" (35.0 mm) to 39.09" (993.0 mm)

Dispenser

TT/DT: 0.92" (25.4 mm) to 5.92" (150.4 mm)
DT Mode on TT Model: 1.37" (35.0 mm) to 5.92" (150.4 mm)

Ribbon (Thermal Transfer Model)

Length

Max. 984.2 ft (300m) Center Justified

Core Diameter

0.5" (12.7 mm) for 100m (328.0 ft) / 1.0" (25.4 mm) for 300m (984.2 ft)

Wind Direction

Face-out / Face-in, No Setting Change Required

SATO Genuine Consumables

For maximum print quality and optimum use, SATO recommends the use of SATO Genuine Consumables.

COMMUNICATION INTERFACES

Standard

USB (Type A, Type B), LAN, RS232C

Wireless

Optional WLAN, IEEE 802.11 b/g/n, Optional Bluetooth, V2.1 + EDR

LAN Protocols

ARP, IP, ICMP, UDP, TCP, HTTP, DHCP, Socket, LPR, IPv4, IPv6, SNMPv2

Emulations

Auto Detect - SBPL®, SZPL®, SEPL®, SDPL®, SIPL®

BARCODE SYMBOLOGIES

Linear

UPC-A/E, JAN/EAN-8/13, Code 39, Code 93, Code 128, Bookland, GS1-128 (UCC / EAN128), Codabar (NW-7), Interleaved 2 of 5, MSI, GS1 Databar™ / RSS14 (Truncated, Stacked, Limited, Expanded), Industrial 2/5, Composite JAN/EAN-8/13, Composite UPC A/E, Postnet™, Matrix 2/5

2D Symboleges

PDF417 Including Micro PDF, MAXI Code, QR Code, GS1 Data Matrix (ECC200)

Print Rotation / Character Data - Barcode

0°, 90°, 180°, 270°

FONT SPECIFICATIONS

Internal Fonts

7 Bitmap SATO Fonts, 2 Scalable SATO Fonts, Multi-National Language Support, Single and Double Byte Fonts (Korean, Chinese and Japanese)

OPERATING & ENVIRONMENT CHARACTERISTICS

Environment

Operating Temperature

41 to 104°F (5 to 40°C), 25 – 85% RH, Non- condensing

Storage Temperature

-4 to 140°F (-20 to 60°C), 10 – 90% RH, Non- condensing

Status Indicators

2 Tricolor LEDs (Red, Green and Orange)

Power Requirements

Energy Star™ Input Voltage Adapter: AC100V-240V (Auto Switching) ;
DT: 60W / TT: 90W

OPTIONS

Dispenser, Full Cutter, Real Time Clock Module (future option),
Wireless LAN, Bluetooth Interface, External Unwinder

MISCELLANEOUS

Standards & Agency Approvals

EN60950-1, UL60950-1/CSA C22.2 No.60950-1, CE Marking, FCC,
TUV GS, ICES-003, RCM, CCC, KC, EAC, S-Mark

User Serviceable

Thermal Printhead and Platen Roller can be replaced without tools

SATO SUPPORT

Ensure top quality and long-lasting performance with SATO's Onsite Service Plans and Depot Service Contracts.

Note: Specifications subject to change without notice

