EPSON®

System Product Guide
2001-2002

POS TERMINAL **SR**
INTELLIGENT REGISTER **IR**
PRINTERS **TM SERIES**
CUSTOMER DISPLAYS **DM-D SERIES**

The Best Hardware Solutions For Your Open System

Hybrid

Inkjet

IR-310/SR-600

TM-H6000Ⅱ

TM-J2000 / J2100

EPSON Roots

EPSON's first major product was a digital watch featuring micromechatronics and electronic technology. This was followed by a printing timer used as the official timekeeper at the 1964 Olympics. Four years later there came the EP-101, the world's first electronic calculator mini printer. This ultra-compact printer was a huge hit worldwide and heralded the start of EPSON's multi-faceted business expansion, giving rise to many other products or "sons". Actually, the name EPSON is a combination of the EP from the EP-101 and SON. EPSON. A name associated with cutting-edge, high quality products around the world.

Co-existence
Protecting The Environment

EPSON's efforts to protect the environment began ten years ago with the declaration that it would stop using CFCs. Other measures include the reduction of CO_2 emissions at factories and facilities, the reduction of waste material, and recycling. This focus on the environment has resulted in many EPSON factories acquiring ISO14001 certification.

Co-Existence
EPSON

ENVIRONMENTAL SYSTEM
JQA-E-80015

Quality
Satisfaction Guaranteed

Outstanding quality is something all EPSON products share. Thanks to this, EPSON was the first mini printer manufacturer to acquire accreditation for ISO9001, the strictest of the ISO9000 international quality standards. Approved by the Japan Quality Assurance Organization, ISO9001 compliance is just another example of the steps EPSON takes to assure total product satisfaction.

QUALITY SYSTEM
JMI-0028

Innovation For The Customer

Since its establishment, EPSON has continued to strive to define new standards
of performance and operation ease.
That's the EPSON Solution Initiative®. Our aim is total customer satisfaction.
To achieve this, we look at the task at hand, and combine our extensive database and technical expertise
with our considerable experience to deliver the optimum solution. Naturally,
we also take advantage of our global network to keep abreast of the latest trends worldwide.
By doing this, we are always able to provide value-added products that respond precisely to
changing needs. Innovation – it's all part of EPSON's customer first approach.

Thermal Line

Impact dot matrix

Slip printer

TM-U590

TM-T90/L90

TM-U950/U925

EPSON takes the initiative for your solution.

Setting the standards by providing revolutionary products for a wide range of applications -- in other words, the
EPSON Solution Initiative®. The facts speak for themselves. In the area of hardware, EPSON has continued to
provide countless solutions, such as the TM-J8000, the first inkjet printer for POS applications. With regards to
software, EPSON took the initiative by introducing ESC/POS, a proprietary POS printer command system
including patented commands and enabling versatile POS system construction with high scalability. Compatible
with all types of EPSON POS printers and displays, this proprietary control system also offers the flexibility to
easily make future upgrades. Its popularity is worldwide. Another world first was OLE POS (OPOS) OCX driver
software for application software development support in Windows® 95/NT® environments. For software
development support in Java™ environments, there's JavaPOS™, also an industry standard. These and other
innovations are why EPSON is a leader in its field. It's all a matter of taking the initiative.

Satisfying needs

Whenever there's a need, Epson is there with just the right solution. The TM Series lineup offers models to print
everything from receipts, sales slips and journals to tickets, checks and invoices. And for retail and hospitality
businesses, SR / IR Series feature an easy-to-use touch panel.

Over 25 Years Of Satisfaction

For over a quarter of a century EPSON has been the world's top manufacturer of printers. During this time, we
have produced an incredible 200 million of our famous mini printers. At retail outlets, in hotels, hospitals, car
rental centers, banks – wherever you look, you'll find an EPSON printer contributing to improved productivity
and efficiency.

SR-600 Series New POS Terminal

The Epson SR-600 Series offers a wide range of value-added solutions to businesses in the retail, and hospitality industries.

NEW

Quality and Performance at a Touch

The new Epson SR-600 Series provides establishments with the competitive advantage they need to stay ahead.

Compact and unobtrusive, this outstanding new product offers highly efficient, powerful solutions to any business that requires a low-cost, easy-to-operate POS terminal.

Blending stylishly with any retail environment, the terminal's low profile means that communications with customers are unhindered.

A wide range of expansion possibilities and peripherals ensures that the precise needs of users are met.

Long established leaders in the POS field, Epson products combine superior design with all the latest technological developments. Why settle for anything less?

Not only functional, the sleek lines and refined good looks of the SR-600 Series are sure to enhance the appearance of any shop counter. This modernistic design will blend perfectly with the decor of even the most up-market specialty store or the highest class of hotels.

Increased efficiency

A powerful 366-MHz Celeron™ CPU increases operating speed by processing data quickly, reducing customer waiting time.

Training time is kept to a minimum thanks to the large easy-to-operate LCD with touch panel.

12-inch Touch Panel

Boutiques and up-market retail establishments

Any boutique understands the importance of superior design. And the classy Epson SR-600 Series will not look out of place in even the most up-market of establishments.

Quiet, compact, and with a low profile, its sleek lines and stylish appearance mean this POS terminal will add to, rather than detract from, the ambience of any store.

Selectable configuration

A wide range of POS peripherals enables users to tailor a system to meet their needs.

Alongside the LCD display, users can select from a magnetic stripe reader (MSR), a customer display, a CD-ROM, CompactFlash™, and one of Epson's range of industry-leading POS printers.

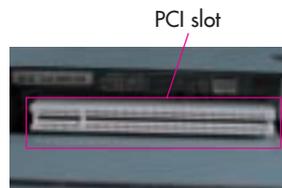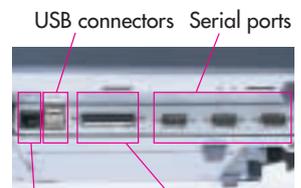MSR Unit   Customer Display   CD-ROM Drive

Expandability

A PCI slot, three serial ports, a parallel port and two USB enable the system to be expanded, while for customers with large systems there is 100/ 10Base-T Ethernet capability.

Data backup and installation/saving of applications software is simple.
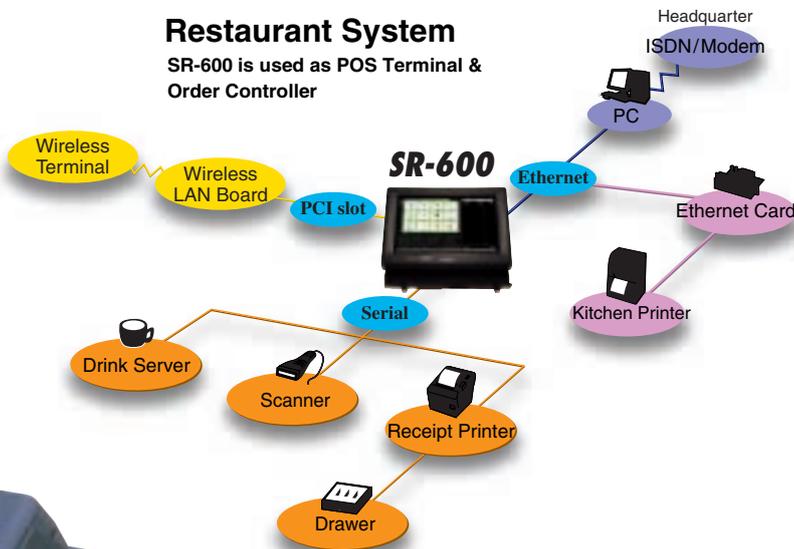
PCI slot   USB connectors   Serial ports

LAN connector   Parallel port

Restaurant System

SR-600 is used as POS Terminal & Order Controller

Headquarter
ISDN/Modem

PC

Wireless Terminal

Wireless LAN Board

SR-600

PCI slot

Ethernet

Ethernet Card

Kitchen Printer

Serial

Drink Server

Scanner

Receipt Printer

Drawer

Flexible installation

Neat and compact, the SR-600 Series can be sited on the counter, discretely concealed from customers, or even on a high shelf.

With a footprint of 306 by 303 mm and a height of 278 mm at its highest and 225 mm at its lowest angle, the terminal keeps the counter uncluttered and allows unimpeded communication with customers.

Designed to withstand the rigors of even the toughest fast food restaurant or eatery, the heat-resistant SR-600 Series can withstand accidental splashes and spills of water, mayonnaise or ketchup.

With a choice of stylish black or white, you can the select the terminal that suits the decor of your shop.

Use the SR-600 Series to create the retail environment that's right for your customers.

Reduced cost of ownership

Designed to be compatible with the latest PC architecture and industry standards (OPOS), the SR-600 Series is designed to keep your costs to a minimum.

Service and maintenance fees are reduced thanks to the lift-up main unit case that makes access to the CPU, HDD and memory easy.

The LCD unit is also simple to remove and attach.

Most upgrades and simple repairs can be carried out by the user, reducing the need to call service personnel.

Restaurants, bars and fast food stores

The food industry requires POS terminals that are efficient, no-nonsense and durable - and that's just what the SR-600 Series is.

Easily visible under subdued or bright lighting, the LCD touch panel is simple for part-time or inexperienced staff to operate, reducing training time and the possibility of errors.

And accidental spills of water and sauce can be wiped off in an instant.

SPECIFICATIONS

CPU		Celeron™ 366 MHz
Memory		168-pin DIMM slots x 2 (Max. 256 MB)
I / O Ports		Ethernet x 1 10 Base-T / 100 BaseTX, "Wake On LAN" support
		SERIAL x 3 (9-pin D-sub male), +5 V to pin 1 of COM1 or COM2
		Parallel x 1 (D-sub 25-pin female)
		USB port x 2
		K/B & Mouse port x 1 PS / 2-type (6-pin mini-DIN)
		CRT x 1 (D-sub 15-pin female) (Factory option on the drawer board)
		Cash Drawer x2 (for two drives) (Factory option with CRT)
Storage		FDD (1.44/3.5" External Option), 1 HDD (2.5" IDE interface / Ultra DMA / 33)·¹
		CD-ROM Drive (24 x speed slim drive / Alternative Option)·¹, CompactFlash™ Card Slot (Alternative Option)·¹
Slot		PCI x 1
MSR		ISO Track 1, 2, 3 (Option)
Size	Base unit	306 (W) x 303 (D) x 278 (H)mm <12.0" x 11.9" x 10.9"> (at highest angle)
		(including rubber feet, excluding LCD clamp)
Mass		Approx. 8.6 kg (including CPU, HDD, DIMM, TFT LCD UNIT)
Safety Standards	for North America EMI	FCC class A
	Safety standard	UL1950, CSA C22.2 No.950
	for Europe CE marking / EMC	EN55022 class A, EN50082-1, IEC801-2, IEC801-3, IEC801-4, EN61000-3-2, EN61000-3-3
	Safety	EN60950
	for Japan EMC	VCCI class A, Harmonic current control guideline of Japan, JEIDA52
Environment	Temperature Operating	5˚ to 35˚C
	Storage	-10˚ to 50˚C
	Humidity Operating	30 to 80 % RH (no condensation)
	Storage	30 to 85 % RH (no condensation)
OS		MS-DOS® 6.2 / Windows® 95 / 98 / 2000 / NT Workstation 4.0
LCD With Touch Panel		12.1-inch color DSTN (800 x 600 dots, with resistive-film touch panel)
		12.1-inch color TFT (800 x 600 dots, with resistive-film touch panel)
Customer Display		2 x 20 char. Type
Others		Front key lock , Backup battery

*1 Bay Configuration

Internal Bay	Front Bay
HDD or CF	CF or CD-ROM

CF: CompactFlash™ Card Slot

It's All Here!

The EPSON IR-310 series is the business partner you've been looking for. You get a powerful CPU for fast communication. A large touch panel for easy operation.

And a seven-position keylock and a lock on the front and back covers to prevent unauthorized operation and access to valuable data. Exceptional flexibility is also yours with a wide range of options enabling customization to precisely meet your needs.

What's more, the EPSON IR is network ready and boasts a truly open architecture for the expandability that growing businesses demand. The other good news is a compact, elegant design that complements any modern interior decor. All this and more from a single, all-round unit - the EPSON IR.

GOOD DESIGN AWARD 1998

Established by Japan's Ministry of International Trade and Industry (MITI) in 1957, the Good Design Award is the most coveted design accolade in Japan.
The EPSON IR received this prestigious award in the Office and Stores division for its contribution to the convenience and needs of users.

OLE POS

12.1-inch Touch Panel

10.4-inch Touch Panel

Outstanding Flexibility

Creating the exact EPSON IR configuration you need is easy. Choose between thermal and dot matrix printing.
For data input, choose between a 12.1" (800 x 600 dot display) or 10.4" (640 x 480 dot display) touch panel, or a keyboard.

Fast, Flexible Printing & Easy Paper Loading

With the IR, you get a choice between one hybrid and two receipt printers.

The hybrid printer lets you enjoy slip and thermal receipt output. The one station thermal receipt printer offers convenient drop-in paper loading. And the one station impact dot matrix printer enables use of regular roll paper or pressure-sensitive roll paper for printing one original and one copy.

It also features a take-up device that lets you use two-ply paper to provide customers with journal printouts.

Whichever model you choose, output from these compact units is extremely fast, a vital feature for high volume tasks.

All three printers come with an Auto Status Back function and autocutter .

One Station Impact Dot Matrix Printer

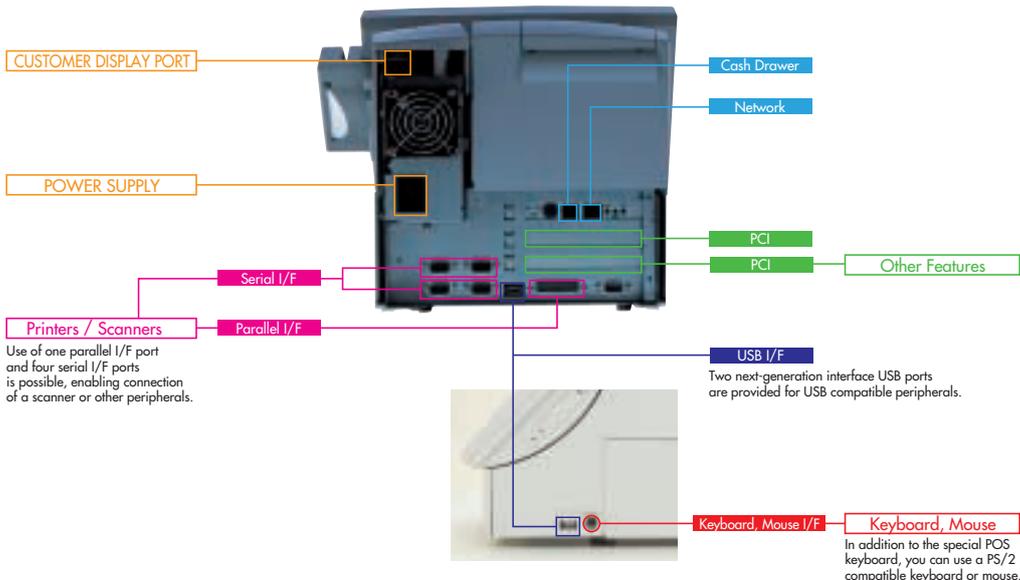Hybrid Printer (Slip & Thermal Receipt)

One Station Thermal Printer

Multiple Interfaces For Exceptional Expandability

CUSTOMER DISPLAY PORT

POWER SUPPLY

Cash Drawer

Network

PCI

PCI — Other Features

Serial I/F

Printers / Scanners

Parallel I/F

Use of one parallel I/F port
and four serial I/F ports
is possible, enabling connection
of a scanner or other peripherals.

USB I/F

Two next-generation interface USB ports
are provided for USB compatible peripherals.

Keyboard, Mouse I/F — Keyboard, Mouse

In addition to the special POS
keyboard, you can use a PS/2
compatible keyboard or mouse.

Extensive Range Of Options

A wide range of options are available for customizing your EPSON IR system.
These include a 24X speed CD-ROM drive, an MSR unit, a 28-key keyboard unit, and a selection of customer displays. You can also add a printer tray to enable the use of other EPSON TM Series printers.

CD-ROM Drive

MSR Unit

28-Key Keyboard Unit with
MSR Unit (MSR connectable)

Printer Tray for EPSON TM Series Printer

SPECIFICATIONS

CPU		Celeron™ 366 / 433 MHz
Memory		2 DIMM slots (256 MB max.)
Storage		FDD (1.44/3.5" standard), 1 HDD (3.5" 25.4 mm <1.0"> max. high) or 2 HDD (2.5" 9.5 mm <0.4"> max. high) can be installed
		CompactFlash™ card slot can be installed
Slots		PCI x 2
I/O		SERIAL x 6 (Internal x 2, External x 4)
		w/5V & 12V power for external by jumper switches (Internal two for Printer / Customer display and Touch panel)
		K/B & Mouse port w/PS/2 type (1 connector located on right side)
		24V Drawer port x 1
		Parallel x 1 (does not support OCIA)
		USB port x 2 (1 ch located on rear panel, 1 ch located on right side)
		Ethernet x 1 (10 BASE-T / 100 BASE-TX), wake on LAN support
Video		CHIPS 69000, SDRAM 2 MB
Others	Keylock	7 positions
	Power connector	For External TM printers (TM-H6000, T88, U200, U300, U325 series)
	Power switch	Soft switch on front for power off by software, main switch on right side
	Power supply	Built-in, 100-240V w/auto switch, 280VA
BIOS		APM / Plug & Play / DMI
OS		Option (MS-DOS®, Windows® 95, Windows® 98, Windows® 2000, Windows NT® Workstation 4.0)
Size		Base unit·····252 (W) x 454.5 (D) x 287 (H) mm <9.9" x 17.9" x 11.3"> (including cable cover)
Printer Units	Thermal Printer	56 column thermal (80 mm paper roll)
	Dot Matrix Printer	42 column dot matrix
	Hybrid Printer	Slip printer ··············· 42 column dot matrix
		Receipt printer ············· 56 column thermal
	TM Printer Tray	Tray for one station TM printers or for TM-H6000
LCD With Touch Panel		12.1" TFT color (800 x 600), Resistive touch panel (314 (W) x 254 (D) mm)
		10.4" DSTN color (640 x 480), Resistive touch panel (277 (W) x 208 (D) mm)
		10.4" DSTN color (800 x 600), Resistive touch panel (277 (W) x 208 (D) mm)
LCD Without Touch Panel		10.4" DSTN color (640 x 480) (277 (W) x 208 (D) mm)
Options	Customer Display	VFD (20 x 2-line display or 256 x 64 dots graphic display), w/Standard Pole (125 mm <4.9">), w/Extended Pole (244 mm <9.6">, OPTION)
	MSR Unit	ISO 1, 2 & 3 truck, Fixed to LCD or Keyboard unit, Communication via KB interface
	NVRAM Unit	32 KB SRAM with battery backup can be installed
	Sound	Exclusive Sound board can be installed
	CD-ROM Drive	24X speed slim drive
	Keyboard	POS 84-K/B, Programmable (277 (W) x 208 (D) mm <10.9" x 8.19">), 28-Key Keyboard Unit

TM Series

Fast Solutions For Multiple Printing Needs

- Hybrid printers
- Thermal line printers
- Impact dot matrix printers
- Inkjet printers
- Slip printers

Variety

Technology lineup
Impact, thermal, hybrid and inkjet printers for a wide range of applications.

Station lineup
A huge range of models including 1 station, 1.5 station, 2.5 station, Slip, and Label printers.

Two case colors
EPSON dark gray available for hospitality businesses and stores aiming for interior color coordination.
(TM-T88II, TM-T90/L90, U200 Series, U295)

Asian multi-language capability
Extension memory enables use of multiple languages including Chinese and Thai.
(TM-H6000II, H5000II, T88II, T90, L90, TM-U230, U200A, TM-J2000/J2100, U590)

ASB ··········	Automatic Status Back Function
Auto Load ··········	Auto Load
Autocutter ··········	Autocutter
2 Colors ··········	2 Colors
MICR ··········	MICR
Maintenance Memory ··········	Maintenance Memory
Display Port ··········	Display Port
Multi Language ··········	Multi Language
Dark Gray ··········	Dark Gray

Expandability

Universal interface
Wide range of interfaces to meet customers' current needs while enabling future upgrades.
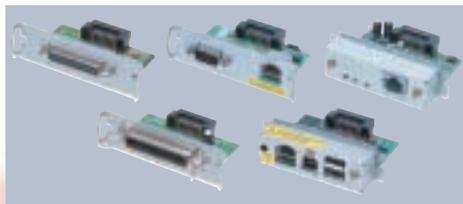
Multiple interfaces

DM connection
Interface on the printer side provided for connection of a DM customer display without taking up valuable counter space. Also leaves other interfaces free for additional applications.

IR connection
You can easily combine a TM Series printer with an IR Series model for future system upgrades.

Easy combination with a customer display

Variety
Security
Advanced Technology
Expandability

Ready To Meet All Your Needs

When EPSON designs a printer, it takes everything into consideration, not just whether you want receipt, journal, ticket or other output. This means there's an EPSON printer ready to deliver all the functions and features you need while meeting your connection and security requirements. Take a look at what EPSON has to offer.

Security

Maintenance memory
Number of lines printed and number of cutter operations performed are stored in memory to help decide when maintenance is required. (TM-H6000II, H5000II, U675, TM-J2000/J2100, T90, L90, U230)

Switch cover
Prevents accidental switch operation.

Cable management
Eliminates untidy cables while assuring firm connection.

Security plug
Prevents accidental unplugging. (PS-170)

Locked Unlocked

Advanced Technology

Industry-Leading Innovation
EPSON doesn't just focus on hardware development.
OLE POS application software simplifies POS application development in Windows® through the use of modules and objects.
It also enables control of POS devices regardless of the kind of hardware. JavaPOS™ does the same for application development in a Java environment. There's also ESC/POS®, EPSON's proprietary control system enabling versatile POS system construction with high scalability.
Other examples of EPSON's cutting-edge technology include customer displays ready to support USB and Ethernet interfaces.

Ethernet Interface

USB Interface

Technology at a glance

	Impact	Thermal	Hybrid	Inkjet
	Impact dot matrix	**Thermal Line**	**Hybrid**	**Inkjet**
Features	Extremely durable Low maintenance requirements EPSON models feature 9-pin technology for superior quality	Fast and quiet Direct printing to paper eliminates need for ribbon Easy paper loading	Combine thermal and impact printing capabilities	Fast and silent Ideal printers for PC output Plain paper printing capability 2-color printing
Good for	Speed and clarity Reliability Low consumables cost (ribbons, plain paper) Capabilities such as check endorsement, validation etc.	Virtually silent printing High-resolution graphics High-speed output Printing labels and tickets Barcode printing	Quiet, high-speed operation High-resolution graphics Multi-part printing Enable check endorsement, validation etc.	Speed and print clarity High-resolution graphics High-speed printing Barcode printing capability Highlight printing (company logos etc.)
Recommended EPSON printers	TM-U200 Series TM-U230 TM-U325 TM-U590 TM-U675 TM-U295 TM-U950	TM-T90 TM-L90 TM-L60II TM-T88II	TM-H5000II TM-H6000II	TM-J8000 TM-J2000/J2100

Packed with a range of innovative features, the Epson TM series lineup features five exciting new models. Designed especially with the retail, hospitality and service industries mind, you're sure to find a product that suits your precise needs. The single-color TM-J2000 and two-color TM-J2100 inkjet, and the two-color

Inkjet
TM-J2000/J2100

NEW

Compact, Inkjet POS Printer

High Performance

Although compact with a small, space-saving footprint, the EPSON TM-J2000/J2100 are ready to deliver outstanding performance. You get high-speed, high-quality output in one or two colors plus extremely quiet operation. For extra flexibility you can change paper width. And an autocutter is standard with partial or full cut selectable. Another handy feature of the TM-J2000/J2100 is that everything from roll paper loading, ink cartridge changing and receipt output is performed at the front of the unit, enabling it to be embedded in a counter.

2-Color Graphic Printing

With the TM-J2100, you can print eye-catching two-color logos and raised company emblems. These are ideal features when advertising or promoting store events such as sales. Two-color printing also helps you avoid forged receipts.
Ink Cartridge (Black/Red, Black/Blue, Black/Green)

Low Cost of Ownership

The TM-J2000/J2100 are packed with features designed to reduce the cost of ownership. Not only are these models durable with a printing life of 50-million lines, but the ink cartridges are built to keep on going and going.
An ink near-end detector prevents wasteful printing of blank receipts, and Epson's unique SEAJet® technology keeps energy consumption to an absolute minimum by relying on electrostatic rather than the usual thermal energy for power.

Print method		TM-J2000: 64 nozzle serial inkjet (180 dpi x 180 dpi)
		TM-J2100: 128 nozzle serial inkjet (180 dpi x 180 dpi)
Print font	Font	12 x 24 / 9 x 17
	Column capacity (columns)	82.5 mm: 42 / 56
		76 mm: 40 / 53
		70 mm: 36 / 48
		58 mm: 30 / 40
	Character size (mm)	1.41 (W) x 3.39 (H) / 0.99 (W) x 2.4 (H)
	Character set	ASCII, WPC1252, PC437, PC850, PC852, PC858,
		PC860, PC863, PC865, PC866
		Custom Graphic
		Bar code: UPC-A, UPC-E, JAN8 (EAN), JAN13 (EAN), 2 of 5 (ITF),
		CODE 39, CODE 93, CODE 128, CODABAR (NW7)
	Characters per inch	15 cpi (Font A) / 20 cpi (Font B)
Interfaces		RS-232, Bi-directional parallel,
		Dealer option: RS-485, USB , 10 Base-T I/F
Data buffer		4 KB or 512 byte
Print speed		Character: 14.7 lps (8 lines / inch)
		Graphic: 43 mm / sec.
		(76 mm width paper, Full columns print)
Paper	Dimensions (mm)	57.5 ± 0.5, 69.5 ± 0.5
		76 ± 0.5, 82.5 ± 0.5
	Thickness (mm)	0.06 to 0.11
Ink Cartridge		SJIC5 (Black for TM-J2000)
		SJIC3 (Black for TM-J2100)
		SJIC4 (Red, Blue, Green for TM-J2100)
Ink life		24×10^6 characters (Mono), 17×10^6 characters (2 colors)
Power		24 VDC ± 10%
Power consumption		Approx. 1 A (Operating)
D.K.D.function		2 drivers
Reliability		MTBF: 18×10^4 hours
		MCBF: 50×10^6 lines
Overall dimensions (mm)		195 (W) x 250 (D) (275 D with overhanging ledge) x 195 (H)
Mass (Approx.)		4.7 kg
EMC standards		VCCI class A, FCC class A, CE marking, Canada EMI, AS / NZS 3548
Power supply		PS-170 (option)
Safety standards		UL / CSA / TÜV (EN60950)

*cpi: characters per inch   lps: lines per second

ASB   Auto Load   Autocutter   2 Colors   Maintenance Memory   Display Port   Multi Language

TM-H6000II hybrid POS printers offer outstanding speed, low cost of ownership and high printing quality. And the TM-L90 and TM-T90 thermal printers for labels and receipts/tickets respectively are the first in their field to be designed for counter-top use.

Receipt: Thermal Line, Slip: 9-pin, serial dot

TM-H6000II

NEW

Hybrid

2-Color Printing **

The ability to print in two colors puts the Epson TM-H6000II in a class of its own*.

Previously unknown in such a printer, this exciting new feature enables users to print their logo and to highlight the parts of the label or ticket they want to emphasize.

Printing in two colors not only opens up a new world of design possibilities, but is sure to impress customers too.

*All data in this page is correct as of January 1, 2001.
**To print in two colors, users must load dedicated thermal paper and set the printer to the 2-color printing mode.

Check Printing Convenience

Enables quick printing and endorsement of checks without the need to manually reverse them.

Designed For Speed

Offers bi-directional minimum distance printing for high-speed output with batch processing capability.
High-speed graphics printing also possible.

Print method		Receipt: Thermal line printing, Slip: 9-pin serial impact dot matrix
		E / P: 8-pin shuttle impact dot matrix
Print font	Font	Receipt: 9 x 17 / 12 x 24, Slip: 5 x 9 / 7 x 9, E / P: 5 x 7
	Column capacity (columns)	Receipt: 56 / 42, Slip: 45 / 60, E / P: 40
	Character size (mm)	Receipt: 0.99 (W) x 2.4 (H) / 1.41 (W) x 3.39 (H)
		Slip: 1.24 (W) x 3.1 (H) / 1.56 (W) x 3.1 (H)
		E / P: 1.1 (W) x 2.42 (H)
	Character set	Receipt / Slip: 95 Alphanumeric, 37 International,
		128 x 12 Graphic
		Bar code: UPC-A, UPC-E, JAN13 (EAN), JAN8 (EAN),
		CODE 39, CODE 93, CODE 128, ITF, CODABAR
		PDF417(Receipt only)
	Characters per inch	Slip: 13.3 cpi / 17.8 cpi
Interfaces		RS-232, Bi-directional parallel,
		Dealer option: RS-485, USB, 10 Base-T I/F
Data buffer		4 KB or 45 bytes
Print speed		Receipt: Max. 170 mm / sec.
		Slip: Approx. 5.14 lps (at 40 columns, 17.8 cpi)
		E / P: Approx. 1.9 lps
Paper	Dimensions (mm)	Receipt: Thermal roll paper 79.5 ± 0.5 (W) x dia. 83.0
		Slip & E / P: 68 to 230 x 68 to 297 mm (W x L)
		NOTE: The minimum paper size is 68 x 152 mm
	Thickness (mm)	Receipt: 0.06 to 0.09, Slip: 0.09 to 0.31
		E / P: 0.09 to 0.2
Copy capability		Slip: One original and three copies
		E / P: One original single ply
Inked ribbon		Slip: ERC-32 (Purple, Black), E / P: ERC-41 (Purple, Black)
Ribbon life		Slip: Purple: 6×10^6 characters, Black: 4×10^6 characters
		E / P: Purple: 1×10^6 characters, Black: 8×10^5 characters
Power		24 VDC ± 10%
Power consumption		Receipt: Approx. 1.8 A
		Slip: Approx. 1.7 A
D.K.D.function		2 drivers
Reliability		MTBF: Receipt: 36×10^4 hours, Slip: 18×10^4 hours
		MCBF: Receipt: 52×10^6 lines, Slip: 18×10^6 lines
Overall dimensions (mm)		186 (W) x 298 (D) x 185 (H)
Mass (Approx.)		5.8 kg
EMC standards		VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply		PS-170, PS-180 (option)
Factory options		MICR device, Endorsement printer (E / P)
Safety standards		UL / CSA / TÜV (EN60950)

ASB | Auto Load | Autocutter | 2 Colors | MICR | Maintenance Memory | Display Port | Multi Language

Thermal Line
TM-T90

NEW

High speed

There's no need to keep customers waiting with the Epson TM-T90.

Printing at a maximum speed of 170 mm/sec, there's no doubt that it's the fastest printer in its class* – even when printing barcodes and logos.

* 2-color printing speed is 57 mm/sec.

Large paper rolls

The Epson TM-T90 provides you with all-round paper-handling versatility.

The ability to handle paper rolls of up to 100 mm in diameter reduces paper-loading downtime and saves on the cost of purchasing paper.

Selectable paper width

You don't have to buy another printer to print on different size paper.

With a simple spacer adjustment, users can adjust the TM-T90 to suit a variety of receipt sizes.

Available paper widths range from 58, 60 mm (with spacer), or 80 mm.

2-Color Printing **

The ability to print in two colors puts the Epson TM-T90 in a class of its own*.

Previously unknown in such a printer, this exciting new feature enables users to print their logo and to highlight the parts of the label or ticket they want to emphasize.

Printing in two colors not only opens up a new world of design possibilities, but is sure to impress customers too.

*All data in this page is correct as of January 1, 2001.

**To print in two colors, users must load dedicated thermal paper and set the printer to the 2-color printing mode.

EPSON DARK GRAY

Thermal Line

Print method	··	Thermal line printing
Print font	Font ·······························	9 x 17 / 12 x 24
	Column capacity (columns) ···	56 / 42
	Character size (mm) ···········	1.3 (W) x 2.4 (H) / 1.7 (W) x 3.4 (H)
	Character set ··················	95 Alphanumeric, 37 International, 128 x 11 Graphic, Barcode: UPC-A, UPC-E, JAN13(EAN), JAN8(EAN), CODE39, CODE93, CODE128, ITF, CODABAR, PDF417
	Characters per inch ············	20.0 cpi / 15.0 cpi
Interfaces	···	RS-232, Bi-directional parallel, Dealer option: RS-485, USB, 10 Base-T I/F
Data buffer	··	4 KB or 45 byte
Print speed	··	Max. 170 mm / sec.
Paper	Dimensions (mm) ··············	Rollpaper: Max. 79.5 ± 0.5 x dia. 100.0
	Thickness (mm) ·················	0.06 ~ 0.08
Power	··	24 VDC ± 7%
Power consumption	································	Approx. 1.7 A (mean)
D.K.D.function	····································	2 drivers
Reliability	··	MTBF: 36 x 10^4 hours MCBF: 70 x 10^6 lines
Overall dimensions (mm)	·······················	140 (W) x 201 (D) x 148 (H)
Mass (Approx.)	····································	1.8 kg
EMC standards	·····································	VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply	··	PS-170, PS-180 (option)
Safety standards	···································	UL / CSA / TÜV (EN60950)

ASB | Auto Load | Autocutter | 2 Colors | Maintenance Memory | Multi Language | Dark Gray

Easy to site

Available in two attractive colors, the TM-T90 and L90 is designed to blend into even the most refined of establishments. Install the printer vertically or horizontally, or use the optional wall-hanging bracket to move it off the counter altogether.

Cable management

The TM-T90 and L90 avoids the problem of unsightly cables by having all its interfaces located beneath the main unit. With convenient holes providing flexibility for installation, there's no need for cables to detract from the atmosphere of your establishment.

Thermal Line
TM-L90

NEW

Easy operation and maintenance
The TM-L90 is so easy to use that it requires almost no training for even the most inexperienced of staff. With no complicated paper feeding, the drop-in loading method allows operators to open the door and load new paper in a few short seconds.

Reliable
There's nothing more annoying for you – and your customers – than paper jams.
Not only are paper jams unlikely with the TM-L90, but they are easy to clear when they do occur. A long lifespan allows your TM-L90 to print up to one million labels or twenty million lines.
(MCBF: Seventy million lines when printing receipt)

Flexibility
The Epson TM-L90 can be operated using all standard commands and drivers for the retail environment. For Asian markets, a variety of languages are supported as a factory option.

EPSON DARK GRAY

Label Printing
Whether they contain barcodes, addresses, or other vital information, printed labels are fast becoming a necessity in a variety of consumer-orientated businesses.
For retailers of all kinds, ticketing agencies, post offices or delivery companies, a fast, accurate and versatile label printer has become an absolute must. And that is where Epson comes in.
The fastest label printer in its class* – and the first of its kind that can print in two colors* – the TM-L90 is revolutionizing the way that labels are printed.

*All data in this page is correct as of January 1, 2001.

Thermal Line

Compact
A compact design and small footprint makes the TM-T90 and L90 ideal for counters with limited space. Its low profile means that face-to-face contact with your customers is unimpeded, and there are no sharp corners or jutting out parts to get in the way.

Print method			Thermal line printing
Print font	Font		9 x 17 / 12 x 24
	Column capacity (columns)		64 / 48
	Character size (mm)		1.1 (W) x 2.1 (H) / 1.5 (W) x 3.0 (H)
	Character set		95 Alphanumeric, 37 International, 128 x 11 Graphic, Barcode: UPC-A, UPC-E, JAN13(EAN), JAN8(EAN), CODE39, CODE93, CODE128, ITF, CODABAR, PDF417, MaxiCode, QRCode
	Characters per inch		22.6 cpi / 16.9 cpi
Interfaces			RS-232, Bi-directional parallel, Dealer option: RS-485, USB, 10 Base-T I/F
Data buffer			4 KB or 45 byte
Print speed			Max. 150 mm / sec.
Paper	Dimensions (mm)		Rollpaper: Max. 79.5 ± 0.5 x dia. 90.0
	Thickness (mm)		0.06 ~ 0.15
Power			24 VDC ± 7%
Power consumption			Approx. 1.7 A (mean)
D.K.D.function			2 drivers
Reliability			MTBF: 36×10^4 hours MCBF: 70×10^6 lines (when printing receipt)
Overall dimensions (mm)			140 (W) x 148 (D) x 203 (H)
Mass (Approx.)			1.9 kg
EMC standards			VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply			PS-170, PS-180 (option)
Safety standards			UL / CSA / TÜV (EN60950)

ASB | Auto Load | Autocutter | 2 Colors | Maintenance Memory | Multi Language | Dark Gray
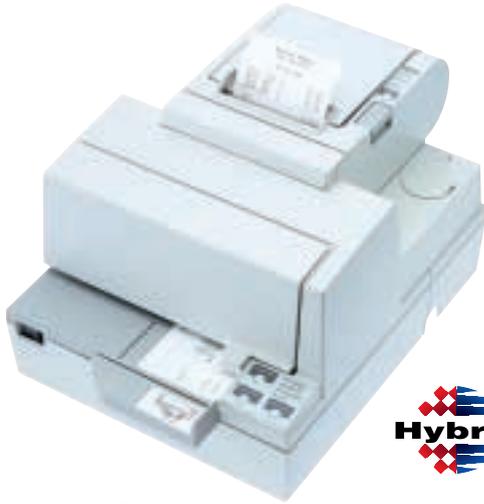
With a hybrid printer, you can enjoy the benefits of both thermal and impact printing.
Choose thermal printing when you need fast, quiet output of high-resolution, graphics-rich receipts.
If the demand is for optimum performance, copy capability and reliability for fast,
clear printing on pre-printed slip forms and checks, impact printing is ideal.

Receipt: Thermal Line, Slip: 9-pin, serial dot
TM-H5000II

High-End POS System Printer

Print method	⋯	Receipt: Thermal line printing, Slip: 9-pin serial impact dot matrix
Print font	Font	Receipt: 9 x 17 / 12 x 24, Slip: 7 x 9 / 9 x 9
	Column capacity (columns)	Receipt: 56 / 42, Slip: 88 / 66
	Character size (mm)	Receipt: 0.99 (W) x 2.4 (H) / 1.41 (W) x 3.39 (H),
		Slip: 1.3 (W) x 3.1 (H) / 1.6 (W) x 3.1 (H)
	Character set	95 Alphanumeric, 32 International,
		128 x 7 Graphic (Receipt)
		128 x 10 Graphic (Slip)
		Traditional / Simple Chinese, Thai, Japanese
	Characters per inch	Receipt: 20.0 cpi / 15.0 cpi, Slip: 16.7 cpi / 12.5 cpi
Interfaces		RS-232, Bi-directional parallel,
		Dealer option: RS-485, USB, 10 Base-T I/F
Data buffer		4 KB or 45 bytes
Print speed		Receipt: 120 mm / sec. (38 lps, 1 / 8" conversion), Slip: 311 / 233 cps
Paper	Dimensions (mm)	Receipt: Thermal roll paper 79.5 ± 0.5 (W) x dia. 83.0,
		Slip: 70 (W) x 70 (L) to 210 (W) x 297 (L)
	Thickness (mm)	Receipt: 0.06 to 0.07, Slip: 0.09 to 0.2, (total thickness: ~ 0.36)
Copy capability		Slip: One original and four copies
Inked ribbon		ERC-31 (Purple, Black)
Ribbon life		Purple: 7×10^6 characters, Black: 4.5×10^6 characters
Power		24 VDC ± 10%
Power consumption		Receipt: Approx. 1.7 A, Slip: Approx. 1.9 A
D.K.D.function		2 drivers
Reliability		MTBF: Receipt: 36×10^4 hours, Slip: 18×10^4 hours
		MCBF: Receipt: 52×10^6 lines, Slip: 29×10^6 lines
Overall dimensions (mm)		252 (W) x 331 (D) x 201 (H), (excluding extended table)
Mass (Approx.)		6.5 kg
EMC standards		VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply		PS-170 (option)
Factory options		MICR device
Safety standards		UL / CSA / TÜV(EN60950)

Thermal & Dot Output
Application versatility with thermal and dot matrix output.
Plus fast 38 lps (1/8") receipt printing and ladder and
fence bar code printing.

Wide Slip Printing
Able to print slips up to a width of 88 columns,
with one original and four copies.
Packed with other convenient features.

ASB Auto Load Autocutter MICR Maintenance Memory Display Port Multi Language

Thermal Line
TM-T88II

High-Performance Thermal Printer

Print method		Thermal line printing
Print font	Font	9 x 17 / 12 x 24
	Column capacity (columns)	56 / 42
	Character size (mm)	0.99 (W) x 2.4 (H) / 1.41 (W) x 3.39 (H)
	Character set	95 Alphanumeric, 37 International, 128 x 8 Graphic
		Traditional / Simple Chinese, Thai, Japanese
		Bar code: UPC-A, UPC-E, JAN8 (EAN), JAN13 (EAN),
		CODE39, CODE93, CODE128, ITF, CODABAR
	Characters per inch	20.0 cpi / 15.0 cpi
Interfaces		RS-232, Bi-directional parallel,
		Dealer option: RS-485, USB, 10 Base-T I/F
Data buffer		4 KB or 45 bytes
Print speed		120 mm / sec. (38 lps, 1 / 8" conversion)
Paper	Dimensions (mm)	Roll paper: 79.5 ± 0.5 (W) x dia. 83.0
	Thickness (mm)	0.06 to 0.07
Power		24 VDC ± 7%
Power consumption		Approx. 1.7 A (mean)
D.K.D.function		2 drivers
Reliability		MTBF: 36×10^4 hours
		MCBF: 52×10^6 lines
Overall dimensions (mm)		145 (W) x 195 (D) x 148 (H)
Mass (Approx.)		1.8 kg
EMC standards		VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply		PS-170 , PS-180 (option)
Factory options		Wall-hanging bracket WH-10
Safety standards		UL / CSA / TÜV (EN60950)

EPSON DARK GRAY

Fast, Versatile Printing
Top speed of 28.4 lps in this model completes
large-volume tasks fast.
Smooth and scalable font printing capability
with a choice of font sizes, and fence and ladder bar codes.

Ergonomic Design
Handy features include easy roll paper loading and
automatic receipt cutting.
Also comes with the built-in drawer kickout interface
common to all TM Series models.

ASB Auto Load Autocutter Multi Language Dark Gray

THERMAL LINE PRINTERS

Extremely fast, quiet output and exceptionally clear characters are just some of the advantages of thermal printers.
There's no need to change the ribbon because printing is performed directly onto the paper.
Paper loading is easy due to a simplified paper path.
And printing is possible on a wide range of media, including polypropylene and clear labels.

9-pin, serial dot

TM-U950/U925

Versatile Printer For Large POS Systems

Impact dot matrix

Print method		9-pin, serial impact dot matrix
Print font	Font	7 x 9 / 9 x 9
	Column capacity (columns)	Receipt (Journal): 40 / 30, Slip: 88 / 66 (TM-U950)
		Receipt: 40 / 30, Slip: 88 / 66 (TM-U925)
	Character size (mm)	1.3 (W) x 3.1 (H) / 1.6 (W) x 3.1 (H)
	Character set	95 Alphanumeric, 32 International,
		128 x 8 Graphic
	Characters per inch	16.7 cpi / 12.5 cpi
Interfaces		RS-232, Bi-directional parallel (TM-U950)
		RS-232 (TM-U925)
Data buffer		2 KB or 32 bytes
Print speed		311 / 233 cps
Paper	Dimensions (mm)	Receipt (Journal): Roll paper: 69.5 ± 0.5 (W) x dia. 83.0
		Slip: 70 (W) x 70 (L) to 210 (W) x 297 (L) (TM-U950)
		Receipt: Roll paper: 69.5 ± 0.5 (W) x dia. 83.0
		Slip: 70 (W) x 70 (L) to 210 (W) x 297 (L) (TM-U925)
	Thickness (mm)	Receipt (Journal): 0.06 to 0.09, Slip: 0.09 to 0.36 (TM-U950)
		Receipt: 0.06 to 0.09, Slip: 0.09 to 0.36 (TM-U925)
Copy capability		One original and four copies (for slip)
Inked ribbon		ERC-31 (Purple, Black)
Ribbon life		Purple: 7×10^6 characters, Black: 4.5×10^6 characters
Power		24 VDC ± 10%
Power consumption		Approx. 1.8 A (mean)
D.K.D.function		2 drivers
Reliability		MTBF: 18×10^4 hours
		MCBF: 18×10^6 lines
Overall dimensions (mm)		251 (W) x 298 (D) x 194.5 (H) (TM-U950), 251 (W) x 298 (D) x 193.7 (H) (TM-U925)
Mass (Approx.)		5.6 kg
EMC standards		VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply		PS-170 (option)
Factory options		MICR device
Safety standards		UL / CSA / TÜV (EN60950)

ASB   Auto Load   Autocutter   MICR   Display Port

Outstanding Performance & Versatility

Prints everything from slips and receipts to journals.
Ultra-fast output of up to 88 columns on A4-size paper
with bi-directional, logic-seeking printing.

Reliability & Convenience

The reliability is there. Plus a wide range of handy
features including automatic paper cutting
and easy paper loading and ribbon changing.

9-pin, serial dot

TM-U675

High-Performance, Multi-Purpose Printer

Impact dot matrix

Print method		9-pin serial impact dot matrix
Print font	Font	5 x 9 / 7 x 9
	Column capacity (columns)	Receipt: 37 / 50, Slip / Validation: 45 / 60
	Character size (mm)	1.56 (W) x 3.1 (H) / 1.24 (W) x 3.1 (H)
	Character set	95 Alphanumeric, 37 International,
		128 x 12 Graphic
	Characters per inch	13.3 cpi / 17.8 cpi
Interfaces		RS-232, Bi-directional parallel,
		Dealer option: RS-485, USB, 10 Base-T I/F
Data buffer		4 KB or 45 bytes
Print speed		Approx. 5.14 lps (at 40 columns, 17.8 cpi)
Paper	Dimensions (mm)	Roll paper: 82.5 ±0.5 (W) x dia. 83.0
		Slip: 70 (W) x 150 (L) to 148 (W) x 297 (L)
		Validation: 148 (W) x 70 (L) to 150 (W) x 210 (L)
	Thickness (mm)	Roll paper: 0.06 to 0.085 / sheet
		Slip: 0.09 to 0.2 (total thickness: 0.09 to 0.31)
Copy capability		One original and two copies
Inked ribbon		ERC-32 (Purple, Black)
Ribbon life		Purple: 6×10^6 characters , Black: 4×10^6 characters
Power		24 VDC ±10%
Power consumption		Approx.1.8 A (mean)
D.K.D.function		2 drivers
Reliability		MTBF: 18×10^4 hours MCBF: 37×10^6 lines
Overall dimensions (mm)		186 (W) x 298 (D) x 195 (H)
Mass (Approx.)		5.8 kg
EMI standards		VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply		PS-170 (option)
Factory options		MICR device, Autocutter
Safety standards		UL / CSA / TÜV (EN60950)

ASB   Auto Load   Autocutter   MICR   Maintenance Memory   Display Port

Fast & Super Quiet

Throughput is fast thanks to bi-directional minimum
distance printing.
Quieter than other impact dot matrix printers of its class.

Handy Features

ASB (Automatic Status Back) function automatically
transmits changes in printer status.
Also offers the convenience of two-way paper loading.

Impact Dot Matrix Printers

Widely used for receipt printing, dot matrix printers are the only choice when the demand is for multi-part output. Other dot matrix printer benefits include exceptional durability that keeps maintenance costs low, and economical operation. And the printing ribbon only needs to be changed occasionally. With EPSON dot matrix printers, you also get high quality results thanks to the 9-pin heads.

9-pin, serial dot
TM-U375

High-Performance 1.5 Station Printer

Print method		9-pin, serial impact dot matrix
Print font	Font	5 x 9 / 7 x 9
	Column capacity (columns)	33 / 40
	Character size (mm)	1.6 (W) x 3.1 (H) / 1.2 (W) x 3.1 (H)
	Character set	95 Alphanumeric, 32 International, 128 x 9 Graphic
	Characters per inch	13.3 cpi / 16 cpi
Interfaces		RS-232, Bi-directional parallel
Data buffer		4 KB or 40 bytes
Print speed		3.5 lps (at 40 columns, 16 cpi), 5.4 lps (at 20 columns, 16 cpi)
Paper	Dimensions (mm)	Roll paper: 76.0 ± 0.5 (W) x dia. 83.0
		Slip: 70 (W) x 160 (L) to 182 (W) x 257 (L)
		Validation: 135 (W) x 70 (L) to 182 (W) x 257 (L)
	Thickness (mm)	Roll paper 0.06 to 0.085 / sheet
		Slip: 0.09 to 0.12 (Total thickness 0.09 to 0.31)
Copy capability		Roll Paper: One original and one copy
		Slip: One original and two copies
Inked ribbon		ERC-38 (Purple, Black)
Ribbon life		Purple: 4×10^6 characters, Black: 3×10^6 characters
Power		24 VDC ± 10%
Power consumption		Approx. 1.4 A
D.K.D.function		2 drivers
Reliability		MTBF: 18×10^4 hours
		MCBF: 18×10^6 lines
Overall dimensions (mm)		186 (W) x 327 (D) x 145 (H)
Mass (Approx.)		4 kg
EMI standards		VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply		PS-170 (option)
Safety standards		UL / CSA / TÜV (EN60950)

ASB   Auto Load   Display Port

Standard 1.5 Station Printer
Basic 1.5 station model with exceptionally low height. Features a movable platen and easy-to-use design for simple roll paper loading, slip insertion and maintenance.

9-pin, serial dot
TM-U325

High-Performance 1.25 Station Printer

Print method		9-pin, serial impact dot matrix
Print font	Font	7 x 9 / 9 x 9
	Column capacity (columns)	40 / 42 or 33 / 35 (3 half dots / 2 half dots space)
	Character size (mm)	1.2 (W) x 3.1 (H) / 1.6 (W) x 3.1 (H)
	Character set	95 Alphanumeric / 32 International, 128 x 8 Graphic
	Characters per inch	16 or 17.8 cpi / 13.3 or 14.5 cpi
Interfaces		RS-232, Bi-directional parallel, Dealer option: RS-485, USB, 10 Base-T I/F
Data buffer		4 KB or 45 bytes
Print speed		Approx. 3.5 lps (at 40 columns, 16 cpi) Approx. 6.4 lps (at 16 columns, 16 cpi)
Paper	Dimensions (mm)	Receipt: 76.0 ± 0.5 (W) x dia. 83.0
		Validation: 135 (W) x 70 (L) to 182 (W) x 182 (L) (Maximum print lines: 9 lines)
	Thickness (mm)	Receipt: 0.06 to 0.085 (total thickness:0.2mm or less)
		Validation: 0.09 to 0.12 (total thickness 0.09 to 0.31)
Copy capability		One original and two copies
Inked ribbon		ERC-38 (Purple, Black)
Ribbon life		Purple: 4×10^6 characters, Black: 3×10^6 characters
Power		AC adapter (included)
Power consumption		Approx. 43 W
D.K.D.function		2 drivers
Reliability		MTBF: 18×10^4 hours
		MCBF: 49×10^6 lines
Overall dimensions (mm)		164 (W) x 240 (D) x 136 (H)
Mass (Approx.)		2.3 kg
EMC standards		FCC class A
Power supply		Exclusive AC adapter (included)
Safety standards		UL / CSA

ASB   Auto Load

Versatile Printing
Receipt printing and multi-line validation up to 9 lines from a compact, space-saving unit.

Quiet, Fast Output
Designed for environments where quiet operation is a must. Features logic-seeking control for fast 6.4 lps receipt and multi-line validation printing.

TM-U200 *Series*

9-pin, serial dot

EPSON
DARK GRAY

Impact dot matrix

Fast, Lightweight & Rugged
Tough construction assures outstanding reliability.
Fast 3.5 lps red/black printing for 40 columns
and 6.4 lps for 16 columns.

Feature-Packed
Complete with ESC/POS®-based command system for smooth
operation. Also features Automatic Status Back for quick
confirmation of printer operation status, and semi-automatic
paper loading.

MODEL	Item Standard device / unit	Applications	Appearance
Type A	Take up / Automatic cutter	Receipt & Journal Printer	
Type B	Automatic cutter	Kitchen Receipt / ticket	
Type D		Receipt	

Print method	9-pin, serial impact dot matrix
Print font······· Font	7 x 9 / 9 x 9
Column capacity (columns)	40 / 42 or 33 / 35
Character size (mm)	1.2 (W) x 3.1 (H) / 1.6 (W) x 3.1 (H)
Character set	95 Alphanumeric, 32 International, 128 x 8 Graphic Traditional / Simple Chinese, Thai, Japanese (A type)
Characters per inch	17.8 / 16 cpi or 14.5 / 13.3 cpi
Interfaces	RS-232, Bi-directional parallel, Dealer option: RS-485, USB, 10 Base-T I/F
Data buffer	1 KB or 40 bytes
Print speed	3.5 lps (at 40 columns, 16 cpi) 6.4 lps (at 16 columns, 16 cpi)
Paper·········Dimensions (mm)	Roll paper: 76.0 ± 0.5 (W) x dia. 83.0
Thickness	0.06 to 0.085
Copy capability	A type: One original and two copies B type: One original and one copy D type: One original and two copies
Inked ribbon	ERC-38 (Purple, Black, Black / Red)
Ribbon life	Purple: 4 x 10^6 characters, Black: 3 x 10^6 characters B / R: 15 x 10^5 characters (Black) / 75 x 10^4 characters (Red)
Power	AC adapter (included)
Power consumption	Approx. 43 W
D.K.D.function	2 drivers
Reliability	MTBF: 18 x 10^4 hours MCBF: 18 x 10^6 lines
Overall dimensions (mm)	A type: 160 (W) x 295 (D) x 160 (H) B type: 160 (W) x 248 (D) x 150 (H) D type: 160 (W) x 248 (D) x 133 (H)
Mass (Approx.)	A type: 2.5 kg, B type: 2.5 kg, D type: 2.2 kg
EMC standards	VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply	Exclusive AC adapter (included)
Factory options	Near-end sensor
Safety standards	UL / CSA / TÜV (EN60950)

ASB Auto Load Autocutter **2** Colors Multi Language Dark Gray

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TM-U230

9-pin, serial dot

Impact dot matrix

Water resistant and easy to clean
With a water-resistant case and a unique drain channel,
the TM-U230 is a perfect addition to any busy kitchen.
Its flat surface makes it easy to wipe clean, while a fine
coating makes it possible to remove oils, sauces, and
other kitchen stains.

Flexible and versatile
Install the TM-U230 wherever you want: vertically
(paper exit at the front), horizontally (paper exit on top),
or hanging on the wall (bracket optional).
And with Ethernet and USB available as options, you can
be sure that the TM-U230 will fit into any kitchen network.
Ethernet capability allows this unique kitchen printer to be
connected to a large network or an Order Entry System.

Print method	9-pin, serial impact dot matrix
Print font······· Font	7 x 9 / 9 x 9
Column capacity (columns)	40 / 42 or 33 / 35
Character size (mm)	1.2 (W) x 3.1 (H) / 1.6 (W) x 3.1 (H)
Character set	95 Alphanumeric, 37 International, 128 x 8 Graphic Traditional / Simple Chinese,
Characters per inch	16 or 17.8 cpi, 13.3 or 14.5 cpi
Interfaces	RS-232, Bi-directional parallel, Dealer option: RS-485, USB, 10 Base-T I/F
Data buffer	1 KB / 16 KB
Print speed	3.5 lps (at 40 columns, 16 cpi) 6.4 lps (at 16 columns, 16 cpi)
Paper········· Dimensions (mm)	Roll paper: 76.0 ± 0.5 (W) x dia. 83.0
Thickness (mm)	0.06 to 0.085
Copy capability	One original
Inked ribbon	ERC-38 (Purple, Black, Black / Red)
Ribbon life	Purple: 4 x 10^6 characters, Black: 3 x 10^6 characters B / R: 15 x 10^5 characters (Black), 75 x 10^4 characters (Red)
Power	24 VDC ± 5%
Power consumption	Approx. 43 W
D.K.D.function	2 drivers
Reliability	MTBF: 18 x 10^4 hours MCBF: 18 x 10^6 lines
Overall dimensions (mm)	166 (W) x 168 (D) x 259.5 (H)
Mass (Approx.)	2.7 kg
EMC standards	VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply	Power supply built-in model / Power supply separate model
Factory options	WH-10
Safety standards	UL / CSA / TÜV (EN60950)

ASB Auto Load Autocutter **2** Colors Multi Language

Inkjet Printers

Inkjet printers feature ultra-fine nozzles to spray ink. The advantages of these printers include silent operation, fast throughput, and high-resolution results in multiple colors. Inkjet printers also enable plain paper printing.

InkJet
TM-J8000

Inkjet POS Printer

Print method		Serial Inkjet dot matrix (128 nozzle / 360 dpi)
Print font	Font	22 x 48 / 18 x 36
	Column capacity (columns)	Receipt: 42 / 51, Slip: 130 / 158
	Character size (mm)	1.48 (W) x 3.32 (H) / 1.20 (W) x 2.47 (H)
	Character set	95 Alphanumeric, 32 International, 128 x 9 Graphic Bar code: UPC-A, UPC-E, JAN13 (EAN), 2 of 5 (ITF), CODE 39, CODE 93, CODE 128
	Characters per inch	16.4 cpi / 20 cpi
Interfaces		RS-232, Bi-directional parallel, Dealer option: RS-485, USB, 10 Base-T I/F
Data buffer		4 KB or 45 bytes
Print speed		Receipt: 10.1 lps (at 42 columns) / 14.7 lps (at 51 columns) Slip: 4.9 lps (at 130 columns) / 7.3 lps (at 158 columns)
Paper	Dimensions (mm)	Receipt: 76 ± 0.5 x dia. 83.0 Slip: (W) 68 to 215.9 / (L) 68 to 297.0
	Thickness (mm)	Receipt: 0.06 to 0.09, Slip: 0.09 to 0.15
Ink cartridge		SJIC1 (Black)
Ink life		12×10^6
Power		AC 85 V - 264.5 V (only for single phase)
Power consumption		25 W (operating)
D.K.D.function		2 drivers
Reliability		MTBF: 18×10^4 hours MCBF: 37×10^6 lines
Overall dimensions (mm)		325 (W) x 300 (D) x 200 (H)
Mass (Approx.)		9.0 kg
EMC standards		VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply		Universal power supply is built in
Safety standards		UL / CSA / TÜV (EN60950)

ASB Auto Load Autocutter Display Port

Fast Output, Plain Paper Convenience
Featuring SEAJet® technology, printing speed is about 15 lps on roll paper and 3 pages per minute on A4 size slips.

Exceptionally Quiet
Quiet operation makes the TM-J8000 ideal for use in hotels, bookstores, coffee shops and other environments where silence is required.

9-pin, serial dot
TM-U590

Wide Slip Printer

Print method		9-pin, serial impact dot matrix
Print font	Font	7 x 9 / 9 x 9
	Column capacity (columns)	88 / 66
	Character size (mm)	1.3 (W) x 3.1 (H) / 1.6 (W) x 3.1 (H)
	Character set	95 Alphanumeric, 32 International, 128 x 10 Graphic
	Characters per inch	16.7 cpi / 12.5 cpi
Interfaces		RS-232, Bi-directional parallel, Dealer option: RS-485, USB, 10 Base-T I/F
Data buffer		4 KB or 69 bytes
Print speed		311 / 233 cps
Paper	Dimensions (mm)	70 (W) x 70 (L) to 210 (W) x 297 (L)
	Thickness (mm)	0.09 to 0.2 (total thickness: ~ 0.36)
Copy capability		One original and four copies
Inked ribbon		ERC-31 (Purple, Black)
Ribbon life		Purple: 7×10^6 characters, Black: 4.5×10^6 characters
Power		24 VDC ± 10%
Power consumption		Approx. 1.9 A (mean)
D.K.D.function		2 drivers
Reliability		MTBF: 18×10^4 hours MCBF: 29×10^6 lines
Overall dimensions (mm)		252 (W) x 266 (D) x 185 (H)
Mass (Approx.)		5 kg
EMC standards		VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply		PS-170 (option)
Safety standards		UL / CSA / TÜV (EN60950)

ASB Display Port Multi Language

Versatile Printing
Designed to handle virtually any printing task including output of slips up to 88 columns wide.
Can also provide four copies with one original.

User-Friendly
Complete with the ESC/POS® command system for smooth, error-free operation. Printer operation status provided by the Automatic Status Back function.
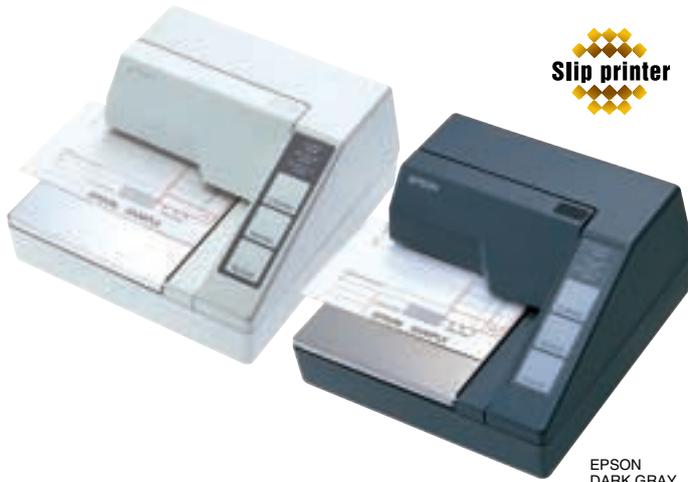
Slip Printers

Compact, easy-to-use and exceptionally reliable, EPSON's slip printers have what it takes to satisfy POS, banking and other transaction needs. One valuable feature is the ability to print slips with multiple copies.

7-pin, shuttle dot

TM-U295

Slip printer

Ultra-Compact Slip Printers

EPSON
DARK GRAY

World's Smallest Slip Printer
Combines printing versatility and ultra-compact, space-saving design.

Printing Versatility
Provides a choice of character sizes, and enables printing in four directions.

Print method	7-pin, shuttle impact dot matrix
Print font · Font	5 x 7 / 7 x 7
Column capacity (columns)	35 / 42
Character size (mm)	1.6 (W) x 2.9 (H) / 1.3 (W) x 2.9 (H)
Character set	95 Alphanumeric, 32 International, 128 x 3 Graphic
Characters per inch	13.5 cpi / 16.2 cpi
Interfaces	RS-232, Bi-directional parallel
Data buffer	512 bytes or 35 bytes
Print speed	2.1 lps
Paper · Dimensions (mm)	80 (W) x 69 (L) to 182 (W) x 257 (L)
Thickness (mm)	0.09 to 0.25 (total thickness with copy: ~ 0.35)
Copy capability	One original and two copies
Inked ribbon	ERC-27 (Purple)
Ribbon life	15×10^5 characters
Power	24 VDC ± 10%
Power consumption	Approx. 600 mA (mean)
D.K.D.function	2 drivers
Reliability	MTBF: 18×10^4 hours / MCBF: 7×10^6 lines
Overall dimensions (mm)	180 (W) x190.5 (D) x 101.5 (H)
Mass (Approx.)	1.6 kg
EMC standards	VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B
Power supply	PS-170 (option)
Safety standards	UL / CSA / TÜV (EN60950)

ASB **Dark Gray**
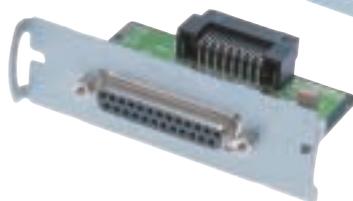
Expandability

UB-E01

UB-U01II

UB-P02II

UB-S09

UB-S01/02

Multiple Interfaces
TM Series printers feature a wide range of interfaces, including USB & Ethernet interfaces. Besides satisfying current customer needs, these enable easy upgrading in the future, an important consideration for growing businesses.

	UB-S01	UB-S02	UB-S09	UB-P02II	UB-U01II	UB-U02II	UB-E01
Data transfer format	RS-232	RS-485	RS-232	IEEE1284	USB 1.1	USB 1.1	10BASE-T
Remarks			With DM-D connector		With hub	No hub	

• OPTIONS •

POWER SUPPLY

PS-170

Input	Output	Plug	Safety standard		
			UL	CSA	TÜV
100 to 240V AC	24 VDC, 2.0A	3P power jack	●	●	●

PS-180

Input	Output	Plug	Safety standard		
			UL	CSA	TÜV
100 to 240V AC	24 VDC, 2.0A	3P power jack	●	●	●

ACCESSORIES

DC-21
DC cable set
(for TM series)
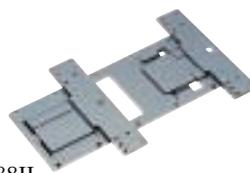
WH-10
Wall-hanging bracket
for TM-T90/L90, TM-T88II,
TM-U230

WT-5000
Extension table
for TM-H5000II

RIBBON CASSETTES

ERC-38
for TM-U200,
TM-U375, TM-U230
(Purple, Black, Black/Red)

ERC-31
for TM-U950/U925,
TM-U590, TM-H5000II,
(Purple, Black)

ERC-27
for TM-U295
(Purple, Black)

ERC-32
for TM-H6000II, TM-U675
(Purple, Black)

ERC-41
for TM-H6000II
(Endorsement Printer)
(Purple, Black)

*An EPSON ribbon is recommended.

INK CARTRIDGES

SJIC1
for TM-J8000
(Black)

SJIC3
for TM-J2100
(Black)

SJIC4
for TM-J2100
(Red, Blue,
Green)
Used with SJIC3

SJIC5
for TM-J2000
(Black)

CUSTOMER DISPLAY

DM-D Series

EPSON Setting POS Standards

Unified POS Related Drivers

Unified POS is a combined two existing device interface standard under one specification of Point of Service Devices. Herein, two existing device interface standard is OPOS and JavaPOS™. Epson is a key player of these (Unified POS, OPOS and JavaPOS™), and promote the standardization of peripheral device control drivers for the retail market. At the same time, we also provide a wide range of customers with drivers to support POS applications development. Working from customer feedback, our future aims include offering still better functions and establishing yet more industry standards.

EPSON OPOS ADK

EPSON OPOS ADK, provides the versatility and convenience of applications development in Windows® 95, Windows NT®, Windows® 98 and Windows® 2000 environments. Besides dramatically reducing the number of application steps, EPSON OPOS ADK makes system upgrading pretty easy.
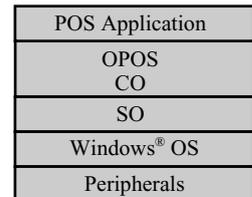
EPSON JavaPOS™ ADK

Java™ is a platform-independent language widely used for POS and other applications. JavaPOS™ standard API makes peripheral devices easy to operate and supports quick system startup. EPSON JavaPOS™ ADK provides support in mainly Linux® environments.
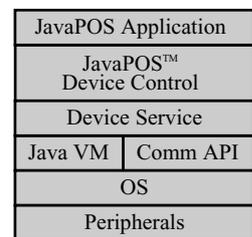
Standard Specifications

~ OPOS APG 1.5
~ JavaPOS™ PG 1.5

OPOS Architecture

POS Application
OPOS CO
SO
Windows® OS
Peripherals

JavaPOS™ Architecture

| JavaPOS Application |
| --- |
| JavaPOS™ Device Control |
| Device Service |
| Java VM | Comm API |
| OS |
| Peripherals |

Migration To Non-POS Markets

EPSON Advanced Drivers

EPSON currently provide a universal mini driver with simple printing functions for non-POS markets. However, to meet the needs of non-retail markets, EPSON now offers the Advanced Printer Driver, an upgraded version of the Universal mini driver featuring a Status Monitor function.

Advanced Printer Driver for Windows®

Advanced Printer Driver: Universal mini driver + Status API
1. Status API allows use of EPSON's original Printer Status function
2. Easy applications development in non-POS Windows® environments
3. Enables use of unique TM Series printer functions for other environments (image printing, network connection, spooling processing, etc.)
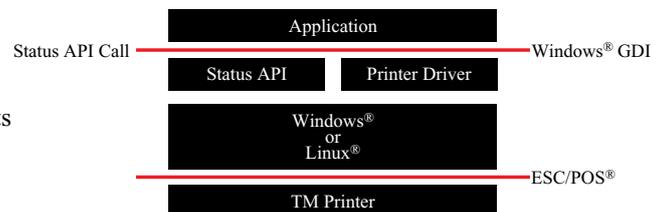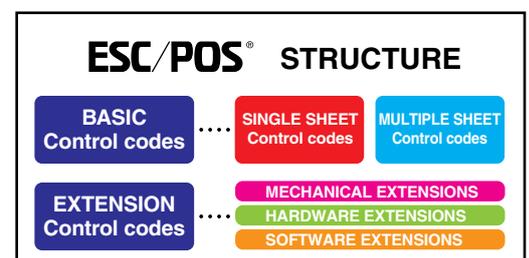
Advanced Linux® Drivers

EPSON is now developing a Linux® Driver as an alternative operating system to Windows®.

ESC/POS® Proprietary Command System

EPSON took the initiative by introducing ESC/POS®, a proprietary POS printer command system including patented commands and enabling versatile POS system construction with high scalability. Compatible with all types of EPSON POS printers and displays, this proprietary control system also offers the flexibility to easily make future upgrades. Its popularity is worldwide.

ESC/POS® STRUCTURE

BASIC Control codes	SINGLE SHEET Control codes	MULTIPLE SHEET Control codes
EXTENSION Control codes	MECHANICAL EXTENSIONS	
	HARDWARE EXTENSIONS	
	SOFTWARE EXTENSIONS	

ESC/POS is a registered trademark of SEIKO EPSON CORPORATION.
EPSON is a member of the OPOS committee and JavaPOS initiative.

TM SERIES SPECIFICATIONS

Item	Hybrid Printer		Thermal Line Printer	
	NEW TM-H6000II	**TM-H5000II**	**NEW TM-T90**	**NEW TM-L90**
Appearance				
Print method	Receipt: Thermal line printing Slip: 9-pin serial impact dot matrix E / P: 8-pin shuttle impact dot matrix	Receipt: Thermal line printing Slip: 9-pin serial impact dot matrix	Thermal line printing	
Print Font — Font	Receipt: 9 x 17 / 12 x 24 Slip: 5 x 9 / 7 x 9 E / P: 5 x 7	Receipt: 9 x 17 / 12 x 24 Slip: 7 x 9 / 9 x 9	9 x 17 / 12 x 24	
Column capacity (columns)	Receipt: 56 / 42 Slip: 45 / 60 E / P: 40	Receipt: 56 / 42 Slip: 88 / 66	56 / 42	64 / 48
Character size (mm)	Receipt: 0.99 (W) x 2.4 (H) / 1.41 (W) x 3.39 (H) Slip: 1.24 (W) x 3.1 (H) / 1.56 (W) x 3.1 (H) E / P: 1.1 (W) x 2.42 (H)	Receipt: 0.99 (W) x 2.4 (H) / 1.41 (W) x 3.39 (H) Slip: 1.3 (W) x 3.1 (H) / 1.6 (W) x 3.1 (H)	1.3 (W) x 2.4 (H) / 1.7 (W) x 3.4 (H)	1.1 (W) x 2.1 (H) / 1.5 (W) x 3.0 (H)
Character set	Receipt / Slip: 95 Alphanumeric, 37 International, 128 x 12 Graphic Bar code: UPC-A, UPC-E, JAN13 (EAN), JAN8 (EAN), CODE39, CODE93, CODE128, ITF, CODABAR, PDF417 (Receipt only)	95 Alphanumeric 32 International 128 x 7 Graphic (Receipt) 128 x 10 Graphic (Slip) Traditional / Simple Chinese, Thai, Japanese	95 Alphanumeric, 37 International, 128 x 11 Graphic Bar code: UPC-A, UPC-E, JAN13 (EAN), JAN8 (EAN), CODE39, CODE93, CODE128, ITF, CODABAR, PDF417, Maxicode (L90 only), QRCode (L90 only)	
Characters Per Inch	Slip: 13.3 cpi / 17.8 cpi	Receipt: 20.0 cpi / 15 .0 cpi Slip: 16.7 cpi / 12.5 cpi	20.0 cpi / 15.0 cpi	22.6 cpi / 16.9 cpi
Interfaces*	RS-232, Bi-directional parallel, RS-485, USB, 10 Base-T I/F			
Data buffer	4 KB or 45 bytes			
Print speed	Receipt: Max. 170 mm / sec. Slip: Approx. 5.14 lps (at 40 columns, 17.8 cpi) E / P: Approx. 1.9 lps	Receipt: 120 mm / sec. (38 lps,1 / 8" conversion) Slip: 311 / 233 cps	Max. 170 mm / sec.	Max. 150 mm / sec.
Paper — Dimensions (mm)	Receipt: Thermal roll paper 79.5 ± 0.5 (W) x dia. 83.0 Slip & E / P: 68 to 230 x 68 to 297 (W x L) NOTE: The minimum paper size is 68 x 152 mm	Receipt: Thermal roll paper 79.5 ± 0.5 (W) x dia. 83.0 Slip: 70 (W) x 70 (L) to 210 (W) x 297 (L)	Roll paper: Max. 79.5 ± 0.5 (W) x dia. 100.0	Roll paper: Max. 79.5 ± 0.5 (W) x dia. 90 .0
Thickness (mm)	Receipt: 0.06 to 0.09 Slip: 0.09 to 0.31 E / P: 0.09 to 0.2	Receipt: 0.06 to 0.07 Slip: 0.09 to 0.2 (total thickness: ~ 0.36)	0.06 ~ 0.08	0.06 ~ 0.15
Copy capability	Slip: One original and three copies E / P: One original single ply	Slip: One original and four copies	–	
Inked ribbon	Slip: ERC-32 (Purple, Black) E / P: ERC-41 (Purple, Black)	ERC-31 (Purple, Black)	–	
Ribbon Life (characters)	Slip: Purple: 6×10^6, Black: 4×10^6 E / P: Purple: 1×10^6, Black: 8×10^5	Purple: 7×10^6 Black: 4.5×10^6	–	
Power	24 VDC ± 10 %		24 VDC ± 7%	
Power consumption	Receipt: Approx. 1.8 A Slip: Approx. 1.7 A	Receipt: Approx. 1.7 A Slip: Approx. 1.9 A	Approx. 1.7 A (mean)	
D.K.D.function	2 drivers			
Reliability — MTBF	Receipt: 36×10^4 hours Slip: 18×10^4 hours		36×10^4 hours	
MCBF	Receipt: 52×10^6 lines Slip: 18×10^6 lines	Receipt: 52×10^6 lines Slip: 29×10^6 lines	70×10^6 lines	70×10^6 lines (when printing receipt)
Overall dimensions (mm)	186 (W) x 298 (D) x 185 (H)	252 (W) x 331 (D) x 201 (H) (excluding extended table)	140 (W) x 201 (D) x 148 (H)	140 (W) x 148 (D) x 203 (H)
Mass (Approx.)	5.8 kg	6.5 kg	1.8 kg	1.9 kg
EMC standards	VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B			
Power supply (option)	PS-170, PS-180	PS-170	PS-170, PS-180	
Factory Options	MICR device, Endorsement Printer (E / P)	MICR device	Wall-hanging bracket WH-10	
Safety Standards	UL / CSA / TÜV (EN60950)			

*Interface: Dealer option: RS-485, USB, 10 Base T I/F, Please contact your EPSON representative   lps: lines per second   cpi: characters per 25.4 mm (character per inch)

Thermal Line Printer		Impact Dot Matrix Printer		
TM-T88II	**TM-L60II**	**TM-U950 / U925**	**TM-U675**	**Appearance**
Thermal line printing		9-pin, serial impact dot matrix		**Print method**
	9 x 24 / 12 x 24	7 x 9 / 9 x 9	5 x 9 / 7 x 9	Font
56 / 42	42 / 32 (Roll paper) 40 / 30 (Label)	U950: Receipt (Journal): 40 / 30 Slip: 88 / 66 U925: Receipt: 40 / 30 Slip: 88 / 66	Receipt: 37 / 50 Slip / Validation: 45 / 60	Column capacity (columns)
0.99 (W) x 2.4 (H) / 1.41 (W) x 3.39 (H)	0.99 (W) x 3.39 (H) / 1.41 (W) x 3.39 (H)	1.3 (W) x 3.1 (H) / 1.6 (W) x 3.1 (H)	1.56 (W) x 3.1 (H) / 1.24 (W) x 3.1 (H)	Character size (mm)
95 Alphanumeric, 37 International, 128 x 8 Graphic Traditional / Simple Chinese, Thai, Japanese Bar code: UPC-A, UPC-E, JAN8 (EAN), JAN13 (EAN), CODE39, CODE93, CODE128, ITF, CODABAR	95 Alphanumeric, 32 International, 128 x 7 Graphic Bar code: UPC-A, UPC-E, JAN8 (EAN), JAN13 (EAN), CODE39, CODE93, CODE128, ITF, CODABAR	95 Alphanumeric 32 International 128 x 8 Graphic	95 Alphanumeric 37 International 128 x 12 Graphic	Character set
20.0 cpi / 15.0 cpi		16.7 cpi / 12.5 cpi	13.3 cpi / 17.8 cpi	Characters Per Inch
RS-232, Bi-directional parallel, RS-485, USB, 10 Base-T I/F	RS-232, Bi-directional parallel	U950: RS-232, Bi-directional parallel U925: RS-232	RS-232, Bi-directional parallel RS-485, USB, 10 Base-T I/F	**Interfaces***
4 KB or 45 bytes		2 KB or 32 bytes	4 KB or 45 bytes	**Data buffer**
120 mm / sec. (38 lps, 1 / 8" conversion)	50 mm / sec. (12 lps with 1 / 6" paper feed)	311 / 233 cps	Approx. 5.14 lps (at 40 columns, 17.8 cpi)	**Print speed**
Roll paper: 79.5 ± 0.5 (W) x dia. 83.0	Roll paper: 60.0^{+1}_{-0} (W) x dia. 83.0 Label: $60.0^{+0.2}_{-0.3}$ (W) x dia. 83.0	U950: Receipt (Journal): Roll paper 69.5 ± 0.5 (W) x dia. 83.0 Slip: 70 (W) x 70 (L) to 210 (W) x 297 (L) U925: Receipt: Roll paper 69.5 ± 0.5 (W) x dia. 83.0 Slip: 70 (W) x 70 (L) to 210 (W) x 297 (L)	Roll paper: 82.5 ± 0.5 (W) x dia. 83.0 Slip: 70 (W) x 150 (L) to 148 (W) x 297 (L) Validation: 148 (W) x 70 (L) to 150 (W) x 210 (L)	Dimensions (mm)
0.06 to 0.07	Label: 0.143 ± 0.015	U950: Receipt (Journal): 0.06 to 0.09, Slip: 0.09 to 0.36 U925: Receipt: 0.06 to 0.09, Slip: 0.09 to 0.36	Roll paper: 0.06 to 0.085 / sheet Slip: 0.09 to 0.2 (total thickness: 0.09 to 0.31)	Thickness (mm)
–		One original and four copies (for slip)	One original and two copies	**Copy capability**
–		ERC-31 (Purple, Black)	ERC-32 (Purple, Black)	**Inked ribbon**
–		Purple: 7×10^6 Black: 4.5×10^6	Purple: 6×10^6 Black: 4×10^6	**Ribbon Life (characters)**
24 VDC ± 7%		24 VDC ± 10%		**Power**
Approx. 1.7 A (mean)	Approx. 1.0 A (mean)	Approx. 1.8 A (mean)		**Power consumption**
2 drivers				**D.K.D.function**
36×10^4 hours	18×10^4 hours	18×10^4 hours		MTBF
52×10^6 lines	29×10^6 lines (thermal paper) 12×10^6 lines (thermal label)	18×10^6 lines	37×10^6 lines	MCBF
145 (W) x 195 (D) x 148 (H)	123 (W) x 201 (D) x 124 (H)	U950: 251 (W) x 298 (D) x 194.5 (H) U925: 251 (W) x 298 (D) x 193.7 (H)	186 (W) x 298 (D) x 195 (H)	**Overall dimensions (mm)**
1.8 kg	0.8 kg	5.6 kg	5.8 kg	**Mass (Approx.)**
VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B				**EMC standards**
PS-170, PS-180	PS-170			**Power supply (option)**
Wall-hanging bracket WH-10	–	MICR device		**Factory Options**
UL / CSA / TÜV (EN60950)				**Safety Standards**

Reliability (row label spanning MTBF and MCBF rows)

cps: characters per second

TM SERIES SPECIFICATIONS

Item		Impact Dot Matrix Printer			
		TM-U375	**TM-U325**	**TM-U200** series	**TM-U230**
Appearance					
Print method		9-pin, serial impact dot matrix			
Print Font	Font	5 x 9 / 7 x 9	7 x 9 / 9 x 9		
	Column capacity (columns)	33 / 40	40 / 42 or 33 / 35 (3 half dots / 2 half dots space)	40 / 42 or 33 / 35	
	Character size (mm)	1.6 (W) x 3.1 (H) / 1.2 (W) x 3.1 (H)	1.2 (W) x 3.1 (H) / 1.6 (W) x 3.1 (H)		
	Character set	95 Alphanumeric 32 International 128 x 9 Graphic	95 Alphanumeric 32 International 128 x 8 Graphic	95 Alphanumeric 32 International 128 x 8 Graphic Traditional / Simple Chinese, Thai, Japanese (A type)	95 Alphanumeric, 37 International 128 x 8 Graphic Traditional / Simple Chinese,
	Characters Per Inch	13.3 cpi / 16 cpi	16 or 17.8 cpi 13.3 or 14.5 cpi	17.8 cpi / 16 cpi or 14.5 cpi / 13.3 cpi	16 or 17.8 cpi 13.3 or 14.5 cpi
Interfaces*		RS-232, Bi-directional parallel	RS-232, Bi-directional parallel, RS-485, USB, 10 Base-T I/F		
Data buffer		4 KB or 40 bytes	4 KB or 45 bytes	1 KB or 40 bytes	1 KB / 16 KB
Print speed		3.5 lps (at 40 columns, 16 cpi) 5.4 lps (at 20 columns, 16 cpi)	Approx. 3.5 lps (at 40 columns, 16 cpi) Approx. 6.4 lps (at 16 columns, 16 cpi)	3.5 lps (at 40 columns,16 cpi) 6.4 lps (at 16 columns,16 cpi)	
Paper	Dimensions (mm)	Roll paper: 76.0 ± 0.5 (W) x dia. 83.0 Slip: 70 (W) x 160 (L) to 182 (W) x 257 (L) Validation: 135 (W) x 70 (L) to 182 (W) x 257 (L)	Receipt: 76.0 ± 0.5 (W) x dia. 83.0 Validation: 135 (W) x 70 (L) to 182 (W) x 182 (L) (Maximum print lines: 9 lines)	Roll paper: 76.0 ± 0.5 (W) x dia. 83.0	
	Thickness (mm)	Roll paper: 0.06 to 0.085 / sheet Slip: 0.09 to 0.12 (total thickness: 0.09 to 0.31)	Receipt: 0.06 to 0.085 (total thickness: 0.2 mm or less) Validation: 0.09 to 0.12 (total thickness: 0.09 to 0.31)	0.06 to 0.085	
Copy capability		Roll paper: One original and one copy Slip: One original and two copies	One original and two copies	A type: One original and two copies B type: One original and one copy D type: One original and two copies	One original
Inked ribbon		ERC-38 (Purple, Black)		ERC-38 (Purple, Black, Black / Red)	
Ribbon Life (characters)		Purple: 4 x 10^6 Black: 3 x 10^6		Purple: 4 x 10^6, Black: 3 x 10^6 B / R: 15 x 10^5 (Black), 75 x 10^4 (Red)	
Power		24 VDC ± 10%	AC adapter (included)		24 VDC ± 5%
Power consumption		Approx. 1.4 A	Approx. 43 W		
D.K.D.function		2 drivers			
Reliability	MTBF	18 x 10^4 hours			
	MCBF	18 x 10^6 lines	49 x 10^6 lines	18 x 10^6 lines	
Overall dimensions (mm)		186 (W) x 327 (D) x 145 (H)	164 (W) x 240 (D) x 136 (H)	A type: 160 (W) x 295 (D) x 160 (H) B type: 160 (W) x 248 (D) x 150 (H) D type: 160 (W) x 248 (D) x 133 (H)	166 (W) x 168 (D) x 259.5 (H)
Mass (Approx.)		4 kg	2.3 kg	A type / B type: 2.5kg D type: 2.2kg	2.7 kg
EMC standards		VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B	FCC class A	VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B	
Power supply (option)		PS - 170	Exclusive AC adapter (included)		Power supply built-in model / Power supply separate model
Factory Options		–		Near - end sensor	WH-10
Safety Standards		UL / CSA / TÜV (EN60950)	UL / CSA	UL / CSA / TÜV (EN60950)	

*Interface: Dealer option: RS-485, USB, 10 Base T I/F, Please contact your EPSON representative   lps: lines per second   cpi: characters per 25.4 mm (character per inch)

Inkjet Printer		Slip Printer		
TM-J8000	**NEW TM-J2000 / J2100**	**TM-U590**	**TM-U295**	**Appearance**
Serial Inkjet dot matrix (128 nozzle / 360 dpi)	J2000: 64 nozzle serial inkjet (180 dpi x 180 dpi) J2100: 128 nozzle serial inkjet (180 dpi x 180 dpi)	9-pin, serial impact dot matrix	7-pin, shuttle impact dot matrix	**Print method**
22 x 48 / 18 x 36	12 x 24 / 9 x 17	7 x 9 / 9 x 9	5 x 7 / 7 x 7	Font
Receipt: 42 / 51 Slip: 130 / 158	82.5 mm 42 / 56 76 mm: 40 / 53 70 mm: 36 / 48 58 mm: 30 / 40	88 / 66	35 / 42	Column capacity (columns)
1.48 (W) x 3.32 (H) / 1.20 (W) x 2.47 (H)	1.41 (W) x 3.39 (H) / 0.99 (W) x 2.4 (H)	1.3 (W) x 3.1 (H) / 1.6 (W) x 3.1 (H)	1.6 (W) x 2.9 (H) / 1.3 (W) x 2.9 (H)	Character size (mm)
95 Alphanumeric, 32 International, 128 x 9 Graphic Bar code: UPC-A, UPC-E, JAN13 (EAN), 2 of 5 (ITF), CODE39, CODE93, CODE128	ASCII, WPC1252, PC437, PC850, PC852, PC858, PC860, PC863, PC865, PC866 Custom Graphic, Bar code: UPC-A, UPC-E, JAN8 (EAN), JAN13 (EAN), 2 of 5 (ITF), CODE39, CODE93, CODE128, CODABAR (NW7)	95 Alphanumeric 32 International 128 x 10 Graphic	95 Alphanumeric 32 International 128 x 3 Graphic	Character set
16.4 cpi / 20 cpi	15 cpi (Font A) / 20 cpi (Font B)	16.7 cpi / 12.5 cpi	13.5 cpi / 16.2 cpi	Characters Per Inch
RS-232, Bi-directional parallel, RS-485, USB, 10 Base-T I/F	RS-232, Bi-directional parallel RS-485, USB, 10 Base-T I/F	RS-232, Bi-directional parallel, RS-485, USB, 10 Base-T I/F	RS-232, Bi-directional parallel	**Interfaces***
4 KB or 45 bytes	4 KB or 512 bytes	4 KB or 69 bytes	512 bytes or 35 bytes	**Data buffer**
Receipt: 10.1 lps (at 42 columns) / 14.7 lps (at 51 columns) Slip: 4.9 lps (at 130 columns) / 7.3 lps (at 158 columns)	Character: 14.7 lps (8 lines / inch) Graphic: 43 mm / sec. (76 mm width paper, Full columns print)	311 / 233 cps	2.1 lps	**Print speed**
Receipt: 76 ± 0.5 x dia. 83.0 Slip: (W) 68 to 215.9 (L) 68 to 297.0	57.5 ± 0.5, 69.5 ± 0.5 76 ± 0.5, 82.5 ± 0.5	70 (W) x 70 (L) to 210 (W) x 297 (L)	80 (W) x 69 (L) to 182 (W) x 257 (L)	Dimensions (mm)
Receipt: 0.06 to 0.09 Slip: 0.09 to 0.15	0.06 to 0.11	0.09 to 0.2 (total thickness: ~ 0.36)	0.09 to 0.25 (total thickness with copy: ~ 0.35)	Thickness (mm)
–		One original and four copies	One original and two copies	**Copy capability**
Ink Cartridge: SJIC1 (Black)	Ink Cartridge: SJIC5 (Black for TM-J2000) SJIC3 (Black for TM-J2100) SJIC4 (Red, Blue, Green for TM-J2100)	ERC-31 (Purple, Black)	ERC-27 (Purple)	**Inked ribbon**
Ink Life:12 x 10^6	Ink Life: 24 x 10^6 (Mono) 17 x 10^6 (2 colors)	Purple: 7 x 10^6 Black: 4.5 x 10^6	15 x 10^5	**Ribbon Life (characters)**
AC 85 V - 264.5 V (only for single phase)		24 VDC ± 10%		**Power**
25 W (Operating)	Approx. 1 A (Operating)	Approx. 1.9 A (mean)	Approx. 600 mA (mean)	**Power consumption**
2 drivers				**D.K.D.function**
18 x 10^4 hours				MTBF — **Reliability**
37 x 10^6 lines	50 x 10^6 lines	29 x 10^6 lines	7 x 10^6 lines	MCBF
325 (W) x 300 (D) x 200 (H)	195 (W) x 250 (D) (275 D with overhanging ledge) x 195 (H)	252 (W) x 266 (D) x 185 (H)	180 (W) x 190.5 (D) x 101.5 (H)	**Overall dimensions (mm)**
9.0 kg	4.7 kg	5 kg	1.6 kg	**Mass (Approx.)**
VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B	VCCI class A, FCC class A, CE marking, Canada EMI, AS / NZS 3548	VCCI class A, FCC class A, CE marking, AS / NZS 3548 class B		**EMC standards**
Universal power supply is built in	PS - 170			**Power supply (option)**
–				**Factory Options**
UL / CSA / TÜV (EN60950)				**Safety Standards**

cps: characters per second

DM-D Series

Clear, Easy-to-Read Displays

- DM-D500
- DM-D100 Series
- DM-D200 Series

ESPON DM Series displays provide customers with exceptionally clear, easy-to-read indications at a comfortable height and viewing angle. They are also ready to provide graphic displays as well as text. And compliance with safety standards worldwide means they can be used virtually anywhere. Additional valuable features include an extensive font table, direct connection to any terminal, and ESC/POS® control commands for easy downloading of user-defined characters.

Customer Display

DM-D500

256 x 64 Dot Matrix Display
Provides clear, easy-to-read display of up to 8 lines of text. Up-down. left/right adjustability of indications assures optimum viewing angle.

Graphic Display
The DM-D500 can also display pictures and illustrations, an ideal feature for advertising and when running a campaign. Vertical and horizontal scrolling of both text and graphics is also possible.

A Choice Of Stands
Four types of stands are available to meet different application needs.

• OPTIONS •

POWER SUPPLY

PS-170
INPUT: 100~240V AC
OUTPUT: 24 VDC, 2.0 A
Plug: 3P Power jack
Safety standards: UL, CSA, TÜV

POLE UNIT

DP-105
254 (H) x dia. 35mm

DM-D100 Series

Small & Easy-To-Read
Panel and height adjustment possible with optional support.
Ideal for restaurants and specialty stores.

Direct Connection
It's easy to connect a DM Series display to an EPSON TM or IR Series POS unit.
You can also connect directly to your current host terminal (serial port with a 12V power supply required) for expanded system flexibility.

DM-D200 Series

Client-Friendly
Offers large, easy-to-read, 20-column, 2-line indications.
Up/down, left/right adjustable display panel assures optimum viewing angle.

Compact Designs
Easy-to-read, 20-column, 2-line dot matrix displays for use with EPSON TM Series printers.

SPECIFICATIONS

	DM-D500	DM-D100 Series	DM-D200 Series
Display method / Color	Vacuum fluorescent display / Green (505 mm)	Vacuum fluorescent display / Green (505 mm)	
Number of characters	40 (20 columns x 2 lines)	40 (20 columns x 2 lines)	
Brightness	300 cd / m²	690 cd / m²	
Character type	95 Alphanumeric characters / 37 International characters Graphic characters: 128 x 12 pages, Kanji characters	95 Alphanumeric characters / 37 International characters Graphic characters: 128 x 12 pages	
Character font	5 x 7 dot matrix, 8 x 16, 16 x 16 dot matrix	5 x 7 dot matrix, cursor	5 x 7 dot matrix, comma, decimal point, annunciator
Character size / pitch	—	3.5 x 5.0 mm / 5.2 mm	6.5 x 11.3 mm / 9.9 mm
Reliability	MTBF 30,000 hours	MTBF 20,000 hours	
Power / current consumption	11.4-48 VDC / Approx. 6W		
Overall dimensions · · · · · Panel	213 (W) x 51 (D) x 83 (H) mm	165 (W) x 50.5 (D) x 69 (H) mm	260 (W) x 40 (D) x 83 (H) mm
Viewing angle	Max. 48° (5 positions)	Max. 48° (4 positions)	Max. 36° (3 positions)
Horizontal rotation	Max. 90°		Max. 330°
Case color	ECW (EPSON Cool White), EDG (EPSON Dark Gray)		
EMC standards	VCCI class A, FCC class A, CE marking		
Safety standards	UL / CSA / TÜV (EN 60950)		
Power supply	PS-170 / Supplied by a TM printer or IM-310		

Notes;*= Available with the baud rate 2,400-38,400 bps as displaying 20 columns x 2lines.

System Product Guide
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