

## Lightweight 4" (112mm) receipt printers with 3 wireless options

- Designed to withstand the rigours of mobile computing
- Contemporary, lightweight, robust printer
- Over-moulding on S4500THS for additional protection in harsh environments
- · Easy "drop-in" paper loading
- Easy to wear with belt loop system or shoulder strap
- New high speed communication system for IrDA, Bluetooth™ and Serial modes
- · A field tried, robust IrDA communication system included as standard
- More receipts per charge with new high capacity Lithium Ion battery
- Faster printing to reduce waiting time
- State-of-the art integrated ARM-7 micro-processor
- Flash memory add logos, bar codes and other graphic elements
- Optional built-in ISO standard 3-track micro magnetic card reader and/or smart card reader
- Optional Bluetooth™ or 802.11b module for state-of-the art wireless communication
- Full 12 month warranty including print head

### New S4500THS/S4000T Design Details

### Highly Integrated ARM-7 32 bit Microcontroller by ST-Microelectronics:

- Flash based integrated CPU contains firmware, resident fonts, rotated fonts, downloadable fonts, graphics, logos, and bar codes
- Incorporates Flash and SRAM memory
- Manages all the features supported by the printer

#### **Low Power Precision Regulator Circuits**

- 8 bit 2 channel A/D circuit to measure system and printer mechanism voltage levels, battery and thermal print head temperature
- Fail safe circuit

### Seiko Thermal Print Head (rated 2" per second at 7.2V)

- Easy Load Clamshell style paper load system with push button release for paper door
- Automatic thermal print contrast control (voltage and temperature dependent)
- · High speed, high resolution print
- Built-in detectors to monitor voltage and paper-out

### Fast Charge Circuit with Auto-Switch to Top-Off Charge

- Power adapter option, auto switch to AC power when charging adapter is used
- · Hardware and software power management
- New extra capacity Lithium Ion battery cartridge (2200 mAh)

#### Easy to Integrate:

- Multiple Communication Interfaces including IrDA, Bluetooth™ and 802.11b
- MS-DOS and Windows compatible with full-speed handshake
- Print Drivers available for Windows 95, 98, 2000, XP
- Print Utilities available for all CE (including Windows CE, Pocket PC, .NET) and Palm based operating systems

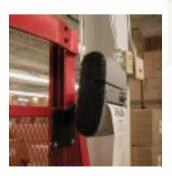
#### **Special Features:**

- Resident fonts to enable printing from 10 to 26 characters per inch
- Protective elastomer bumpers on S4500THS
- Printer is in-field programmable for firmware, font and logo setup
- Optional integrated magnetic card reader and/or smart card reader
- •Two-bay battery charger











# S4500THS/S4000T Series

Print Mechanism	
Printing Method	Thermal dot line printing
Dots Per Line	832
Number of Heat Elements	1 heater/dot, 170 ohms/dot
Printing Width	104mm
Resolution	8 dots/mm
Paper Feed Pitch	0.125mm
Printing Speed	50mm/sec linear at 7.2 Volts, 25% print density
Head Temperature Detection	By thermistor with hardware protection against overheating
Paper-out/TOF detection	By photo interrupter
Operating Voltage	5V
Current Consumption	2.4A at 64 dots
Reliability	Electrical - 100 million pulses Mechanical - 50km
Standard Operating Features	
Character Set	ASCII International and IBM Graphic set plus downloadable option. All font tables are in-field downloadable
Graphic Print	Bit addressable graphic command set graphic logo store and print. Black or Q-mark sensing
Bar Code	Codes 39, 128, 2 Of 5, UPC-A, UPC-E, UPC/EAN-8, UPC EAN-13, Codabar and 2-D Barcode (PDF 417)
Supervised Operation	Supervisory command set to read battery voltage, print head temperature, buffer status, power management and Firmware version
Line Buffering	32K Standard
Characters Per Line	40 or 80 (s/w command)
Character Size	@40 ch/line 23h x 20w (mm) @80 ch/line 23h x 10w (mm)
Print contrast	Auto and user selectable
Print output	Double high, double wide bold print underline print and reverse print
Optional	Downloadable fonts, logos, forms
Communication	
Interface	RS232C and IrDA standard; Bluetooth™ option 802.11b option
Baud Rate	2400, 9600, 19200, 38400, 57600, 115200 baud, dip switch select
Fast IrDA Transfer Speed	Up to 115K depending on computer capability
Std. IrDA Transfer Speed	9600 connect and transfer
Handshaking	CTS/RTS and/or XON/XOFF
Print Media	
Paper Width	112mm (4.125")
Lines of Print/Roll	4400 (2.0" diameter roll, 0.4" core, approx 100' long)
Paper Rolls Per Charge Lines Per Charge	~4 ~17,500 (4" receipt followed by 60 second
	delay then repeat)

Power	
Power Supply	Internal rechargable battery with wall mount
	DC charging adapter
Battery	2 cell Lithium Ion, 2200 mAh
DC Power Pack	10V/1.4 A DC UL listed adapter standard
Battery Recharge Power ON/OFF	Internal 180 min fast charge with auto switch to top off charge, over voltage, over current and over heat protection  Power ON/OFF switch, or by raising RTS input, or sending characters through serial input. Auto power down timer can be set or disabled through user application
User Interface	
Status Indicators	3 LEDs (2 multifunction) - Power/Communication Mode, Battery Status/Charging, Ready/Fault
User Switches	2 switches - On/Off, Feed
Connection	RJ type (6 pin) for Data I/O, DC input power jack for wall mount adapter, IrDA with Ambient Light Filter, integrated Bluetooth™ radio module (optional), integrated magnetic card reader (optional), integrated 802.11b radio (optional), integrated smart card reader (optional)
Dimensions	165x190x70mm (6.5x7.5x2.75") WxLxH including bumpers
Weight	850g (30oz) with paper and battery pack
Warranty	1 Year standard (3year available at extra cost)
OEM	Design services available
Environmental Specifications	
Operating Temperature	-10° to 50 °C
Storage Temperature	-20° to 60 °C
Humidity	Up to 90% RH (non-condensing)
Agency Approvals	Product Emissions and Immunity Certification FCC Part 15 Subpart B Class B CEPN60950 CEEN55022 Class B CEEN61000-3-2 CEEN10003-3 CEEN50024 AS/NZ: 3548 Class B CENS Class B CECRNS Class B CECRNS Class B CERNS CORPORT STO C222 No. 60990-00 CB Certified CENS CORPORT STO CANADA STO C222 No. 60990-00 CB Certified CENS CORPORT STO CANADA STO C222 No. 60990-00 CB Certified CENS CORPORT STO CANADA STO C222 No. 60990-00 CB Certified CENS CORPORT STO CANADA STO CANAD
Ordering Information	
Printer 78628l1 [2] [4] [R] [S] [-1] [-2]	S4500THS with 115K IrDA Interface (US Style Adapter) (change last digit to <b>2</b> for Euro style 220v and <b>4</b> for UK style adapter versions) Add <b>R</b> for 3-track MCR, Add <b>S</b> for smart card reader, Add <b>RS</b> for MCR and SCR, Add <b>-1</b> for Bluetooth, Add <b>-2</b> for 802.11b option
Printer 78618l1	S4000T with RS-232 and 115K IrDA Interface (US Style Adapter) (change last digit to <b>2</b> for Euro style 220v and <b>4</b> for UK style adapter versions) Add <b>R</b> for 3-track MCR, Add <b>S</b> for smart card reader, Add <b>RS</b> for MCR and SCR, Add <b>-1</b>
[2] [4] [R] [S] [-1] [-2]	or Bluetooth, Add <b>-2</b> for 802.11b option
756998-2	Power adapter, 12-16 VDC input vehicle adapter Belt loop system (included as standard)
757351	Shoulder Strap
757064	Spare paper, pack of 5 rolls
7A100014	Spare battery
5892RJD9	Coiled Cable (RJ to D9)

All manufacturers trademarks acknowledged. Specifications subject to change without notice. 

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