

## S1500T Series

### Compact, Space Saving 2.25" (57mm) Desk Top Receipt Printer

#### ✓ Flexibility

- Desk top for fixed POS applications
- Compact, contemporary, space saving design without sacrificing durability and performance
- \*Battery operated version available

#### ✓ Trouble-free operation

- State of the Art Integrated Micro-processor
  - Flash Memory – Add logos, Bar Codes and other Graphic Elements
  - Faster printing – Reduces Print Time per Receipt
- Easy Load Clamshell style paper load system with press button release for paper door
- In-field programming - Upgrade firmware, download fonts and logos
- 12 month warranty (including printhead)
  - Optional Extended warranty available

#### ✓ Multiple communications options

- RS232
- Optional Uniquely Designed IrDA Communication System
- Optional integrated Bluetooth™
- Optional 3-Track Magnetic Card Reader



#### S1500T-DT Design Details:

##### Power:

- Wall mounted power supply

##### Highly Integrated Microcontroller by ST-Microelectronics:

- Flash based integrated CPU contains firmware, resident fonts, rotated fonts, downloadable fonts, graphics, logos, and barcodes
- 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 and CPU watchdog circuits

##### Seiko Thermal Print Head:

- High speed (rated up to 2" per second -- voltage, application and temperature dependent) and high resolution print
- Built-in detectors to monitor voltage and paper-out.
- Automatic thermal print contrast control (voltage and temperature dependent)

##### Easy to Integrate:

- Multiple communication interfaces including Serial, IrDA and Bluetooth™
- MS-DOS and Windows compatible with full-speed handshake
- Print Drivers available for Windows 95, 98, 2000, XP
- Print Utilities available for most Mobile Operating Systems (including Windows CE, Pocket PC, .NET, WM5 and Palm)

##### Special Features:

- Resident fonts to enable printing from 12 to 24 characters per inch
- Printer is in-field programmable for firmware, font and logo setup
- Optional integrated 3-Track Magnetic Card Reader



S1500T space saving desk top receipt printer



S1500T with Magnetic Card Reader

\*See separate specification sheet for details of portable printer version

## Print Mechanism:

<b>Printing Method:</b>	Direct Thermal
<b>Print Resolution:</b>	203 dpi/ 8 dots mm
<b>Dots per Line:</b>	384
<b>Printing Width:</b>	1. 89" (48mm)
<b>Paper Feed Pitch:</b>	0.125mm
<b>Printer Speed:</b>	Up to 2" per second (50mm/sec) @ 7.2 Volts (actual print speed is dependent on state of battery, temperature and nature of application)
<b>Number of Heat Elements:</b>	2 heater/dot, 142 ohms/dot
<b>Head Temperature Detection:</b>	By thermistor with hardware protection against overheating
<b>Paper-out/Q-Mark/TOF Detection:</b>	By photo interrupter
<b>Operating Voltage:</b>	5V
<b>Current Consumption:</b>	3.8A @ 64 dots
<b>Reliability:</b>	100 million MCTF (mean characters until fail) @ 25% density

## Operating Characteristics:

<b>Character set:</b>	ASCII International, PC Line Draw
<b>Additional Character Sets:</b>	Simplified Chinese, Hebrew, Arabic, Polish, Korean
<b>Optional Character Sets:</b>	Downloadable fixed-width fonts
<b>Graphic print:</b>	Supports 8-bit graphic printing, custom fonts and logo downloading
<b>Bar code Symbolologies:</b>	
<b>Linear:</b>	Codes 39, Code128, UCC/EAN-128, UPC-A, UPC-E, Interleaved2 of 5, EAN/JAN-8, EAN/Jan-13, Codabar PDF417
<b>2 Dimensional:</b>	
<b>Supervisory commands:</b>	Commands available to read battery voltage, buffer status, firmware and hardware version
<b>Memory:</b>	
<b>SRAM:</b>	32K standard as cache memory (fast, low power memory)
<b>Flash:</b>	256K + 32K for program and tables plus downloaded features
<b>Characters per line:</b>	24, 32, 38, 40, 42, 48 (s/w command)
<b>Print contrast:</b>	Auto and user selectable
<b>Special Print</b>	
<b>Character Attributes</b>	Double high, double wide and bold print

## Communication:

<b>Interface:</b>	
<b>Standard:</b>	RS232C (up to 38.4K depending on computer capability) IrDA (up to 38.4K depending on computer capability)
<b>Optional:</b>	Bluetooth™ V2.0
<b>Dip Switch Selectable</b>	
<b>Baud Rate:</b>	2400 – 38.4K
<b>Handshaking:</b>	Hardware (CTS/RTS) and/or Software (XON/XOFF)

## Print Media:

<b>Media Type:</b>	Direct Thermal Paper and Tag Stock; Limited Label Support (Standard paper is Kansaki P390)
<b>Paper Width:</b>	2.25" (57mm)
<b>Max Roll Size:</b>	56' length @ OD: 1.5" with standard paper
<b>Roll Core ID:</b>	0.4"
<b>Lines of Print/Roll:</b>	5200 (1.5" diameter roll, 0.4" core, approx. 56' long)
<b>Paper Rolls per Charge:</b>	~ 9
<b>Lines per Charge:</b>	~ 47,000 (4" receipt followed by 60 second delay then repeat)

(For optimum print quality and printer performance, use Extech supplied paper)

## Power:

<b>DC Power Pack:</b>	100V – 250V AC input, 10V/1.4 A DC/AC UL listed adapter standard (in-printer charging)
<b>Power ON/OFF:</b>	Power ON/OFF switch, or by raising RTS input; or sending a single character through serial input. Auto power down timer, can be set or disabled through user application

## Software:

Extech Logo Downloading utility  
Extech Bluetooth™ Configuration utility

## User Interface:

<b>Status indicators:</b>	3 LEDs (2 are multi functioning) Power/ERROR, Charging, Ready/Fault
<b>User switches:</b>	2 switches – Power (On/Off), Feed
<b>Connection:</b>	RJ type (6 pin) for RS232 Data I/O Infra-Red (IrDA) with Ambient Light Filter (optional) Bluetooth™ V2.0 (optional) Magnetic Card Reader (optional) DC input power jack for wall mount/vehicle power supply (optional)

## Mechanical:

<b>Construction:</b>	Cyclocol KJW Enclosure
<b>Dimensions:</b>	3.5"W x 5.4"L x 2.5"H (88.9W x 137.2L x 63.5H mm)
<b>Weight:</b>	9.7 ounces (300g) (Printer Only)
<b>Warranty:</b>	
<b>Standard:</b>	One year
<b>Optional:</b>	Up to 5 years available at extra charge
<b>OEM Products:</b>	Design services available

## Environmental Specifications:

<b>Operating Temperature:</b>	14° to 122°F (-10° to 50°C)
<b>Storage Temperature:</b>	-4° to 140°F (-20° to 60°C)
<b>Charging Temperature:</b>	32° to 122°F (0° to 50°C)
<b>Humidity:</b>	10 - 90% RH (non-condensing)
<b>Drop:</b>	Exceeds industry standard for drop

## Agency Approvals:

FCC: Part 15 Subpart B, Class B	Conforms to ANSI/UL STD 60950 & Certified to CAN/CSA STD C22.2 No. 60950-00
CE: EN60950	
CE: EN55022 Class B	CB Certified
CE: EN61000-3-2	ETL Listed, Control # 3046813
CE: EN61000-3-3	IEC 68 Certified
CE: EN50024	GS Certified, #04US00384-1
AS/NZ: 3548 Class B	
Complies with EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC	

## Ordering Information:

Power supply/charger not included

Printer Desk-Top:	
78318S0-DT	S1500T with RS-232
[ ]	add "R" for 3-track MCR (e.g. 78318S0R-DT)
[ ]	add "-1" for Bluetooth option (e.g. 78318S0R-1-DT)

**Note: Change "S" to "I" to add IrDA**

<b>Accessories:</b>	
159999-1	US Plug Mains Adaptor, 7.5V, 3A, 120V
159999-2	Euro Plug Mains Adaptor, 7.5V, 3A, 220V
159999-4	UK Plug Mains Adaptor, 7.5V, 3A, 220V
757060	Spare paper, pkg. of 5 rolls
757060-CASE	Spare paper, case of 200 rolls
5892RJD9	Coiled Cable (RJ to D9)

Specifications subject to change without notice  
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