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 seperate specification sheet for details of portable printer version

Print Mechanism:

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

Operating Characteristics:

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

Communication:

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

Print Media:

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

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

Power:

DC Power Pack:	100V – 250V AC input, 10V/1.4 A DC/AC UL listed adapter standard (in-printer charging)
Power ON/OFF:	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:

Status indicators:	3 LEDs (2 are multi functioning) Power/ERROR, Charging, Ready/Fault
User switches:	2 switches – Power (On/Off), Feed
Connection:	
	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:

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

Enviromental Specifications:

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

Agency Approvals:

FCC: Part 15 Subpart B, Class B
CE: EN60950
CE: EN55022 Class B
CE: EN61000-3-2
CE: EN61000-3-3
CE: EN50024
AS/NZ: 3548 Class B
Complies with EMC Directive 89/336/EEC
and Low Voltage Directive 73/23/EEC

Conforms to ANSI/UL STD 60950 &
Certified to CAN/CSA STD C22.2 No.
60950-00
CB Certified
ETL Listed, Control # 3046813
IEC 68 Certified
GS Certified, #04US00384-1

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

Accessories:
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)