

S1500T Series Ultra Lightweight 2.25" (57mm) Portable Receipt Printer

✓ Designed for multiple applications

- Compact, contemporary design without sacrificing durability and performance
- Lightweight - weighs less than a pound (with paper and battery)
- Easy to wear all day long: belt loop or shoulder strap system options
- Simple Vehicle mount system option*
- Desktop use option*

✓ Trouble-free operation

- Ready to use - portable version comes complete with paper, adaptor, and battery
- State-of-the-Art Integrated Micro-Processor
 - Faster Printing - Reduces Print Time per Receipt
 - Flash Memory - Add Logos, Bar codes and other Graphic Elements
- In-field programming - Upgrade Firmware, Download Fonts and Logos
- High capacity Lithium-Ion battery - More Receipts per Charge
- Easy load clamshell style paper load system with press button release for paper door
- 12 month warranty (including printhead)
 - Optional extended warranty programs available

✓ Multiple communications options

- RS232 (Standard)
- Uniquely designed IrDA communication system (Standard)
- Optional integrated Bluetooth™
- Optional 3-Track Magnetic Card Reader

✓ Typical applications include

- Field Service: Invoicing and Credit Card Receipts
- Route Accounting; Presales & DSD
- Ticketing: Transportation and Public Safety
- Fixed station* or Mobile POS and Hospitality



S1500T Design Details:

Power:

- Powered battery or by mains:
 - High capacity Lithium-Ion battery cartridge
 - Variable input desktop or vehicle supply*
- Battery charges internally to the printer or in external battery charger

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

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
- Two-bay battery charger



S1500T in environmental case



S1500T with Magnetic Card Reader

*See separate specification sheet for details of vehicle and desktop printer versions

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 Symbolologies:	
Linear:	Codes 39, Code128, UCC/EAN-128, UPC-A, UPC-E, Interleaved2 of 5, EAN/JAN-8, EAN/JAN-13, Codabar PDF417
2 Dimensional:	
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 (optional)
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:

Battery:	Internal rechargeable 2 cell Lithium-Ion (7.4V; 2200 mAh)
Battery Life:	80% of original capacity after 300 cycles (typical)
Recharging:	3 hours @ fast rate charge (at empty)
External Charging Options:	
DC Power Pack:	100V – 250V AC input, 10V/1.4 A DC/AC UL listed adapter standard (in-printer charging)
In-Vehicle Charger:	12V/24V DC Input, 10V/2A output Cigarette Lighter adaptor
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)

Mechanical:

Construction:	Cyclocal KJW Enclosure
Dimensions:	3.5"W x 5.4"L x 2.5"H (88.9W x 137.2L x 63.5H mm)
Weight:	
Printer Only:	9.7 ounces (300g)
Printer w/s paper and battery:	13 ounces (395g)
Warranty:	
Standard:	One year standard
Optional:	Up to 5 years available at extra charge
OEM Products:	Design services available

Environmental 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	Conforms to ANSI/UL STD 60950 and
CE: EN60950	Certified to CAN/CSA STD C22.2 No.
CE: EN55022 Class B;	60950-00
CE: EN61000-3-2;	CB Certified
CE: EN61000-3-3;	ETL Listed, Control # 3046813
CE: EN50024	IEC 68 Certified
AS/NZ: 3548 Class B	GS Certified, #04US00384-1
Complies with EMC Directive 89/336/EEC	IP54 Rated (with Environmental Case)
and Low Voltage Directive 73/23/EEC	

Ordering Information:

The S1500T series comes standard with IrDA, RS-232, battery, 1 roll of paper, Universal AC Adapter (180-minute Fast Charge) and a 1 year warranty that includes the print head.

783181	S1500T with RS-232 and IrDA Interface (Universal Adaptor)
[]	add "R" for 3-Track Magnetic Card Reader (e.g. 783181R)
[]	add "-1" for Bluetooth option (e.g. 783181R-1)

Accessories:	
756998-2	Belt Loop System
756983	IP54 Certified Environmental Case
157260	Universal Adaptor – (US, UK, EURO & Australian)
757351	Shoulder Strap with Quick Clip
757060	Spare paper, pkg. of 5 rolls
757060-CASE	Spare paper (Case of 200 rolls)
7A100014	Spare battery (2200 mAh)
767400-1	2-bay battery charger (US plug)
767400-2	2-bay battery charger (EURO plug)
767400-4	2-bay battery charger (UK plug)
5892RD9	Coiled Cable (RJ to D9)
151133	12V/24V In-Vehicle Adaptor (with battery in printer)

Specifications subject to change without notice
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