

### Ultra Lightweight Portable Receipt Printer with Wireless Connectivity

#### Advantages

- Contemporary, Rugged Portable Receipt Printer
- Wireless Connectivity for Personal Area Networks
- Uniquely Designed IrDA Communication System
- Optional Integrated Bluetooth™
- New Easy Loading Paper System
- "Easy to wear all day long!"
- Weighs one pound
- New Lithium Ion Battery for More Receipts per Charge
- Faster Printing — Reduces Print Time per Receipt
- State-of-the-Art Integrated Micro-Processor
- Flash Memory — Add Logos, Bar Codes and other Graphic Elements
- Optional built-in 3-track MCR
- Full 12 Month Warranty includes Print Head



#### New S2500THS Design Details

##### Highly Integrated 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 and CPU watchdog circuits

##### SEIKO thermal print head (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 trickle charge

- Power adapter option, auto switch to AC power when adapter is used
- Hardware and software power management
- New extra capacity rechargeable Lithium Ion battery cartridge (2200 mA/h)

##### Easy of Integration:

- Multiple Communication Interfaces
- MS-DOS and Windows compatible with full-speed handshake
- Print Drivers available for Windows 95, 98, 2000, XP
- Print Utilities available for all CE and Palm based operating systems

##### Special Features:

- Resident fonts to enable printing from 12 to 24 characters per inch
- Protective over-molds
- Printer is in-field programmable for firmware, font and logo setup

**Print Mechanism:**

|                                    |  |
|------------------------------------|--|
| <b>Printing Method:</b>            | Thermal dot line printing                                  |
| <b>Dot Per Line:</b>               | 384  |
| <b>Number of heat elements:</b>    | 2 heater/dot, 142 ohms/dot                                 |
| <b>Printing Width:</b>             | 48mm   |
| <b>Resolution:</b>                 | 8 dots/mm  |
| <b>Paper feed pitch:</b>           | 0.125mm  |
| <b>Printing speed:</b>             | 50mm/sec @ 7.2 Volts                                       |
| <b>Head Temperature detection:</b> | By thermistor with hardware protection against overheating |
| <b>Paper-out/TOF detection:</b>    | By photo interrupter                                       |
| <b>Operating Voltage:</b>          | 5V   |
| <b>Current Consumption:</b>        | 3.8A @ 64 dots   |
| <b>Reliability:</b>                | 50 million MCTF (mean characters until fail)@25% pulse     |

**Standard Operating Features:**

|                              |   |
|------------------------------|---|
| <b>Character set:</b>        | ASCII International and IBM Graphic set plus downloadable option. All font tables are in-field downloadable.                  |
| <b>Graphic print:</b>        | Bit addressable graphic command set graphic logo store and print. Black Mark Sensing  |
| <b>Bar codes:</b>            | Codes 39,128, 2 of 5, UPC-A, UPC-E, UPC/EAN-8   |
| <b>Supervised operation:</b> | Supervisory command set to read battery voltage, Print head temperature, buffer status, power management and Firmware version |
| <b>Line Buffering:</b>       | 32K standard  |
| <b>Characters per line:</b>  | 24, 32, 38, 40, 42, 48 (s/w command)  |
| <b>Character Size:</b>       | 3x2 3x1.5 3x1.15 3x1.5 (HxW mm)   |
| <b>Print contrast:</b>       | Auto and user selectable  |
| <b>Print Output:</b>         | Double high, double wide and bold print   |

**Communication:**

|                                  |  |
|----------------------------------|--|
| <b>Interface:</b>                | RS232C and IrDA standard; Bluetooth option         |
| <b>Baud Rate:</b>                | 2400, 9600, 19,200, 38,400 baud, dip switch select |
| <b>Fast IrDA Transfer Speed:</b> | Up to 38.4K depending on computer capability       |
| <b>Std.IrDA Transfer Speed:</b>  | 9600 connect and transfer                          |
| <b>Handshaking:</b>              | CTS/RTS and/or XON/XOFF                            |

**Print Media:**

|                                |   |
|--------------------------------|---|
| <b>Paper Width:</b>            | 57mm (2.25 inches)  |
| <b>Lines of Print/roll:</b>    | 5200 (1.5" diameter roll, 0.4" core, approx. 60 feet long)    |
| <b>Paper Rolls per Charge:</b> | ~ 6   |
| <b>Lines per Charge:</b>       | ~ 30,000 (4" receipt followed by 60 second delay then repeat) |

**Power:**

|                          |   |
|--------------------------|---|
| <b>Power supply:</b>     | Internal rechargeable battery with wall mount DC power pack   |
| <b>Battery:</b>          | 2 cell Lithium Ion, 1850 mAh  |
| <b>DC Power Pack:</b>    | 10V/1.4 A DC/AC UL listed adapter standard.   |
| <b>Battery Recharge:</b> | Internal Fast 180 min fast charge with auto switch to trickle charge; Over-voltage, Overcurrent and over-heat protection  |
| <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. |

**User Interfaces/Mechanical:**

|                           |   |
|---------------------------|---|
| <b>Status indicators:</b> | 3 LEDs (2 are multi functioning) - Power/ERROR, Charging, Ready/Fault   |
| <b>User switches:</b>     | 2 switches – On/Off, Feed   |
| <b>Connection:</b>        | RJ type (6 pin) for Data I/O; DC input Power Jack for wall mount adapter; Infra-Red (IrDA) with Ambient Light Filter; Integrated Bluetooth radio module (optional); Integrated magnetic card reader (optional); |
| <b>Dimensions:</b>        | 107x138x68mm (4.2x5.4x2.7")<br>WxLxH including over-mold  |
| <b>Weight:</b>            | 465g (16oz) with paper and battery pack   |
| <b>Warranty:</b>          | One year standard (3 years available at extra charge)   |
| <b>OEM Products:</b>      | Design services available   |

**Environmental Specifications:**

|                               |  |
|-------------------------------|--|
| <b>Operating Temperature:</b> | -10° to 50°C   |
| <b>Storage Temperature:</b>   | -20° to 60°C   |
| <b>Humidity:</b>              | Up to 90% RH (non-condensing)  |
| <b>Drop:</b>                  | Exceeds industry standard for drop   |
| <b>Agency Approvals:</b>      | FCC: Part 15 Subpart B, Class B CE: EN60950<br>CE: EN55022 Class B;<br>CE: EN61000-3-2;<br>CE: EN61000-3-3;<br>CE: EN50024.<br>AS/NZ: 3548 Class B<br>Complies with EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC<br>Conforms to ANSI/UL STD 60950 & Certified to CAN/CSA STD C22.2 No. 60950-00<br>CB Certified<br>ETL Listed, control # 3046813<br>IEC 68 certified |

**Ordering Information:**

|                     |  |
|---------------------|--|
| <b>Printer:</b>     | S2500THS with RS-232 and IrDA Interface        |
| <b>7832811</b>      | (US Style Adapter)                             |
| <b>7832812</b>      | change last digit to 2 for Euro style Adapter  |
| <b>7832814</b>      | change last digit to 4 for UK style Adapter    |
|                     | add "R" for 3-track MCR (eg 7832812R)          |
|                     | add "-1" for Bluetooth option (eg 7832812R-1)  |
| <b>Accessories:</b> |  |
| <b>151131</b>       | Power Adapter, 12-16 VDC input vehicle adapter |
| <b>756998</b>       | Belt Loop System (included as standard)        |
| <b>757351</b>       | Shoulder Strap                                 |
| <b>757060</b>       | Spare paper, pkg. of 5 rolls                   |
| <b>7A100011</b>     | Spare battery (1850 mAh)                       |
| <b>7A100014</b>     | Spare battery (new 2200 mAh: Available 08/04)  |
| <b>5892RJD9</b>     | Coiled Cable (RJ to D9)                        |