

3" Thermal Printers, Wireless Communications

Advantages

- Designed to withstand the rigors of mobile computing applications
- Integrated Bluetooth™ module for peer-to-peer communication up to 30 feet (optional)
- Integrated 3 track magnetic card reader (optional)
- Easy to load and to wear: lightweight belt loop system included
- RS-232 Serial and IrDA wireless communication included as standard
- Battery recharges in less than 90 minutes
- Low power consumption
- Flash memory for downloadable options including fonts and graphics
- Bar code capability for machine readable receipts



S3500T Design Details

Microcomputer-based printer controller:

- Philips CPU on highly integrated circuit board manages all the features supported by the printer
- Flash and SRAM memory allows for optional features
- Reprogrammable PROM for program and printer dot tables

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; Auto shut-off feature
- Fast charge circuit with auto switch to trickle charge

Fujitsu thermal print head

(up to 2" per second at 7.2V)

- Easy paper load system with T-shaped door pull for ease of opening
- Thermal print contrast control (voltage and temperature dependent)
- High speed, high resolution print;
- Built-in detectors to monitor head temperature, voltage, paper-out

Easy integration for developers:

- Multiple Communication Interfaces
- MS-DOS and Windows compatible with full-speed handshake
- Print Drivers available for Windows 95,98, 2000, XP
- Print Utilities for Windows CE, Pocket PC and Palm operating system.

Easy to use Operator Interface:

- Power ON/OFF switch
- Paper feed momentary switch
- Printer <ready>, <charge>, and <fault> LED indicators
- Built-in self-test

Special Features:

- Graphics emulation
- Resident fonts to enable printing from 12 to 24 characters per inch
- Protective environmental case
- Flash based Waferscale PROM contains 256 bytes flash for firmware, resident fonts, optional rotated fonts, downloadable fonts, graphics, logos, and bar codes.

Print Mechanism:

Printing Method:	Thermal dot line printing
Dot Per Line:	576
Number of heat elements:	2 heater/dot, 142 ohms/dot
Printing Width:	70mm
Resolution:	8 dots/mm
Paper feed pitch:	0.125mm
Printing speed:	50mm/sec @ 6 Volts, between 4 & 7 lines/sec
Head Temperature detection:	By thermistor, hardware protection against overheating
Paper-out/TOF detection:	By photo interrupter
Operating Voltage:	5V
Current Consumption:	3.8A @ 64 dots
Reliability:	50 million mean characters until fail @25% pulse

Standard Operating Features:

Character set:	ASCII International and IBM Graphic sets
Graphic print:	Bit addressable graphic command set; graphic logo store and print. Black Mark Sensing
Bar codes:	Codes 39,128, 2 of 5, UPC-A, UPC-E, UPC/EAN-8, UPC/EAN-13, Codabar.
Supervised operation:	Supervisory command set to read battery voltage, buffer status and power management
Line Buffering:	32KB standard
Characters per line:	36 48 57, 60, 63, 72 (s/w command)
Character Size:	3x2 3x1.5 3x1.15 3x1.5 (HxW mm)
Print contrast:	Auto and user selectable
Print Output:	Double high, double wide and bold print

Communication:

Interface:	RS232C and IrDA standard—Bluetooth option
Baud Rate:	2.4k, 9.6k, 19.2k, 38.4k baud, dip switch selectable
Fast IrDA Transfer Speed:	Up to 38.4K depending on computer capability
Std.IrDA Transfer Speed:	9600 connect and transfer
Handshaking:	CTS/RTS and/or XON/XOFF

Print Media:

Paper Width:	80mm (3.125 inches) or 57mm (2.25")
Lines of Print/roll:	4400 (1.4" diameter roll, approx. 48' long)
Paper Rolls per Charge:	>6 (approx 810 receipts)
Lines Per Charge:	26,000 (4" receipt followed by 60 sec delay; repeat)

Power:

Power:	Removable rechargeable battery
Battery:	5 cell NiMH 1500mAH rechargeable (AA cells)
DC Power Pack:	10V/1.4A UL listed
Battery Recharge:	Internal Fast 90-120 min fast charge with auto switch to trickle charge; Over current and overheat protection
Power ON/OFF:	Via switch or by raising RTS (ON) or lowering RTS (OFF); Auto power down timer

User Interface:

Status indicators:	3 LEDs - Power on, Charging, Fault/Option Ready
User switches:	2 switches – On/Off, Feed
Connection:	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)
Mechanical Dimensions:	6"x4.75"x2.25") WxLxH
Weight:	580g (20oz) with paper and battery pack
Warranty:	One year standard (3 years available at extra charge)
OEM Products:	Design services available

Environmental Specifications:

Operating Temperature:	-10° to 50°C
Storage Temperature:	-20° to 60°C
Humidity:	Up to 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

Ordering Information:

Printer:	
781181I	S3500T with RS-232 and IrDA Interface (US Style Adapter)
7811812	change last digit to 2 for Euro style Adapter
7811814	change last digit to 4 for UK style Adapter
[]	add "R" for 3-track MCR (e.g. 7811812R)
[]	add "-S" for smart card reader (e.g. 7811812R-S)
[]	add "-1" for Bluetooth option (e.g. 7811812-1)
Accessories:	
151131	Power Adapter, 12-16 VDC input vehicle adapter
756998	Belt Loop System (included as standard)
757351	Shoulder Strap
757061	Spare paper, pkg. of 5 rolls
7A100005	Spare battery (1500 mAh)
7A100012	Spare battery (new 1800 mAh; Available 04/04)
5892RJD9	Coiled Cable (RJ to D9)