

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 New 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:	0° to 50°C (will operate in restricted mode from -10 to 70°C)
Storage Temperature:	-20° to 60°C
Humidity:	Up to 85% RH (noncondensing)
Agency approvals:	FCC: Part 15 Subpart B, Class B;
CE:	EN55022 Class B; EN50024; EN61000-3-2; EN61000-3-3 ; AS/NZS3548 Class B

Ordering Information:

7811811	S3500T with Standard Serial and 38.4K IrDA Interface (117V Adapter)
7811812	S3500T with Standard Serial and 38.4K IrDA Interface (220V Adapter)
7811814	S3500T with Standard Serial and 38.4K IrDA Interface (240V Adapter) [R] add for 3 track MCR [- I] Bluetooth™
151131	Power Adapter, for vehicle use
756998	Belt Loop System (included in basic model)
757061	Spare paper, pkg. of 5 rolls
767700	External Multi-port battery charger (4 battery packs)
7A100005	Spare NiMH battery
5892RD9D	Coiled Cable (RJ to D9)