NEW

Battery Powered
3" Thermal Printers

- **Rugged Design**
- **Easy Load System**
- **Lightweight**

FC **CE**

Features

- Receipt printing with low power consumption, portability and low noise operation
- High specification printers driving the high-speed Fujitsu series fixed thermal printhead
- Full range of communication interface versions including RS-232 Serial, Infrared (IrDA), Magnetic Card, and Smart Card*
- Enclosed paper supply for receipt paper or labels
- Easy load system - just open the door and drop in the roll!
- Powerful integrated micro-controller managing all the features supported by the Series 3500THS
- S3500THS operates from a seven cell NiMH battery cartridge that delivers 8.4 volts.
- Extended life thermal paper available

- New rugged design with Santoprene overlays
- Internal fast charge circuit charges the battery in 2 hours with automatic switch over to trickle charge
- Easy to use switches; LED feedback
- Graphics emulation mode and Windows® 95, 98, and 2000 compatible; downloadable fonts and logos; Windows® driver; Prints from Windows CE and Pocket PC and from Palm O/S
- Compatible with EPOC O/S and SIBO O/S
- New Flash Memory
- New faster IrDA for wireless communication
- Linerless label option or kiss-cut perforated labels
- 3", 2", or 1" width paper rolls

*Available Q4 2002.

Extech 3500THS Series Portable Printer

16 Bit Controller - CPU Block:

Powerful Industry Standard CPU on highly integrated circuit boards manages all the features supported by the printer Low power precision regulator circuits; 256K bytes of flash memory for program, printer dot tables, forms, and logos; 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; 128 SRAM. Optional: Battery backed clock/calendar, line counter, interval timers.

Controller - Printer Block:

High speed Fujitsu direct thermal print head (up to 2" per second at 7.2V) with easy load system; automatic thermal print contrast control (voltage and temperature dependent); high resolution print; built-in detectors to monitor head temperature, voltage, paper-out.

Controller - Power Block:

Precision, low power 5V regulator, printer mechanism power ON/OFF circuit; auto shut-off; fast charge circuit with auto switch to trickle charge; low power and charging LED indicators; Power adapter option, auto switch to AC power when adapter is used; hardware and software power management; New extra capacity rechargeable NiMH 7-cell (5/4 AAA) battery cartridge (700 mA/H).

Controller - Data Interface Block:

2400 to 38.4K communication speed; Communication Interfaces: Serial Cable RS-232 with RJ type connector (6 pin), Wireless with Infra-Red (IrDA) up to 38.4K transmission speed with ambient light filter; optional Magnetic Card Reader (3 track, simultaneous read). Optional Smart Card Reader (available Q4,2002)
MS-DOS and Windows compatible with full-speed handshake; Windows 95®, 98® and 2000® printer drivers; Windows CE print application; Windows CE and Pocket CE print driver from fieldsoftware.com; Palm O/S print driver from stevenscreek.com. Bluetooth (available Q2 2002).

Operator Interface:

Standard: Power ON/OFF switch; Paper feed momentary switch; Printer <charge>; <AC-on>; and <fault>/<option ready> LED indicators; built-in self-test.

Special Features:

Graphics emulation; Resident fonts to enable printing from 12 to 24 characters per inch; Protective case; Flash based Waferscale PROM contains 256K bytes for firmware, resident fonts, optional rotated fonts, downloadable fonts, graphics, logos, and bar codes. MS-DOS and Windows compatible with full speed handshake.

Ordering Information:

78128I1	S3500THS with Standard Serial and 38.4K IrDA Interface (117V Adapter)
78128I2	S3500THS with Standard Serial and 38.4K IrDA Interface (220V Adapter)
78128I4	S3500THS with Standard Serial and 38.4K IrDA Interface (240V Adapter)
[R]	add for 3 track MCR
[-DEV]	Developers Kit
151129	Power Adapter, 12VDC
756998	Belt Loop System (included in basic model)
757062	Spare paper, pkg. of 5 rolls
767069-350	Linerless Option
757066	Linerless Labels (1 roll)
757073L	Kiss-Cut Perforated Labels (5 rolls)
767800	External Multi-port battery charger (4 battery packs)
7A100007	Spare NiMH battery
5892RJD9	Coiled Cable (RJ to D9)

Specifications:

Print Mechanism:

Printing Method:	Thermal dot line printing (576 dots per line)
Number of heat elements:	2 heater/dot, 142 ohms/dot
Printing Width/Resolution:	70mm/8 dots/mm
Paper feed pitch:	0.125mm
Printing speed:	50mm/sec @ 7.2 Volts, between 4 & 7 lines/sec
Head Temperature detection:	By thermistor, H/W 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; Bar codes 39,128, 2 of 5, UPC; Graphic logo store and print
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

Communication:

Interface:	RS232C and IrDA standard
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 (2.2")
Lines of Print/roll:	6200 (1.4" diameter roll, 0.4" core, approx. 45' long
Paper Rolls per Charge:	~3.5 (approx 385 6" receipts)
Lines Per Charge:	~21,000 (6" receipt followed by 15 sec delay; (repeat)

Power:

Power:	Removable rechargeable battery
Battery:	7 cell NiMH 700mAH rechargeable (5/4 AAA cells)
DC Power Pack:	13.6vdc/1 A DC/AC adapter standard
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

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: -20° to 60˚C)
Storage Temperature:	-20° to 60°C
Humidity:	Up to 85% RH (noncondensing)
Exceeds industry standard for drop	
Agency approvals	FCC Part 15J Part B; CE EN55022 Part B, EN50082-1

EXTECH INSTRUMENTS

The Price and Performance Leader for your Portable Printing Solutions