

## 2000i Series

Improved Firmware and Flash based PROM

**Compact, battery powered printers offer enhanced performance and systems integration capability**

Adds to the mobile applications of a wide range of portable computers and instruments



**Magnetic Card Reader Option**  
(see information on reverse side)

### Features

- A full range of communication interface versions are available including RS-232 Serial, Parallel, Infrared (IrDA) and Magnetic Card (simultaneous read of two tracks)
- The Series 2000i printer range is a high specification, Epson compatible printer driving the Epson M190 series impact printhead
- Enclosed paper supply
- A powerful integrated micro-controller manages all the features supported by the Series 2000i
- Flash based Waferscale PROM contains 128K bytes for firmware, resident fonts, downloadable fonts,
- Reliability of the impact printhead provides up to 1.5 million character lines before failure
- Operates from either an industry standard five cell metal hydride battery cartridge or from an AC power adapter. A fast-charge circuit charges the battery in 90 minutes with automatic switch-over to trickle charge
- Options include Magnetic Card Reader, battery backed clock/calendar, line counter and interval timer, up to 128K of battery backed SRAM memory for datalogging applications
- Front panel membrane switch provides for user input and LED feedback
- Graphics emulation mode and Windows® 95, Windows® 98, Windows® 2000, Pocket PC, and Palm O/S compatible

Information provided is provisional and subject to change.

# Exttech Series 2000i Portable Printer

## Microcomputer-based printer controller:

**powerful Philips 80CL580 on highly integrated circuit boards manages all the features supported by the printer**

### Controller - CPU Block:

**Standard:** Low power precision regulator circuits; 8 bit 4 channel A/D circuit to measure system and printer mechanism voltage levels, and battery; Fail safe and CPU watchdog circuits; Flash based Waferscale PROM contains 128K bytes for firmware, resident fonts, downloadable fonts, graphics, and logos;

**Optional:** Optional battery backed 128K SRAM print buffer for datalogging applications (with IrDA, only 32K is available for printbuffer); Battery backed clock/calendar, line counter, and interval timers.



### Controller - Printer Block:

**Standard:** Epson M190 Series impact printheads (60 cps; 24 and 40 col. options); Low power printer driver and fail safe circuits; Paper-out sensor

### Controller - Power Block:

**Standard:** 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 used; 15 00 mA/H rechargeable NiMH 5 cell battery cartridge (up to 22,500 lines of continuous printing with 24 column print head); Hardware and software power management

**Optional:** External Battery Charger



Optional External Battery Charger  
Part Number 767600

### Controller - Data Interface Block:

**Standard:** 1200 to 9.6K communication speed (19.2K option); Communication Interfaces: Serial RS-232 with RJ type connector (6 pin) Infra-Red (IrDA with ambient light filter); Windows 95®, 98®, and 2000® printer driver; Windows CE print application; Palm O/S print driver from stevenscreek.com; Protective case



RS232 Port



IrDA Interface

### Optional Communication Interfaces:

Parallel (HD 15 connector)

Magnetic Card Reader

### Operator Interface:

**Standard:** Membrane switch for user input; selection and LED feedback; Power on-off momentary switch; Paper feed momentary switch; Printer <on-line>, <low power>, <charge> and <fault> LED indicators; Built-in self-test.



## Special Features:

**Standard:** Graphics emulation; Three resident fonts; 16 downloadable graphics characters; Paper-out sensor by photo interrupter; MS-DOS and Windows™ compatible with full speed handshake; 1.5 inch paper roll (60 feet single ply; 2 ply also available); Newly designed high impact ABS cyclocac enclosure; 2.75"(70mm) H (Max) x 4.2"(107mm)W x 4.75"(122mm)L in size; weighs 18 oz.(510g)

### Optional:

Belt loop system (User installable); Protective rubber case

## Specifications:

### (with standard Epson M190 print head)

	24 Column	40 Column
Dots per line:	144	252
Characters per line:	24 (12 double width)	40 (20 double width)
Characters size (h x w):	2.6mm x 1.7mm	2.6mm x 1.1mm
Column spacing:	2.06mm	1.29 mm
Print Speed:	60 cps	60 cps
(at 4.8VDC)	2.5 lines/sec.	1.5 lines/sec.
Paper rolls per charge:	~5	~3
Printhead Life:	1,500,000 lines	900,000 lines
Line spacing:	3.78 mm (0.15")	
Character matrix (hwx):	5x7, 5x14, 10x7, 10x14 dots	
Line buffering:	32K standard with IrDA	
Baud Rate:	1200, 2400, 4800 or 9600 baud	
Handshaking:	CTS/RTS and/or XON/XOFF	
Ribbon Type:	Epson ERC-09 or ERC-22	
Lines of print per roll:	4800 (1.5" diameter roll, 60 feet long)	
Lines of print per charge:	22,500 (24 column)	13,500 (40 column)
Printer Method:	Impact dot matrix: (8 print solenoids)	
Plain Paper:	57mm (2.25") width x 20m (60') length	
Ribbon Life:	250,000 characters (ERC-09)	500,000 characters (ERC-22)
Power:	5 cell NiMH (rechargeable) battery or AC/DC adapters	
Power ON/OFF:	Via switch or by raising RTS (ON) or lowering RTS (OFF)	
Connection:	Standard RJ type (6 pin) (Data)	
	Standard Power Jack (Adapter)	
	Infra-Red (IrDA) with ambient light filter	
Operating Temp	-10°C to 50°C	
Storage Temp	-20°C to 60°C	

## Ordering Information:

### Series 2000i Portable Printer

**77116 I 0** Series 2000i 24 Column  
**77118 I 0** Series 2000i 40 Column  
 add R2 for MCR Tracks 1/2; R3 for MCR Tracks 2/3  
 Change third digit to a **2** for 128K Datalogging Option

**157120** 117V Adaptor  
**157220** 220V Adaptor  
**157240** 240V Adaptor

**759059** Spare paper, pkg of 5 rolls  
**767600** Series 2000 External battery charger (1 cartridge)  
**767700** Series 2000 External Multi-Port battery charger (4 cartridges)