

S3750THS Series

Robust 3" (80mm) Portable Receipt Printer with Multiple Wireless Communication Options

✓ **Rugged, Lightweight**

- Contemporary and Rugged - Designed to withstand the rigors of mobile printing
- Lightweight and easy to wear with belt loop system or shoulder strap (1.3 lbs with paper and battery)

✓ **Trouble-Free Operation**

- Ready to Use - Printer comes complete with paper, belt loop system, universal adaptor, and battery
- State-of-the-Art Integrated Micro-Processor
 - Flash Memory - Add Logos, Barcodes and other Graphic Elements
 - High Capacity Lithium-Ion Battery - More Receipts per Charge
- In-field Programming - Upgrade firmware, download fonts and logos
- Easy "drop-in" paper load
- 12 month warranty (including printhead)
 - Optional extended warranty programs available

✓ **Multiple Communications Options**

- RS232
- Field tested, robust IrDA communication system
- Optional integrated Bluetooth™
- Optional 802.11b/g
- Optional 3-Track Magnetic Card Reader and/or Smart Card Reader

✓ **Typical Applications Include**

- Field Service: Invoicing and Credit Card Receipts
- Route Accounting; Presales & DSD
- Ticketing: Transportation and Public Safety
- Fixed station* or Mobile POS and Hospitality



S3750THS Design Details:

Fast Charge Circuit with Auto-Switch to Top-Off Charge:

- Powered by high capacity Lithium-Ion battery cartridge (7.4V; 2200 mAh)
 - Battery charges to the printer internally or in external battery charger
- Power adaptor option, auto switch to AC power when charging adaptor is used
- Hardware and software power management

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

Fujitsu Thermal Print Head:

- High speed (rated up to 2" per second at 7.2V -- voltage, application and temperature dependent) and high resolution print
- Automatic thermal print contrast control (voltage and temperature dependent)
- Built-in detectors to monitor voltage and paper-out.

Easy to Integrate:

- Multiple communication interfaces including Serial, IrDA, Bluetooth™, and 802.11b/g
- MS-DOS and Windows compatible with full-speed handshake
- Print drivers available for Windows 95, 98, 2000, XP and Vista
- Print utilities available for most Mobile Operating Systems (including Windows CE, Pocket PC, WM5 and Palm)

Special Features:

- Resident fonts to enable printing from 12 to 24 characters per inch
- Printer is in-field programmable for firmware, font and logo setup
- Protective over-molding for heavy duty field use
- Optional integrated Magnetic Card Reader and/or Smart Card Reader
- Optional two-bay battery charger



S3750THS in environmental case



S3750THS with Magnetic Card Reader

*For further information on the In-Vehicle or Desktop version, please contact Extech Instruments.

Print Mechanism:

Printing Method:	Direct Thermal
Print Resolution:	203 dpi/ 8 dots mm
Dots per Line:	576
Printing Width:	2.83" (72mm)
Paper Feed Pitch:	0.125mm
Printer Speed:	Up to 2" per second (50mm/sec) @ 7.2 Volts (actual print speed is dependent on state of battery, temperature and nature of application)
Number of Heat Elements:	2 heater/dot, 142 ohms/dot
Head Temperature Detection:	By thermistor with hardware protection against overheating
Paper-out/Q-Mark/TOF Detection:	By photo interrupter
Operating Voltage:	5V
Current Consumption:	2.4A @ 7.2V; 25C and 64 dots
Reliability:	100 million MCTF (mean characters until fail) @ 25% density

Operating Characteristics:

Character set:	ASCII International, PC Line Draw
Additional Character Sets:	Simplified Chinese, Hebrew, Arabic, Polish, Korean
Optional Character Sets:	Downloadable fixed-width fonts
Graphic print:	Supports 8-bit graphic printing, customs fonts and logo downloading
Bar code Symbolologies:	
Linear:	Codes 39, Code128, UCC/EAN-128, Interleaved2 of 5, UPC-A, UPC-E, EAN/JAN-8, EAN/JAN-13, Codabar, PDF417 (optional)
2 Dimensional:	
Supervisory commands:	Commands available to read battery voltage, buffer status, firmware and hardware version
Memory:	
SRAM:	32K standard as cache memory (fast, low power memory)
Flash:	256K + 32K for program and tables plus downloaded features
Characters per line:	36, 48, 57, 64, 72, 96 (s/w command)
Print contrast:	Auto and user selectable
Special Print	
Character Attributes:	Double high, double wide and bold print

Communication:

Interface:	
Standard:	RS232C (up to 38.4K depending on computer capability) IrDA (up to 38.4K depending on computer capability)
Optional:	Bluetooth™ V2.0 WLAN 802.11b/g
Dip Switch Selectable	
Baud Rate:	2400 – 38.4K
Handshaking:	Hardware (CTS/RTS) and/or Software (XON/XOFF)

Print Media:

Media Type:	Direct Thermal Paper (Standard paper is Kansaki P390)
Paper Width:	3.125" (80mm)
Max Roll Size:	43' length @ OD: 1.375" using standard paper
Roll Core ID:	0.4"
Paper Rolls per Charge:	~ 5
Total Length Printed Per Charge:	~ 235 ft (71m) (4" receipt followed by 60 second delay then repeat)

(For optimum print quality and printer performance, use Exttech supplied paper)

Power:

Battery:	Internal rechargeable 2 cell Lithium-Ion (7.4V; 2200 mAh)
Battery Life:	80% of original capacity after 300 cycles (typical)
Recharging:	3 hours @ fast rate charge (at empty)
External Charging Options:	
DC Power Pack:	100V - 240VAC input, 10V/1.32A output UL listed adapter standard (in-printer charging)
In-Vehicle Charger:	10.6V~30V, Cigarette Lighter adaptor
Power ON/OFF:	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.

Software:

Exttech Logo Downloading utility
Exttech Bluetooth™ Configuration utility

User Interface:

Status indicators:	3 LEDs (2 are multi functioning) Power/ERROR, Charging, Ready/Fault
User switches:	2 switches – Power (On/Off), Feed
Connection:	RJ type (6 pin) for Data I/O Infra-Red (IrDA) with Ambient Light Filter Bluetooth™ v 1.2 (optional) WLAN: 802.11b/g (optional) Magnetic Card Reader (optional) Smart Card Reader (optional)

Mechanical:

Construction:	Cyclac KJW Enclosure with Rubber Bumpers
Dimensions:	6.1"Lx5"Wx2.27"H (156L x127.2Wx 57.6H mm)
Weight:	
Printer Only:	15oz (422g)
Printer with paper and battery:	1lbs 4oz (583g)
Warranty:	
Standard:	One year standard
Optional:	Up to 5 year programs available at extra charge
OEM Products:	Design services available

Environmental Specifications:

Operating Temperature:	14° to 122°F (-10° to 50°C)
Storage Temperature:	-4° to 140°F (-20° to 60°C)
Charging Temperature:	32° to 122°F (0° to 50°C)
Humidity:	10 - 90% RH (non-condensing)
Drop:	Exceeds industry standard for drop

Agency Approvals:

FCC: Part 15 Subpart B, Class B	Conforms to ANSI/UL STD 60950 and
CE: EN60950	Certified to CAN/CSA STD C22.2 No. 60950-00
CE: EN55022 Class B;	CB Certified
CE: EN61000-3-2;	ETL Listed, Control # 3046813
CE: EN61000-3-3;	IEC 68 Certified
CE: EN50024	GS Certified, #04US00384-1
AS/NZ: 3548 Class B	IP54 Rated (with Environmental Case)
Complies with EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC	

Ordering Information:

The S3750THS series comes standard with IrDA, RS-232, Battery, 1 Paper Roll, Universal AC Adapter (180-minute Fast Charge), Belt Loop System, Print Head Cleaning Pen, and a 1 year warranty that includes the print head.

784281I	S3750THS with RS-232 and IrDA Interface (Universal Adaptor)
[]	add "R" for 3-Track Magnetic Card Reader (e.g. 784281IR)
[]	add "S" for Smart Card Reader (e.g. 784281IS)
[]	add "RS" for 3-Track Magnetic Card Reader and Smart Card Reader
[]	add "-1" for Bluetooth option (e.g. 784281I-1)
[]	add "-2" for 802.11b/g option (e.g. 784281I-2)

Accessories:	
756985	IP54 Certified Environmental Case (NO MCR Opening)
756998-1	Spare Belt Loop System
757351	Shoulder Strap with Quick Clip
757061	Spare Paper, Pkg. of 5 rolls
757061-CASE	Spare Paper (Case of 200 rolls)
7A100014	Spare Battery (2200 mAh)
767400-1	2-Bay Battery Charger (US plug)
767400-2	2-Bay Battery Charger (EURO plug)
767400-4	2-Bay Battery Charger (UK plug)
157261	Universal AC adapter (included as standard)
5892RJD9-1	Coiled Cable, Straight Plug
151133	10.6~30V In-Vehicle Adaptor (with battery in printer)

Specifications subject to change without notice
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