

# BATTERY DRIVE, MOBILE TYPE STANDALONE THERMAL PRINTER 2" EASY LOADING MODEL

## FTP-628WSL110/120

### ■ OVERVIEW

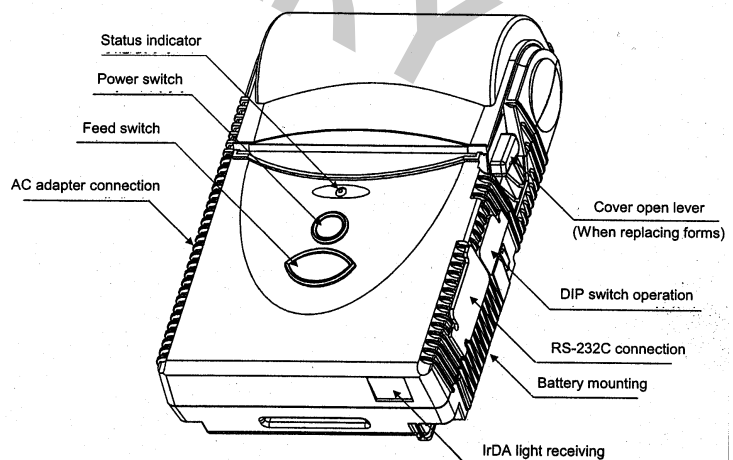
The supply voltage of the FTP-628WSL Series is 120VAC (via AC adaptor) or battery. The width of the standalone printer is 3 inches. The unit uses 2 inch wide paper. The mechanism and interface board is a standard multiple purpose unit.

The semi-rugged printer unit is most suitable for applications such as handheld, mobile and portable devices, as well as for various other equipment.



### ■ FEATURES

- Lightweight and ultra small size
- Easy paper loading
- Bluetooth®, infrared and serial interfaces
- 3.7V Lithion battery, 120/240 VAC adapter
- Drop-test - 1.5 meters
- Water resistant
- Prints 2-D barcodes



# FTP-628WSL110 /120 Series

## ■ PART NUMBER

Item		Part Number
Mobile printer	Bluetooth®, IrDA and serial interfaces	FTP-628WSL110 (includes AC adapter, battery, belt clip and paper roll)
Mobile printer	IrDA and serial (RS-232C) interfaces	FTP-628WSL120 (includes AC adapter, battery, belt clip and paper roll)
Interface cable	Serial	FTP-628Y303

## ■ SPECIFICATIONS

Item		Specification
Part Number		FTP-628WSL110 / 120
Dot structure		384 dots / line
Dot pitch (horizontal)		0.125 mm
Dot pitch (vertical)		0.125 mm
Effective print area		48 mm
Paper width/diameter		58mm / ID 8mm, OD 36mm max.
Paper thickness		60 to 100µm *1
Maximum printing speed		Maximum 40mm/sec. (320 dotline/s)
Character types		Alphanumeric KANA: 159 International characters: 195 JIS KANJI: approx. 6800
Character dimensions (WxH mm), number of characters		12 x 24 dots (1.5 x 3.0mm), 32 columns 24 x 24 dots (3.0 x 3.0mm), 16 columns 8 x 16 dots (1.0 x 2.0mm), 48 columns 16 x 16 dots (2.0 x 2.0mm), 24 columns
Power	Battery	3.7VDC lithium ion battery
	AC Adapter	100VAC to 240AC adapter
Power consumption		1.5 A (40mm/sec., print ratio 25%) standby 32mA
Dimensions (W X D X H)		84 x 136.5 x 30.0 mm body / 43.6mm paper holder
Weight		280 g (paper and battery included)
Expected Life	Head	Pulse durability: 100 million pulse/dot (using Fujitsu's standard driving method) Wear resistance: 50Km
	Battery	One charge: 50m (at 12.5% printing ratio)
	Paper Holder	5000 times open / close

(continued)

# FTP-628WSL110/120 Series

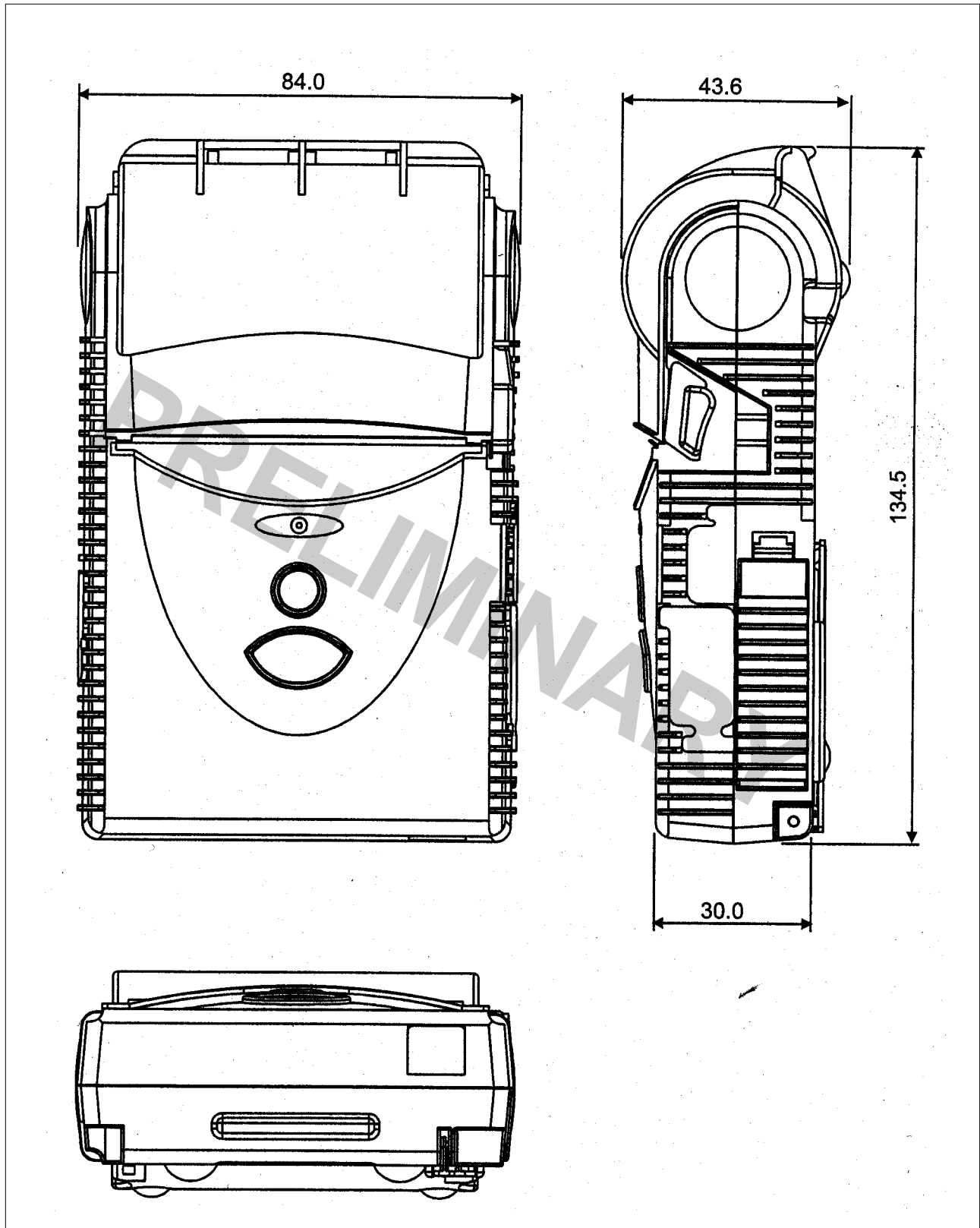
## FTP-628WSL110/120 Specs continued

Item		Specification	
Bar Code Type		UPC-A, UPC-E, JAN13, JAN8, CODE 39, ITF, CODABAR, CODE 128, QR	
Interface	Serial	RS-232C	
	IrDA	Version 1.2 (Ir COMM protocol)	
	Bluetooth® *3	Version 1.1 (SPP profile)	
Safety Standard	Noise	FCC Class B, FCC Part 15	
	Water resistant	JIS C0920 Class 2	
Environmental conditions	Operating temperature	-5° C to +50° C*4	
	Operating humidity	20 to 85% RH (no condensation)	
	Storage temperature	-20° C to +60° C	
	Storage humidity	5 to 90% RH (no condensation)	
Detection function	Head temperature	Detected by thermistor	
	Mark detect	Detected by photo-interruptor	
	Paper out	Detected by photo-interruptor	
	Cover open	Detected by micro-switch	
Major Function		Page mode Registration of character and image Enlarge characters Auto status reply	
Recommended thermal sensitive papers		High sensitive paper	TF50KS-E4 (Nippon paper)
		Standard Paper	TF-60KS-E (Nippon paper), PD150R (Oji paper)
		Medium term paper	TF-60KS-F1 (Nippon paper), PD170R (Oji paper), P220VBB-1 (Mitsubishi paper), FH65BC-3H (Fuji Film)
		Long term paper	PD160R-N (Oji paper), AFP-235 (Mitsubishi)

- Notes: \*1: There may be exceptions  
 \*2: ESC/POS™ Seiko/Epson trademark  
 \*3: FTP-628WSL110 only  
 \*4: +5 to +40°C guarantee of print quality

# FTP-628WSL110/120 Series

## ■ DIMENSIONS



# FTP-628WSL110/120 Series

## ■ COMMANDS

Command	Contents
HT	Horizontal tab.
LF	Line feed.
FF	Feeds forms (new page).
ECS RS	Sets reverse printing.
ESC US	Resets reverse printing.
ESC ! + n	Sets print mode.
ESC % + n	External registration character specification / cancellation.
ESC & + y + c1 + c2 + x + d1 ~ dn	External registration character definition.
ESC * + m + n1 + n2 + [d1 ~ dn]	Bit image mode registration
ESC 3 + n	Sets the line feed length.
ESC ? + n	External registration character deletion.
ESC @	Printer initialization.
ESC A + n	Sets the space between lines.
ESC C + n	Sets the page length by character line.
ESC D + d1 ~ dn + NUL	Sets the tab position.
ESC J + n	Feeds paper in forward direction and prints.
ESC K + n	Reverse paper feed.
ESC R + n	Selects international character.
ESC V + n	Right Rotation 90° specification / cancellation.
ESC X + m + n	Setting the turning time of the motor excitation.
ESC c + 1 + n	Sets internal processing.
ESC s + n	Print speed setting.
ESC { + n	Sets/resets upside down printing.
ESC FF	Data printing in page print mode.
ESC L	Page print mode selection.
ESC S	Line print mode selection.
ESC W + x1 + x2 + y1 + y2 + Dx1 + dx2 + dy1 + dy2	Print area setting in page print mode.
ESC Y SOH x a DLE + n	RS-232C communication setting.
FS ! + n	Kanji printing mode collective specification.
FS &	Kanji printing mode specification.

# FTP-628WSL110/120 Series

Commands continued

Command	Contents
FS .	Kanji printing mode cancellation.
FS 9+n	Sets the detection functions.
FS C+n	Kanji code selection.
FS E+n	Correction of impressed energy.
FS r+n	Parameter transmission.
GS &+m+x+y1+y2+[d]k	Registration of image data.
GS 'm+n	Prints registered image data.
GS <	Line feeds to the next mark.
GS A+m+n	Sets the line feed length after mark detection.
GS E+n	Sets print quality.
GS a+n	Setting and cancelation of status transmission
GS e+n+m	Sets bar code width.
GS h+n	Sets bar code height.
GS k+m+n+d1~dN	Bar code printing.
GS k+m+k1+k2+k3+k4+d~	Two dimensional code printing.
GS ( A ETX + n	Link time setting of Bluetooth (WSL110 only).
GS ( A EOT n1 +n2+n3	Sleep mode timer setting of Bluetooth (WSL110 only).
GS ( A Null n1 ~ n6	BD_ADDR setting (WSL110 only).
GS ( A ACK + m + n	Security mode setting of Bluetooth (WSL110 only).
GS ( A ENQ	Bluetooth, formation printing (WSL110 only).

<b>Fujitsu Components International Headquarter Offices</b>	<b>Japan</b> Fujitsu Components Limited Gotanda-Chuo Building 3-5, Higashigotanda 2-chome, Shinagawa-ku Tokyo 141, Japan Tel: (81-3) 5449-7010 Fax: (81-3) 5449-2626 Email: <a href="mailto:promothq@ft.ed.fujitsu.com">promothq@ft.ed.fujitsu.com</a> Web: <a href="http://www.fcl.fujitsu.com">www.fcl.fujitsu.com</a>	<b>Europe</b> Fujitsu Components Europe B.V. Diamantlaan 25 2132 WV Hoofddorp Netherlands Tel: (31-23) 5560910 Fax: (31-23) 5560950 Email: <a href="mailto:info@fceu.fujitsu.com">info@fceu.fujitsu.com</a> Web: <a href="http://www.fceu.fujitsu.com">www.fceu.fujitsu.com</a>
	<b>North and South America</b> Fujitsu Components America, Inc. 250 E. Caribbean Drive Sunnyvale, CA 94089 U.S.A. Tel: (1-408) 745-4900 Fax: (1-408) 745-4970 Email: <a href="mailto:marcom@fcai.fujitsu.com">marcom@fcai.fujitsu.com</a> Web: <a href="http://www.fcai.fujitsu.com">www.fcai.fujitsu.com</a>	<b>Asia Pacific</b> Fujitsu Components Asia Ltd. 102E Pasir Panjang Road #04-01 Citilink Warehouse Complex Singapore 118529 Tel: (65) 6375-8560 Fax: (65) 6273-3021 Email: <a href="mailto:fcal@fcal.fujitsu.com">fcal@fcal.fujitsu.com</a> <a href="http://www.fcal.fujitsu.com">www.fcal.fujitsu.com</a>

© 2004 Fujitsu Components America, Inc. All company and product names are trademarks or registered trademarks of their respective owners. Rev. 05/28/2004.