FUJITSU THE POSSIBILITIES ARE INFINITE

24V DRIVE, ULTRA HIGH SPEED LINE THERMAL PRINTER 4” MECHANISM, WITH AVAILABLE CUTTER

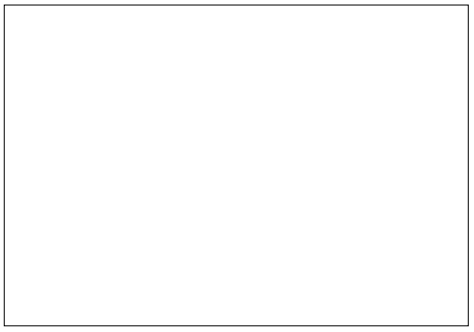
FTP-641MCL351/352

■ OVERVIEW

This thermal printer (driven by 24 VDC) and cutter provide high speed printing for 4-inch wide paper (114 mm). This printer is small in size, light weight, and has low power consumption. The print head features open construction for easy maintenance.

This printer is suitable for a variety of applications, such as POS terminals, ticket machines, label printers, measuring devices and medical equipment.

In addition to the interface board, a driving LSI (MCU + Gate Array) is also available.



FTP-641MCL351/352 shown after assembly with FTP-641CT001cutter

FTP-621CU102, FTP-633GA101

FTP-621DCL013

■ HIGHLIGHTS

- **Ultra high speed printing**
  It can print at 100 mm/s (800 dotlines/s) by using Fujitsu Components' unique head drive control system.
- **Auto cutter**
  Full or partial cutting are available by normal or reverse rotation of the motor (command set).
- **Low power consumption**
  The peak current for head driving is approximately 3.3 A (at 50 mm/s printing speed, 50% printing ratio).
- **Easy head access**
  Head-open construction makes head maintenance easy, especially for head cleaning.
- **Paper auto loading function**
  The thermal paper can be loaded without head-up lever operation.
- **High resolution**
  8 dots/mm head provides clear print output.
- **Selectable paper paths**
  Front or rear insertion types are available.

■ DESIGNATION

Item		Part number
Printer mechanism	Front paper insertion type	FTP-641MCL351
	Rear paper insertion type	FTP-641MCL352
Cutter		FTP-641CT001
Interface board		FTP-621DCL013
LSI	Micro Controller Unit	FTP-621CU102
	Gate Array	FTP-633GA101

■ GENERAL SPECIFICATIONS

Item		Specifications
Printing method		Thermal-sensitive line dot method
Dot structure		864 dots/line
Dot pitch (Horizontal)		0.125 mm (8 dots/mm)—Dot density
Dot pitch (Vertical)		0.125 mm (8 dots/mm)—Line feed pitch
Effective printing area		108 mm
Number of columns		72 columns/line (maximum)—Alphanumeric KANA
Maximum printing speed		800 dotlines/s (100 mm/s) maximum
Character types		JIS ANK : 128 International characters : 130 Semi-graphic : 63 ASCII small characters : 31 Download : 384
Character composition, dimensions (H×W), Number of columns (standard)		24 × 12 dots, (3.0 × 1.5 mm), 72 columns 32 × 16 dots, (4.0 × 2.0 mm), 54 columns 24 × 24 dots, (3.0 × 3.0 mm), 36 columns 32 × 32 dots, (4.0 × 4.0 mm), 27 columns
Interface		1) Centronics standard 2) Bus interface*1
Cutter	Cutting method	Guillotine method
	Cutting type	Full-cut or partial cut (command set)
	Minimum cut length	20 mm
	Paper thickness	65 to 150 μm

(Continued)

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Item		Specifications
Power supply	For head	24 VDC ± 5%, average:*2 0.82 (1.11) A (at 25 mm/s printing speed, 25% printing ratio) 1.25 (1.66) A (at 50 mm/s printing speed, 25% printing ratio) 4.75 (6.30) A (at 50 mm/s printing speed, 100% printing ratio) ( ): Peak
	For motor	24 VDC ± 5%, 1.0 A maximum
	For logic	5 VDC ± 5%, 0.5 A maximum
Weight		Mechanism with cutter: approximately 610 g Interface board: approximately 100 g
Dimensions	Mechanism + cutter Interface board	159 (W) × 60 (D) × 71.0 (H) mm (excluding connector) 140 (W) × 89 (D) × 24.0 (H) mm
Life	Thermal head	Pulse durability : 5×10^7 pulse/dot (using Fujitsu & Takamisawa's standard driving method) Wear resistance : 50 km (at 12.5% printing ratio)
	Cutter	Cutting life: 3×10^5 times
Environmental conditions	Operating temperature	+5 to +40°C*3
	Operating humidity	20 to 85% RH (no condensation)
	Storage temperature	–20 to +60°C (excluding paper)
	Storage humidity	5 to 95% RH (no condensation)
Detection	Head temperature	By thermistor (applied energy control, abnormal temperature detection)
	Paper out/Mark detect	By photointerrupter (command set)
	Head-up	By microswitch
Paper width		114^{+0}_{-1} mm
Recommended thermal sensitive paper*4		1 ply paper in roll : FTP-040P0020

*1: The data to be printed is automatically read out by the printer driver equipment memory (host system frame memory). The communication is parameter transfer.

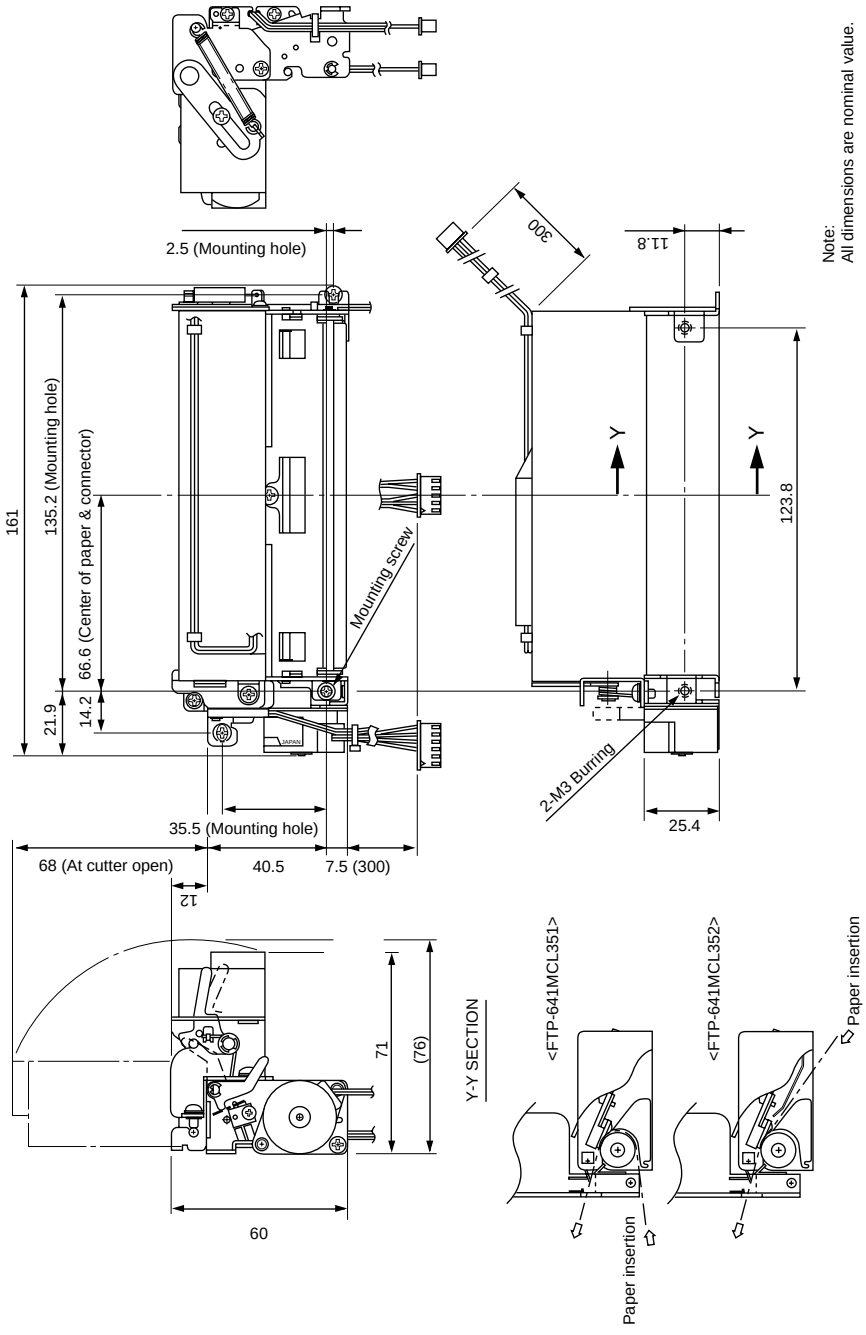
*2: At 25°C, maximum applied voltage, minimum head resistance, specified paper, stable printing ratio.

*3: Temperature range for guaranteed printing density. It can operate at 0 to +40°C.

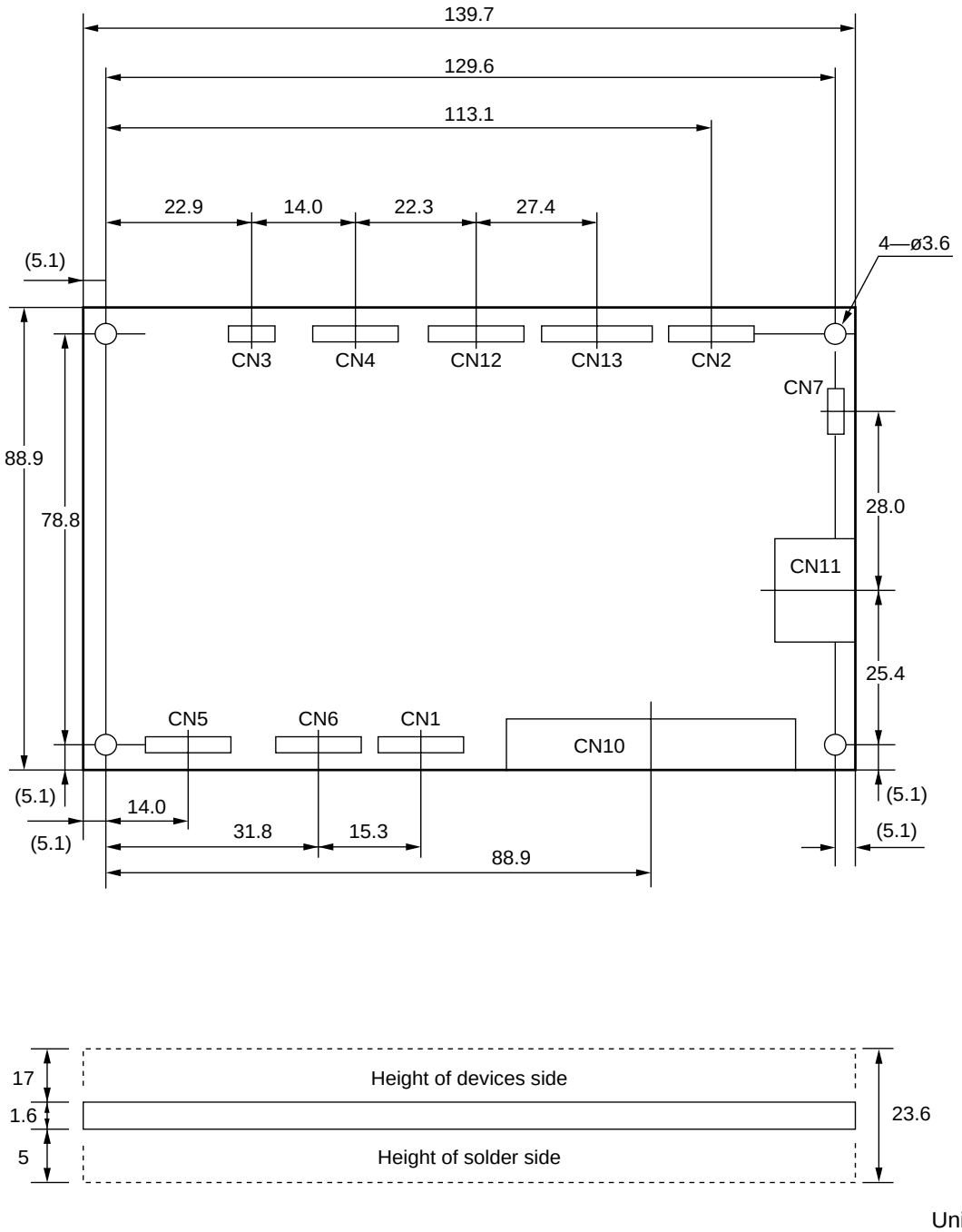
*4: Please contact us for other thermal papers.

■ DIMENSIONS

Printer mechanism with cutter



Interface board



■ INTERFACE, COMMAND, OPTIONS

Please refer to the FTP-621DCL003/013 DATA SHEET for Interface, Command, and Options.

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