

High-Speed Thermal Printer Supporting Thick Printing Paper **FTP-63AMCL301/FTP-63AMCL101**

A thermal printer mechanism with a straight paper path and front paper output supporting thick paper and labels with up to 220 μ m thickness. A paper width of 3 inches and high printing speed of 250mm/sec. makes it optimal for built-in applications in ticketing devices, label printers, information kiosk terminals, financial terminals, and POS terminals.

Overview

Thermal printers are widely adopted in receipt issuance applications in distribution terminals including POS terminals and ECR, payment terminals, and financial terminals such as ATMs, CDs, and change machines due to their high-speed printing, easy maintenance, improved thermal paper conservation, and so forth. Furthermore, adoption of thermal printers is growing in label printing for distribution and logistics including product labeling and management and ticket-issuing applications for service tickets and coupons. In these applications, printing on thick paper is essential to allow the utilization of higher paper quality and prevent counterfeiting or tampering.

FUJITSU COMPONENT has now introduced a thermal printer mechanism which is capable of printing on 220 μ m-thick thermal paper and thermal labels. We have added our newly developed high-performance and small rotary cutter model with a built-in cutter (FTP-63AMCL301) for ticket issuing applications. The model for 155- μ m-thick paper developed as a part of this series has a sliding cutter with our proprietary structure that separates the thermal head section and the moving blade of the cutter from the driving block and pulls the moving blade into the protective cover in the event of a paper jam to ensure safety during maintenance (FTP-63AMCL401). Either model can be selected to suit the application. It also has a special gear structure to increase its durability.

Application Examples

■ KIOSK terminals, various ticketing devices

- Issuance of tickets, service tickets, and coupons
- Issuance of food tickets, admission tickets, etc.
- Issuance of numbered tickets for parking or waiting

■ Label printers, barcode/label printing

- Printing on labels for product identification and management

Photo 1 External View (FTP-63AMCL301)



- Printing of barcodes, etc. on logistics labels for load/warehouse management

■ **Receipt issuance in financial terminals such as ATMs and changemakers**

■ **Receipt issuance in retail market devices such as POS and amusement devices**

Figure 1 presents the application examples for thermal printers.

Product Features

■ **Supports high-speed printing**

This product is capable of high-speed printing at 250mm/sec. (2,000-dot line/sec.) at maximum.

■ **Supports thick paper**

Thermal paper and labels with thickness up to 220 μ m can be used.

The paper path is straight to address thick paper, and it has a head opening structure with front paper output.

■ **Supports two types of cutters**

A newly developed small rotary cutter is adopted for cutting thick thermal paper and labels of up to 220 μ m thickness. Our proprietary sliding cutter is suitable for thick thermal paper and labels of up to 155 μ m thickness. These cutters enable our users to select the optimal type to suit their applications.

■ **Supports ELM (easy loading mechanism)**

The model for 220 μ m-thick paper has a structure that separates the thermal head and the fixed blade of the rotary cutter; the model for 155 μ m-thick paper has a

Figure 1 Application Examples of Thermal Printers

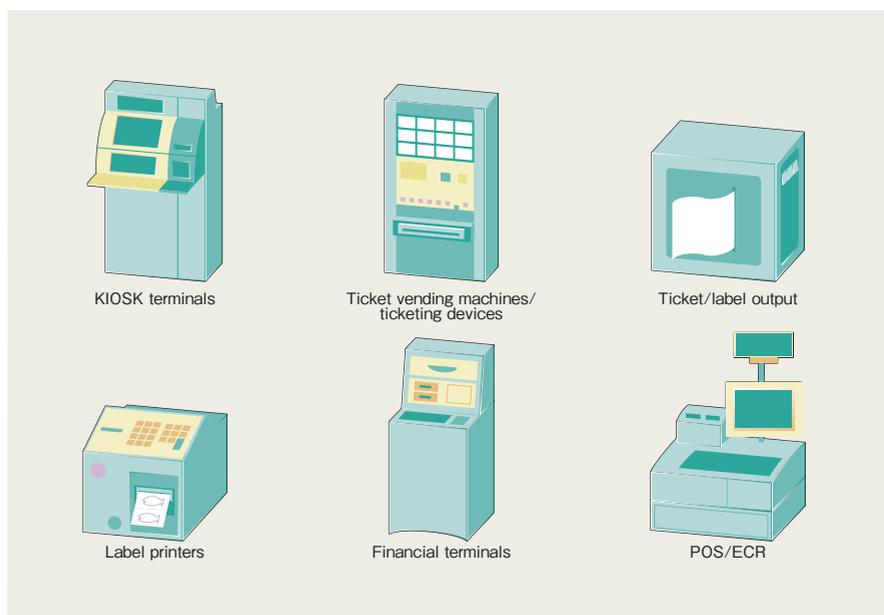


Table 1 Main Specifications of the Printer Mechanism

| Model | FTP-63AMCL301 | FTP-63AMCL101 | FTP-63AMCL401 | FTP-63AMCL001 |
|-----------------------------------|--------------------------------|---|-------------------------------|------------------------|
| Paper thickness | 55 to 220 μ m | | 55 to 155 μ m | |
| Paper type | Thermal paper, thermal labels | | Thermal paper, thermal labels | |
| Cutter | Rotary | None | Sliding | None |
| Printing method | Direct thermal printing method | | | |
| Resolution | 8 dots/mm | | | |
| Paper width | 86 mm | | | |
| Number of dots/ printing width | 640 dots/80 mm | | | |
| Printing speed | 250 mm/sec. at max. | | | |
| Size (W×D×H) | 119.1×54.0× 30.0 mm | 112.3×50.0× 30.0 mm | 119.1×54.0× 30.0 mm | 112.3×50.0× 30.0 mm |
| Weight | Approx. 320g | Approx. 180g | Approx. 310g | Approx. 180g |
| Operation voltage | Head Paper-feeding motor | 24V DC | | |
| | Cutter | 24V DC | | |
| | Logic | 3.13V to 5.25V DC | | |
| Life | Head | Pulse durability: 1×10 ⁸ pulse/dot Wear resistance: Paper-feeding distance 150 km (printing rate 12.5% or lower) | | |
| | Cutter | 1 million times | — | 1 million times |

structure that separates the thermal head and the moving blade of the sliding cutter from the platen by lever operation. This improves the safety during manual paper feeding or maintenance in the event of a paper jam.

Specifications

Table 1 presents the main specifications of the printer mechanism and **Figure 2** its external dimensions.

Future Development

We plan to add to the series unit types incorporating a driving circuit and a paper holder as well as products with 4-inch and 2-inch paper widths using this mechanism. *

Photo 2 Paper-Feeding Path (FTP-63AMCL301)

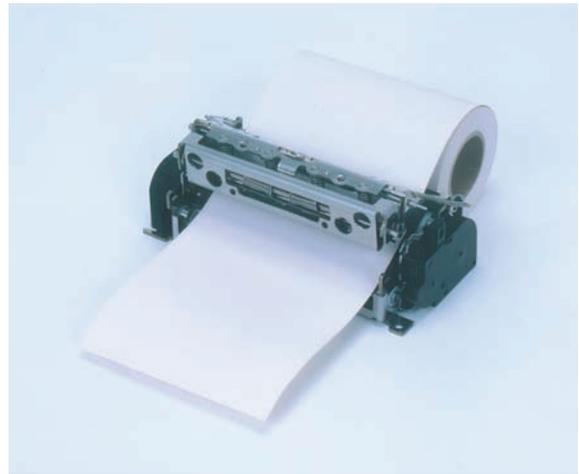


Figure 2 FTP-63AMCL301 External Dimensions

