

# Line Thermal Printer Mechanisms


## Type Classification

**MLT-288 V**

① ②

① Model  
MLT-288  
MLT-289

② Paper path (MLT-288)  
None: Curl  
V: Straight



Paper roll 58 mm

## MLT-288

### Features

- Ultra compact design
- Light weight by aluminium-diecast frame
- Curl and straight paper path
- 5V operation



Paper roll 58 mm

## MLT-289

### Features

- Ultra compact design
- Platen removable design
- 5V operation

### Specifications

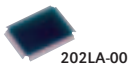
<b>Printing method</b>	Line thermal dot printing	
<b>Total dots</b>	384 dots/lines	
<b>Dot density</b>	8 dots/mm	
<b>Printing width</b>	48mm	
<b>Printing speed</b>	Max. 420 dot-lines/sec.	
<b>Paper feeding pitch</b>	0.125mm	
<b>Sensors</b>	Head temperature	Thermistor
	Paper presence	Photo-interrupter
	Head-up	Mechanical switch
<b>Voltage range</b>	VH	DC 4.2 – 8.5V
	Vdd	DC 4.75 – 5.25V
<b>Current consumption</b>	Head (VH = 5V)	Max. Approx. 1.7A
	Motor (VH = 5V)	Max. Approx. 0.5A
<b>Recommended paper</b>	Width	58mm
	Thickness	60 – 72µm
	Paper (Manufacturer)	TF50KS-E2D (Nippon Paper)
<b>Reliability</b>	Head pulse-resistance	100,000,000 pulses or more
	Head wear-resistance	50km or more
<b>Environment</b>	Operation	Temperature: 0 ~ 45°C Humidity: 35 ~ 85% RH
	Storage	Temperature: -20 ~ 60°C Humidity: 10 ~ 90% RH
<b>External dimensions (W × D × H)</b>	72.7 × 38 × 15mm	
<b>Weight</b>	Approx. 45g	

### Accessories

Control board ▶ **BD2-2880U** Gate array ▶ **202LA-00**



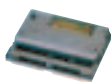
BD2-2880U



202LA-00

<b>Interface</b>	Parallel and RS-232C
<b>Number of columns</b>	Font A: 32 Font B: 42
<b>Font</b>	Font A: 12 × 24 dots Font B: 9 × 24 dots
<b>Command set</b>	ESC/POS
<b>Barcode</b>	Supported
<b>Firmware location</b>	Flash memory
<b>Buffer</b>	2k bytes
<b>Supporting devices</b>	Auto cutter, Paper sensor, Head-up sensor, LF switch, Error LED, Paper out LED
<b>Dimensions</b>	75 × 80mm
<b>Source voltage</b>	5.0 ±5%
<b>Gate array</b>	202LA-00

Auto cutter ▶ **ACS-228**



ACS-228

<b>Cutting method</b>	Slide cutting
<b>Paper width</b>	45 – 69mm
<b>thickness</b>	0.06 – 0.15mm
<b>Max. cutting frequency</b>	20 cuts/min
<b>Voltage</b>	5V ±10%
<b>Current (peak)</b>	2.8A
<b>Operating temperature</b>	0 – 45°C
<b>Size</b>	80 × 55.7 × 15mm
<b>Weight</b>	140g
<b>Reliability</b>	500,000 cuts
<b>Number of tab left</b>	
<b>(F)ull cut blade type</b>	None
<b>(P)artial cut blade type</b>	None or 1 tab

### Specifications

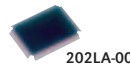
<b>Printing method</b>	Line thermal dot printing	
<b>Total dots</b>	384 dots/lines	
<b>Dot density</b>	8 dots/mm	
<b>Printing width</b>	48mm	
<b>Printing speed</b>	Max. 420 dot-lines/sec.	
<b>Paper feeding pitch</b>	0.125mm	
<b>Sensors</b>	Head temperature	Thermistor
	Paper presence	Photo-interrupter
	Platen	Mechanical switch
<b>Voltage range</b>	VH	DC 4.2 – 8.5V
	Vdd	DC 4.75 – 5.25V
<b>Current consumption</b>	Head (VH = 5V)	Max. Approx. 1.7A
	Motor (VH = 5V)	Max. Approx. 0.5A
<b>Recommended paper</b>	Width	58mm
	Thickness	65µm
	Paper (Manufacturer)	TF50KS-E2C (Nippon Paper)
<b>Reliability</b>	Head pulse-resistance	100,000,000 pulses or more
	Head wear-resistance	50km or more
<b>Environment</b>	Operation	Temperature: 0 ~ 45°C Humidity: 35 ~ 85% RH
	Storage	Temperature: -20 ~ 60°C Humidity: 10 ~ 90% RH
<b>External dimensions (W × D × H)</b>	76.8 × 37 × 16mm	
<b>Weight</b>	Approx. 50g	

### Accessories

Control board ▶ **BD2-2890U** Gate array ▶ **202LA-00**



BD2-2890U



202LA-00

<b>Interface</b>	Parallel and RS-232C
<b>Number of columns</b>	Font A: 32 Font B: 42
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<b>Command set</b>	ESC/POS
<b>Barcode</b>	Supported
<b>Firmware location</b>	Flash memory
<b>Buffer</b>	2k bytes
<b>Supporting devices</b>	Auto cutter, Paper sensor, Head-up sensor, LF switch, Error LED, Paper out LED
<b>Dimensions</b>	75 × 80mm
<b>Source voltage</b>	5.0 ±5%
<b>Gate array</b>	202LA-00