



We Are KEY FOR INDUSTRY

# NAUT Series

## OEM Thermal Printers

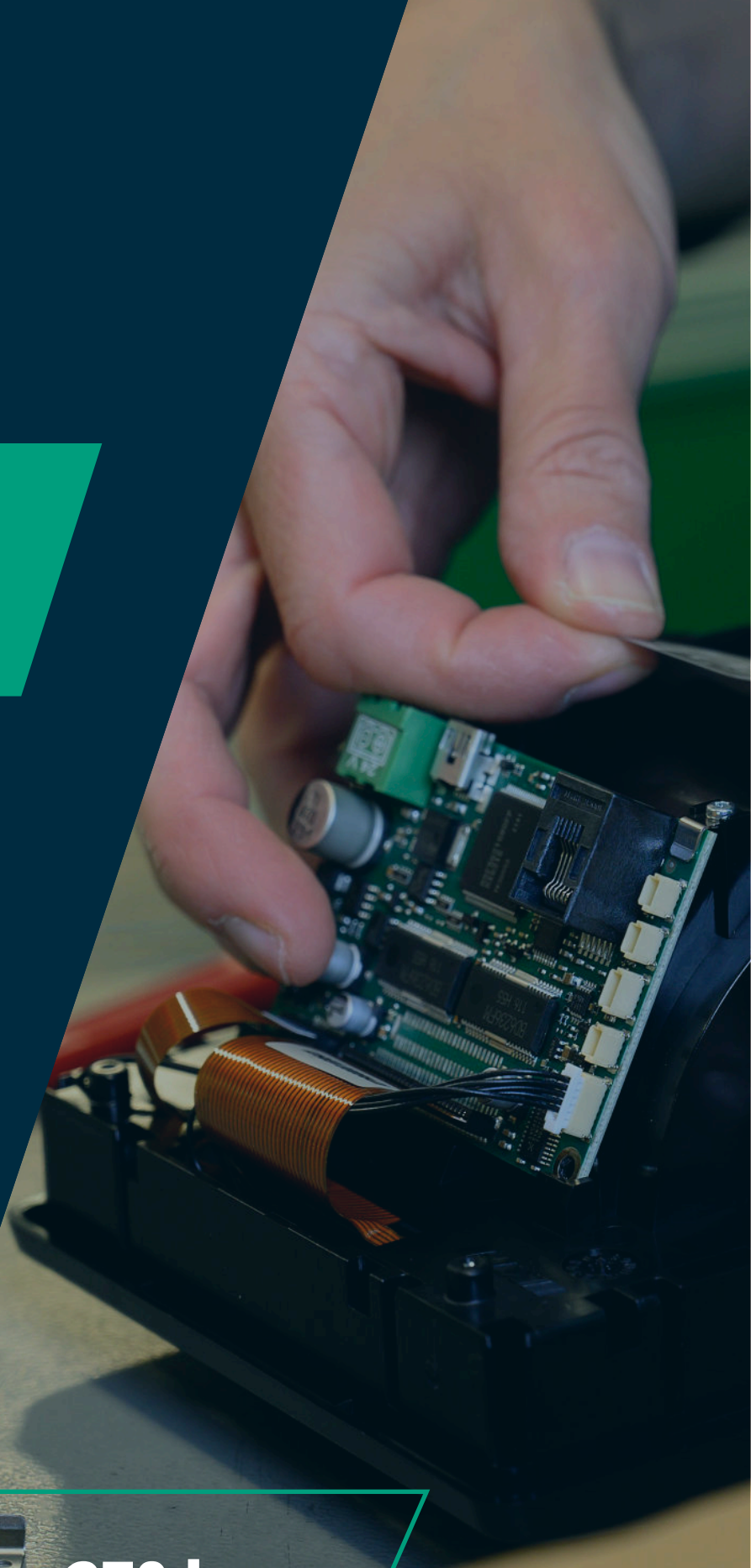
### Built for Industry and Innovation

KFI designs and manufactures robust, compact, and reliable OEM thermal printers for POS terminals, banking devices, medical, and industrial equipment.

The high-performance Naut range offers versatile models to meet various applications with speed and quality.

**+ 30 years**  
of experience

**+ 270 k**  
print units produced



**KFI**



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# Italian Design and Technological Innovation for Over 30 Years

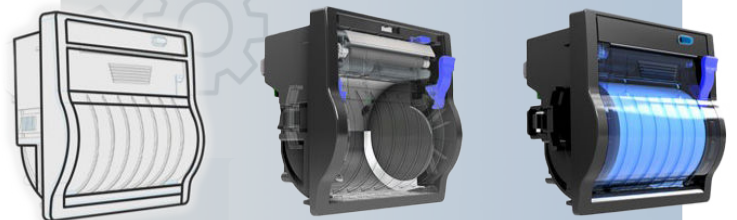


For over 30 years, KFI has stood out in the international market for the design and production of OEM printers, thanks to extensive expertise and an approach that blends tradition and innovation.

Every product is the result of combining experience and Italian design, working together to create solutions that meet the specific needs of the market. KFI's dedication to quality is demonstrated through rigorous checks and tests that ensure superior reliability and performance.

KFI is the ideal partner for companies seeking not only standard printers but also custom-designed devices.

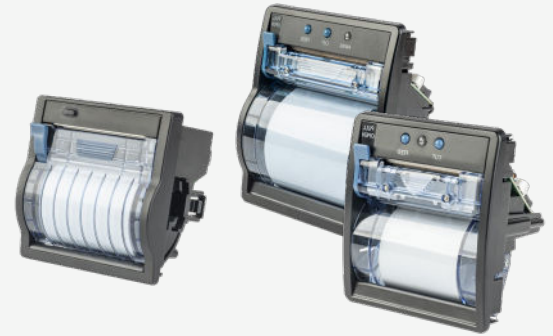
Our commitment to co-design enables us to create tailored printing systems that seamlessly integrate into various contexts, from industrial equipment to electronic voting systems and medical.



**+ 270 K**  
print units produced

Quality is not just a goal but a value that accompanies every stage of development and production processes, helping companies achieve a rapid time-to-market without compromising excellence.

# The Naut Series: Innovation for Every Need



In response to the growing demand for efficient and versatile printing solutions, KFI presents the Naut printer range, designed to excel in high-activity environments.

These thermal printers, available in a comprehensive portfolio of models, are engineered to meet specific needs in various sectors, including POS terminals, banking devices, and medical equipment.

Each unit features an easy-to-use open and close system, with a patented design that ensures practicality and efficiency. The Naut series not only delivers high performance but also stands out for its durability and compactness, making it ideal for use in the most demanding environments.



KFI's mission is clear: to provide printers that not only simplify everyday operations but also enhance overall efficiency.

With Naut, KFI is committed to creating solutions that make a difference, helping companies optimize their products and ensure high-quality service for their customers.

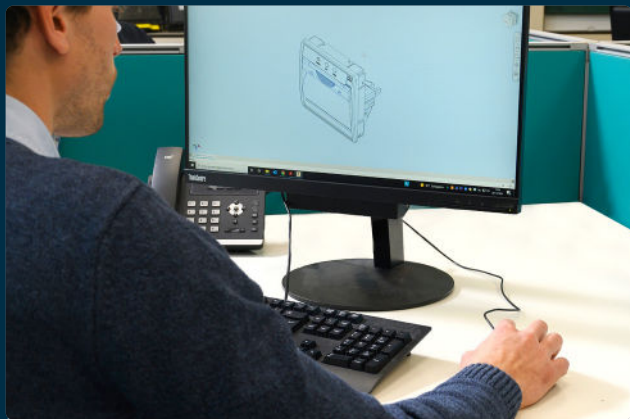


# Excellence in R&D: Patents, Certifications, and Support

**KFI printers are the result of a constant commitment to research and development, with a particular focus on quality, safety, and innovation.**

This approach is reflected in the patented coverage of the Naut printer, which offers greater resistance and durability compared to traditional hinged systems, drawing inspiration from the design of classic sliding bread bins.

The high-strength polycarbonate cover retracts without exposing the hinges, significantly reducing the risk of breakage. Building on this innovative design, the Naut 250 introduces a unique opening lever.



Moreover, Naut printers are designed to comply with stringent certifications, including CE, UL, RoHS, and WEEE. These certifications attest to electrical safety, the absence of electromagnetic interference and hazardous substances, as well as ensuring the recyclability of the devices.

This mechanism allows the lid to be opened by pulling it towards you and closed by pressing on it, minimizing the risk of damage, a common issue in traditional models where excessive pressure can compromise the mechanism.



Such attention protects both users and the environment, ensuring optimal and long-lasting operation. Lastly, we deliver support both directly and through a robust network of partners, ensuring fast response times and effective solutions tailored to every requirement. Our designers offer continuous support, supplying a complete package of drivers and configuration utilities to ensure every customer can use the printers with total peace of mind.

A photograph of a worker in a dark shirt and light pants sitting at a workstation in a factory. The workstation has a computer monitor and keyboard. In the foreground, there are several printer components in white trays.

# Efficiency and Total Control with a New Assembly Line

Opened in 2023, the new assembly line exclusively dedicated to the Naut model represents a significant advancement in the production of OEM printers.

The process takes place in a modern, orderly, and organized 350 sqm environment, where everything is designed to ensure maximum efficiency and quality. The ISO 9001-certified equipment undergoes regular calibrations to maintain the highest precision standards, with continuous inspections by certifying bodies.

A team of experienced specialists assembles up to 240 printers per day. Every component is assembled with dedication, and the use of cutting-edge tools ensures uniform and rigorous assembly for all over 230,000 Naut units produced.

Complete control of electrical and mechanical components across 100% of the units, combined with detailed sample inspections of every supply, has completely eliminated defect reports from the market. Additionally, repairs performed directly on the line ensure production schedules are met, providing a strong guarantee of reliability.



**100% inspection**

for a zero-defect rate

**230 thousand**

Naut units produced

The NAUT324C is a 3-inch, 24V printer engine module with an integrated controller board and cutter, utilizing RS232 and USB communication ports.

It is suitable for a wide range of applications, including POS terminals, banking devices, measurement instruments, medical, and industrial equipment.



NAUT324C  
closed door



NAUT324C  
open door

## GENERAL FEATURES

### PERFORMANCE

- High print speed and resolution
- Highly reliable printing mechanism
- End of paper detection
- Full control over print quality/speed
- Powerful text and graphics printing modes

### TECHNOLOGY

- Integrated cutter (easy to use system)
- Easy paper loading system
- Cover open/close detection
- Integrated electronic control board
- Easy firmware upgrade

### PRINTING

- Barcode support (code 39, 128, QR etc.)
- Four resident character fonts, user defined fonts
- Easy upgrade of fonts, macros, logos

### SAFETY

- Anti-jamming and damage prevention
- Printer status LED

## MAIN APPLICATIONS



POS  
terminals



Measurement  
instrument



Banking  
devices



Medical  
equipment



Industrial  
equipment



Cash  
dispenser



Retail



Cash  
deposit



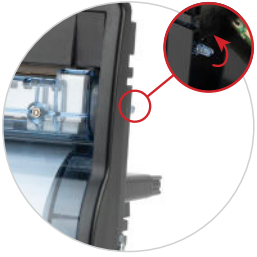
Kiosk



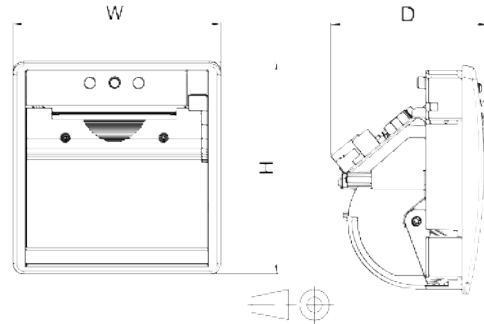
Voting



## AVAILABLE MODELS AND DIMENSIONS



**NAUT324C-BL**  
(Back side opening Lever)



### NAUT 324C

(Front side opening Lever)

**Dimensions (W x H x D)**  
128.4 x 147.7 x 96.3 mm

**Weight**  
370 g without paper roll

**Connections**  
USB and RS232

### PRINTER SPECIFICATIONS

|   |                                     |
|---|-------------------------------------|
| <b>Printing method</b>                    | Direct thermal dot-line printing    |
| <b>Number of dots</b>                     | 576                                 |
| <b>Thermal head temperature detection</b> | Thermistore                         |
| <b>Printing resolution</b>                | 203 DPI (8 dots/mm)                 |
| <b>Heat element pitch</b>                 | 0.125 mm                            |
| <b>Paper feed pitch</b>                   | 0.125 mm                            |
| <b>Printing width</b>                     | 72 mm                               |
| <b>Printing speed</b>                     | Max. 100 mm/s                       |
| <b>Operating temperature</b>              | From 0 to +50 °C                    |
| <b>Operating humidity</b>                 | From 20 to 85% RH (no condensation) |
| <b>Storage temperature</b>                | From -40 to +80 °C                  |
| <b>Storage humidity</b>                   | From 10 to 90% RH (no condensation) |
| <b>Voltage range</b>                      | 24 V ± 5%                           |
| <b>Current consumption</b>                | Average 3.5 A Max. 7 A peak         |

### PAPER SPECIFICATIONS

|                                    |  |
|------------------------------------|--|
| <b>Type of paper</b>               | Thermal rolls, outside heat sensitive                |
| <b>Paper width</b>                 | 80 mm +0/-1  |
| <b>Paper weight</b>                | Min. 55 / Max.80 g/m <sup>2</sup>                    |
| <b>Paper thickness</b>             | Min. 63 / Max. 80 µm                                 |
| <b>Paper roll outside diameter</b> | Max. 83 mm   |
| <b>Roll core inner diameter</b>    | 12.5 mm +1/-0  |
| <b>Core material</b>               | Plastic or cardboard                                 |
| <b>Paper end</b>                   | Not attached to the roll core                        |
| <b>Recommended paper</b>           | JUJO-AF50KS-E (standard grade, 55 g/m <sup>2</sup> ) |

### CUTTER UNIT

|                       |                     |
|-----------------------|---------------------|
| <b>Cutting method</b> | Guillotine          |
| <b>Cut modes</b>      | Full and partial    |
| <b>Cut frequency</b>  | 20 cuts/minute max. |
| <b>Cut time</b>       | Max 500 ms          |

### PRINTER LIFE SPECIFICATIONS

|                                 |                      |
|---------------------------------|----------------------|
| <b>Print head pulse life</b>    | 100 million pulses   |
| <b>Print head abrasion life</b> | 50 km of paper       |
| <b>Cutter life</b>              | Min. 500.000 cuts    |
| <b>Cover open/close</b>         | 5.000 cycles or more |

### STANDARDS

Complies with:  
UL/IEC 62368-1 (UL-Recognized).  
FCC Title 47, Part 15, Subpart B.  
RoHS 2011/65/EU, 2015/863/EU and following amendments.  
CE 2014/30/EU, EN55032, EN55035.

### CONNECTIONS

Phoenix MSTB 2.5/ 2-G-5.08 (Power)  
Standard USB Mini-B receptacle (USB Interface)  
Standard RJ25 6P6C (RS232 Interface)

### DRIVERS

Windows 7 / 10 / 11  
Linux  
CE 6 / 7

The NAUT224C is a 2-inch, 24V printer engine module with an integrated controller board and cutter, utilizing RS232 and USB communication ports.

It is suitable for a wide range of applications, including POS terminals, banking devices, measurement instruments, medical, and industrial equipment.



NAUT224C closed door



NAUT224C open door

## GENERAL FEATURES

### PERFORMANCE

- High print speed and resolution
- Highly reliable printing mechanism
- End of paper detection
- Full control over print quality/speed
- Powerful text and graphics printing modes

### TECHNOLOGY

- Integrated cutter (easy to use system)
- Easy paper loading system
- Cover open/close detection
- Integrated electronic control board
- Easy firmware upgrade

### PRINTING

- Barcode support (code 39, 128, QR etc.)
- Four resident character fonts, user defined fonts
- Easy upgrade of fonts, macros, logos

### SAFETY

- Anti-jamming and damage prevention
- Printer status LED

## MAIN APPLICATIONS



POS terminals



Measurement instrument



Banking devices



Medical equipment



Industrial equipment



Cash dispenser



Retail



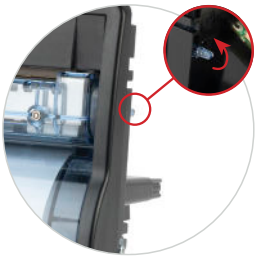
Cash deposit



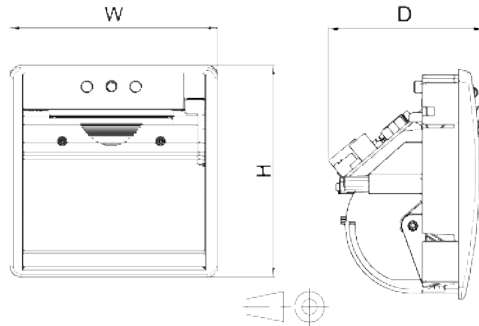
Kiosk



Voting



**NAUT224C-BL**  
(Back side opening Lever)



### NAUT 224C (Front side opening Lever)

**Dimensions (W x H x D)**  
107.4 x 121 x 82.2 mm

**Weight**  
250 g. without paper roll

**Connections**  
USB & RS232

### PRINTER SPECIFICATIONS

|   |                                     |
|---|-------------------------------------|
| <b>Printing method</b>                    | Thermal dot-line printing           |
| <b>Number of dots</b>                     | 432                                 |
| <b>Thermal head temperature detection</b> | Thermistore                         |
| <b>Printing resolution</b>                | 203 DPI (8 dots/mm)                 |
| <b>Heat element pitch</b>                 | 0.125 mm                            |
| <b>Paper feed pitch</b>                   | 0.125 mm                            |
| <b>Printing width</b>                     | 54 mm                               |
| <b>Printing speed</b>                     | Max. 100 mm/s                       |
| <b>Operating temperature</b>              | From 0 to +50 °C                    |
| <b>Operating humidity</b>                 | From 20 to 85% RH (no condensation) |
| <b>Storage temperature</b>                | From -40 to +80 °C                  |
| <b>Storage humidity</b>                   | From 10 to 90% RH (no condensation) |
| <b>Voltage range</b>                      | 24 V ± 5%                           |
| <b>Current consumption</b>                | Average 2.5 A / Max. 5 A            |

### PAPER SPECIFICATIONS

|                                    |   |
|------------------------------------|---|
| <b>Type of paper</b>               | Thermal rolls, outside heat sensitive   |
| <b>Paper width</b>                 | 58 mm +0/-1                             |
| <b>Paper weight</b>                | Min. 55 / Max.80 g/m2                   |
| <b>Paper thickness</b>             | Min. 63 / Max. 80 µm                    |
| <b>Paper roll outside diameter</b> | Max. 63 mm                              |
| <b>Roll core inner diameter</b>    | 12.5 mm +1/-0                           |
| <b>Core material</b>               | Plastic or cardboard                    |
| <b>Paper end</b>                   | Not attached to the roll core           |
| <b>Recommended paper</b>           | JUJO-AF50KS-E (standard grade, 55 g/m2) |

### CUTTER UNIT

|                       |                     |
|-----------------------|---------------------|
| <b>Cutting method</b> | Guillotine          |
| <b>Cut modes</b>      | Full and partial    |
| <b>Cut frequency</b>  | 20 cuts/minute max. |
| <b>Cut time</b>       | Max 500 ms          |

### PRINTER LIFE SPECIFICATIONS

|                                 |                      |
|---------------------------------|----------------------|
| <b>Print head pulse life</b>    | 100 million pulses   |
| <b>Print head abrasion life</b> | 50 km of paper       |
| <b>Cutter life</b>              | Min. 500.000 cuts    |
| <b>Cover open/close</b>         | 5.000 cycles or more |

### STANDARDS

Compliant with RoHS 2011/65/EU, 2015/863/EU and following amendments.

### CONNECTIONS

Phoenix MSTB 2.5/ 2-G-5.08 (Power)  
Standard USB Mini-B receptacle (USB Interface)  
Standard RJ25 6P6C (RS232 Interface)

### DRIVERS

Windows 7 / 10 / 11  
Linux  
CE 6 / 7

The NAUT250 is a 2-inch panel printer, available with or without an integrated controller board.

As the latest addition to KFI's NAUT family of panel modules, it combines high performance and ease of use in a robust yet elegant housing. Its patented retractable cover system makes it ideal for a wide range of applications, including medical, industrial, banking, and point of sale. The seamless, variable input voltage circuitry ensures broad compatibility with various host devices.



NAUT250 closed door



NAUT250 open door

## GENERAL FEATURES

### PERFORMANCE

- Powerful text printing modes
- Powerful graphic modes
- Full control over printing speed and quality

### TECHNOLOGY

- Extended supply voltage range
- Retracting cover system (patented)
- Easy open paper cover system and robust closure
- Easy paper loading / drop in system
- Double tear bar
- End of paper detection
- Easy firmware upgrade

### PRINTING

- Three sizes of fonts
- Extended character sets
- Different types of barcodes supported

### SAFETY

- Printer status LED and feed button (all in one)

## MAIN APPLICATIONS



POS terminals



Measurement instrument



Banking devices



Medical equipment



Industrial equipment



Cash dispenser



Retail



Cash deposit



Kiosk



Voting

## AVAILABLE MODELS AND DIMENSIONS

### NAUT250FD

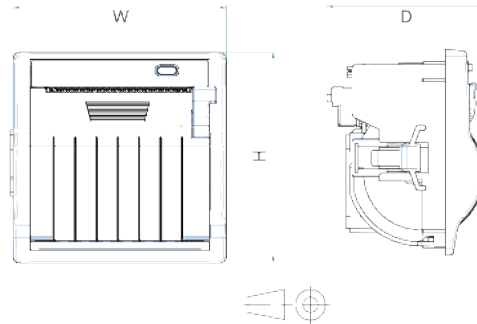
Voltage range 5V - 8.5V and 9V - 36V

### NAUT250FS

Voltage range 5V - 8.5V

### NAUT250NB

Version without electronic board



### NAUT 250FD/FS

#### Dimensions

W 90 x H 90 x D 69 mm (FD)  
W 90 x H 90 x D 63.4 mm (FS)

#### Weight

150 g without paper roll

## PRINTER SPECIFICATIONS

|                                     |   |
|-------------------------------------|---|
| <b>Printing method</b>              | Direct thermal dot-line printing                        |
| <b>Number of dots</b>               | 384   |
| <b>Printing resolution</b>          | 203 DPI (8 dots/mm)                                     |
| <b>Printing width</b>               | 48 mm   |
| <b>Printing speed</b>               | Max. 80 mm/s (under certain conditions)                 |
| <b>Memory size for logos/macros</b> | Max 10 macros 63 Kbyte each                             |
| <b>User font</b>                    | Max 2 fonts, max 64 Kbyte                               |
| <b>Number of text columns</b>       | 24, 32, 42, 40  |
| <b>Operating temperature</b>        | From 0 to 50 °C   |
| <b>Operating humidity</b>           | From 20 to 85% RH (no condensation)                     |
| <b>Storage temperature</b>          | From -20 to +60 °C                                      |
| <b>Storage humidity</b>             | From 10 to 90% RH (no condensation)                     |
| <b>Current consumption</b>          | 2A average, 5A peak (5V to 8.5V)<br>1.5A average (@24V) |

## CUTTING METHOD

Metallic - tear up  
Plastic - tear down

## PRINTER LIFE SPECIFICATIONS

|                                    |                      |
|------------------------------------|----------------------|
| <b>Print head pulse life</b>       | 100 million pulses   |
| <b>Print head abrasion life</b>    | 50 km of paper       |
| <b>Cover open/close operations</b> | 3.000 cycles or more |

## STANDARDS

#### Complies with:

UL/IEC 62368-1 (UL-Recognized).  
FCC Title 47, Part 15, Subpart B.  
RoHS 2011/65/EU, 2015/863/EU and following amendments.  
CE 2014/30/EU, EN55032, EN55035.

## CONNECTIONS

Molex 53398-0671 (Serial RS232 Interface)  
Molex 53398-0671 (Serial TTL Interface)  
Female USB 2.0 Micro-B (VCOM Interface)  
JST-B4B-PH-SM4-TB (Power connection 5-8.5V)  
Weidmüller-LSF-SMD5.0/2/180 (Power connection 9-36V)

## DRIVERS

Windows 7 / 10 / 11  
Linux  
Android

## PAPER SPECIFICATIONS

|                                    |  |
|------------------------------------|--|
| <b>Type of paper</b>               | Thermal rolls, outside heat sensitive  |
| <b>Paper width</b>                 | 57.5 mm +0.5/-0.5  |
| <b>Paper weight</b>                | Min. 55 / Max. 73 g/m <sup>2</sup>   |
| <b>Paper thickness</b>             | Min. 60 / Max. 80 µm   |
| <b>Paper roll outside diameter</b> | Max. 50 mm   |
| <b>Roll core inner diameter</b>    | 14 mm +1/-0  |
| <b>Core material</b>               | Plastic or cardboard   |
| <b>Paper end</b>                   | Not attached to the roll core  |
| <b>Recommended paper</b>           | JUJO-AF50KS-E (standard grade, 55 g/m <sup>2</sup> ). Kanzan KF50 (55 g/m <sup>2</sup> ).<br>Kanzan KPD460 (73 g/m <sup>2</sup> ). Equivalent types can be used. |

The NAUT250 is a 2-inch panel printer, available with or without an integrated controller board.

As the latest addition to KFI's NAUT family of panel modules, it combines high performance and ease of use in a robust yet elegant housing. Its patented retractable cover system makes it ideal for a wide range of applications, including medical, industrial, banking, and point of sale. The seamless, variable input voltage circuitry ensures broad compatibility with various host devices.



NAUT250L  
closed door



NAUT250L  
open door

## GENERAL FEATURES

### PERFORMANCE

- Powerful text printing modes
- Powerful graphic modes
- Full control over printing speed and quality

### TECHNOLOGY

- Extended supply voltage range
- Retracting cover system (patented)
- Easy open paper cover system and robust closure
- Easy paper loading / drop in system
- Double tear bar
- End of paper detection
- Easy firmware upgrade

### PRINTING

- Three sizes of fonts
- Extended character sets
- Different types of barcodes supported

### SAFETY

- Printer status LED and feed button (all in one)

## MAIN APPLICATIONS



POS  
terminals



Measurement  
instrument



Banking  
devices



Medical  
equipment



Industrial  
equipment



Cash  
dispenser



Retail



Cash  
deposit



Kiosk



Voting

### NAUT250LD

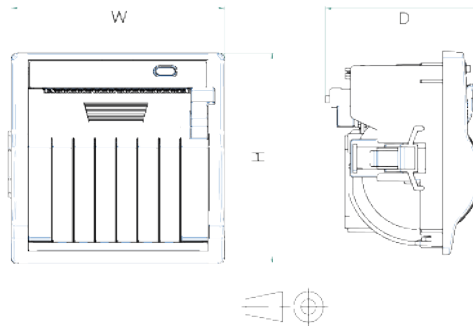
Voltage range 5V - 8.5V and 9V - 36V

### NAUT250LS

Voltage range 5V - 8.5V

### NAUT250NB

Version without electronic board



### NAUT 250LD/LS

#### Dimensions

W 90 x H 90 x D 69 mm (FD)  
W 90 x H 90 x D 63.4 mm (FS)

#### Weight

150 g without paper roll

## PRINTER SPECIFICATIONS

|   |   |
|---|---|
| <b>Printing method</b>                    | Direct thermal dot-line printing                        |
| <b>Number of dots</b>                     | 384   |
| <b>Thermal head temperature detection</b> | Thermistore   |
| <b>Printing resolution</b>                | 203 DPI (8 dots/mm)                                     |
| <b>Heat element pitch</b>                 | 0.125 mm  |
| <b>Paper feed pitch</b>                   | 0.0625 mm   |
| <b>Printing width</b>                     | 48 mm   |
| <b>Printing speed</b>                     | Max. 80 mm/s (under certain conditions)                 |
| <b>Operating temperature</b>              | From 0 to 50 °C   |
| <b>Operating humidity</b>                 | From 20 to 85% RH (no condensation)                     |
| <b>Storage temperature</b>                | From -20 to +60 °C                                      |
| <b>Storage humidity</b>                   | From 10 to 90% RH (no condensation)                     |
| <b>Current consumption</b>                | 2A average, 5A peak (5V to 8.5V)<br>1.5A average (@24V) |

## CUTTING METHOD

Metallic - tear up  
Plastic - tear down

## PRINTER LIFE SPECIFICATIONS

|                                    |                      |
|------------------------------------|----------------------|
| <b>Print head pulse life</b>       | 100 million pulses   |
| <b>Print head abrasion life</b>    | 50 km of paper       |
| <b>Cover open/close operations</b> | 3.000 cycles or more |

## STANDARDS

#### Complies with:

UL/IEC 62368-1 (UL-Recognized).  
FCC Title 47, Part 15, Subpart B.  
RoHS 2011/65/EU, 2015/863/EU and following amendments.  
CE 2014/30/EU, EN55032, EN55035.

## CONNECTIONS

Molex 53398-0671 (Serial RS232 Interface)  
Molex 53398-0671 (Serial TTL Interface)  
Female USB 2.0 Micro-B (VCOM Interface)  
JST-B4B-PH-SM4-TB (Power connection 5-8.5V)  
Weidmüller-LSF-SMD5.0/2/180 (Power connection 9-36V)

## DRIVERS

Windows 7 / 10 / 11  
Linux  
Android

## PAPER SPECIFICATIONS

|                                    |  |
|------------------------------------|--|
| <b>Type of paper</b>               | Thermal rolls, outside heat sensitive  |
| <b>Paper width</b>                 | 57.5 mm +0.5/-0.5  |
| <b>Paper weight</b>                | Min. 55 / Max. 73 g/m <sup>2</sup>   |
| <b>Paper thickness</b>             | Min. 60 / Max. 82 µm   |
| <b>Paper roll outside diameter</b> | Max. 50 mm   |
| <b>Roll core inner diameter</b>    | 14 mm +1/-0  |
| <b>Core material</b>               | Plastic or cardboard   |
| <b>Paper end</b>                   | Not attached to the roll core  |
| <b>Recommended paper</b>           | JUJO-AF50KS-E (standard grade, 55 g/m <sup>2</sup> ). Kanzan KF50 (55 g/m <sup>2</sup> ).<br>Kanzan KPD460 (73 g/m <sup>2</sup> ). Equivalent types can be used. |



We Are KEY FOR INDUSTRY

## KFI – We Are KEY FOR INDUSTRY

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With innovation as a constant drive for continuous improvement, since 1991 KFI has been supporting Supply Chain companies in the implementation of technologies and solutions, driving them to Industry 5.0.

KFI's mission consists in bridging the gap between modern field technologies and business logics, through the integration with the major management systems, making their expertise and services available to companies of all sizes.