

# Desktop Mini Thermal Printer

# GeBE®

**Elektronik und  
Feinwerktechnik GmbH**

Module und Geräte zum Eingeben,  
Auswerten, Anzeigen und Ausdrucken  
analoger und digitaler Daten.

## GPT-437x-FLASH

IR Interface • 58 mm Paper Width • Easy Load Technique  
High Resolution 203 dpi • Text • Graphics • Bar Code  
Mobile with Battery Operation • Internal Charging Circuit  
Power Management with Power Saving • Power Down Modes  
• Serial RS232 Interface • IR Communication through  
GeBE-IR-Protocol / IrDA-IrCOM / Unidirectional  
HP-Protocol

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Easy Load Mini Thermal Printer GeBE-FLASH. A new generation of portable printers - from GeBE !

## Short Information

- Compact, efficient thermal printers
- Plastic injection molded housing with attractive design
- Battery or power supply operation
- Stand-alone version to go with POS cash systems or technical measuring sets
- Ideal for protocol, receipt, and ticket printing
- Easy paper handling: Open printer, insert paper roll, close printer, done!
- High print speed up to 40 mm/s
- 384 dots per horizontal line (48mm)
- Different character sets (IBM-II/850) with 24, 32, 42, or 54 characters per line
- Prints four different bar codes  
EAN8 / EAN13 / 2 out of 5 interleaved / code39
- Battery compartment with contact springs for operation with 4x AA cells, power batteries, NiMH batteries, or external power supply
- Internal battery pack and charging circuit, optional
- Interface and printer parameters can be set through control menu and copied from one device to the next
- Special versions available for medium quantities:  
e.g. private labeling, housing color, low-cost configurations, clock alarm function, changed software, special character sets, paper rewinder, acoustic signal, digital and analog I/O's

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**Description**

**Flexible Equipment**

By offering several versions of this small mobile printer equipped with different components, GeBE shows its traditional flexibility to find the best match for each application for its OEM customers. The flexibility goes beyond the versatile functionality, and also shows in the external design and the resulting pricing.

**Easy Paper Handling**

The paper supply compartment can be easily opened through a small flap lever that is also available in transparent, showing the paper roll. The paper only needs to be inserted without threading. This convenient process allows the use of smaller paper rolls, which made it possible to develop this very small, compact housing that stands out with its light weight and elegant design.

**Small Space Requirements - Light Weight**

The new thermal printer *GeBE-FLASH* is ideal for space sensitive and mobile applications. Receipt printing, billing systems at reception desks, protocol printing for measuring tasks in open terrain, and logistics are typical applications for these small lightweight printers.

**Impressive Print Results**

There are four character sets with 256 characters each (similar to IBM-II code table 850) and different sizes to choose from. Other character sets such as Cyrillic available on request. Printing is always executed in pixel graphics with 384 dots per horizontal line, and with the same density in vertical direction (8 dots/mm equal 203 dpi). Gray printing is achieved by thinning the number of pixels. Receipt printing can be created attractively with format commands: Print black on white, print white on black, print gray, underline, select a character size between single- and eight-fold, single or double character width, change horizontal spacing, adjust effective print width. Text and graphic files (advertising texts and company logos) that can be printed at any time can be stored permanently in the flash memory of the  $\mu$ -controller, or in the optional 8 - 64 KB serial EEPROM alterable by the user. The printer independently generates four different bar codes (EAN8 / EAN13 / Code39 / 2 out of 5 interleaved, others on request). The paper can be transported forward and reverse by the line.

**Controlled Reliability**

The program flow is monitored by a watchdog. Sensors monitor the paper supply, the voltage, and the head and battery temperature, therefore controlling the print parameters. With the suitable paper, the printers can be operated at -10°C to 50°C temperature. Outside this range, printing

will automatically be suspended. Three LEDs on the operating console display the status of the power supply (green) and the communication through the IR interface (yellow), as well as any errors that occurred (red).

**Parameter Setting via Menu Control**

If the printer has a serial EEPROM, several printer parameters like interface selection, data formats, and blackening can be set with three keys through a menu selection, supported by the print function as a display.

**Power Supply and Power Management**

The print system is always operated with a power voltage  $V_p$  between 4.5 and 6.5 V. The battery compartment can be accessed through a lid at the bottom of the housing. One version is equipped with contact springs for four power batteries ( $V_p=6V$ ) or four externally charged NiCd or NiMH ( $V_p=4,8V$ ) with an AA format (Minon cells). For stationary operation, the printer can also be supplied from an external power supply (4.5 - 6.5V; 2.5 - 3 A) through the power socket. In both cases, the printer is not equipped with the optional battery charging circuit.

Another version has this battery charging circuit. The battery compartment holds a battery pack, 4x NiMH batteries (AA) with temperature sensor, instead of the contact springs. The battery pack is charged through the power socket from the external charger GNG-7,2V-0,85A-U-FLASH. The charging process is controlled by the  $\mu$ -processor of the printer controller and displayed by the power LED. Depending on the total blackened area, about 50m of paper can be printed with one full charge. This high efficiency is achieved by using the two power-down modes of the printer, the energy-saving sleep mode, and the power-off mode, automatically.

**Important Technical Data**

Paper / eff. print width	57.5 ± 0.5 / 48 mm
Paper thickness	50 - 80 $\mu$ m
Roll diameter	max. 31 mm
Paper length	ca. 10 m Papier (60 $\mu$ m)
Print speed	bis 40 mm/s
Operating temperature	0 - 50 °C, (-10°C auf Anfrage)
Printed paper	ca. 50 km

**Made in Germany**

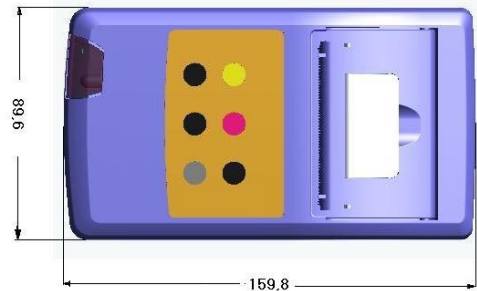
GeBE develops and manufactures *GeBE-FLASH* printers at their factory. For OEM, products can be modified, even for smaller quantities.

**Please find out if we can meet your requests.**

**Product List**

L:=e-factory • P:= 8 week lead time • S:= special order

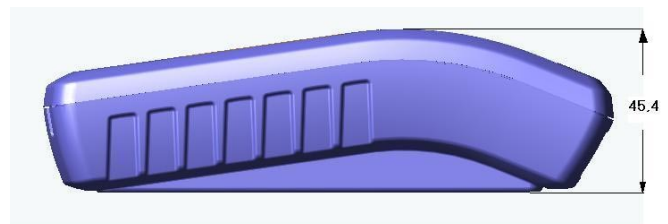
Produkt	GeBE-FLASH	EEPROM	Batteries externally charged	Batterie charging	Batteries NiMH 4AA cells, 1200 mAh	Supply from external source	serial interface	HP-IR-Protocol	GeBE-IR-Protocol	IrDA-IR LPT raw	IrDA-IRComm 9-wire	No. of keys	OPD Menu	Batch files T/NIT	Batch files text and gra	Copy EEPROM	Buzzer	Paperwinder	Clock with timer	
GPT-4379	32kByte	-	x	x	x	x	RS232	x	x	x	x	x	x	x	x	x	x	x	x	x
GPT-4378	8kByte	-	x	x	-	-	RS232	x	x	x	-	x	x	x	x	-	x	x	x	x



**Zubehör**

<b>11766</b>	<b>GNG-7,2V-0,85A-U-FLASH</b>
Charger with Euro connector • input 230VAC • output 7.2 VDC, max. 0,85A, uncontrolled • special Ri • app. 2 m charging cable with special 2pin socket connector matching <i>GeBE-FLASH</i>	
<b>11360</b>	<b>GNG-6V-0,5A-U-charging adapter</b>
Charging adapter with Europe connector • input 230VAC • output 6VDC, max. 0.5A unregulated • special Ri • recharge cable • 2 m with connector 5,5/2,1 mm $\varnothing$	
<b>11347</b>	<b>GPR-T01-057-031-007-060A</b>
• 5x thermal paper rolls, 60 $\mu$ m, HQ 5years, 31 mm ± 0,5 diameter	
<b>11555</b>	<b>GPR-T01-057-031-007-060A-(Maxi)</b>
• 15 thermal paper rolls (11347) as "Maxi Letter"	

\* GPT-437x-FLASH (x=8: LC; x=9: HQ)



More Information on the Internet:  
[www.oem-printer.com/flash](http://www.oem-printer.com/flash)