



## GeBE-PIANO® Box

## GPT-4643

### TECHNICAL INFORMATION

#### Highlights at first sight:

- thermal printer with cutter in aluminium plastic housing
- desktop or wall mounting version with lock function
- for vouchers and tickets, paper thickness up to 200 µm
- text, graphics and bar codes in high quality print of 300 dpi with speed up to 250 mm/s
- barcode scanner
- exact print positioning controlled by black marks
- formular or graphic line mode



## The GeBE-PIANO Box

The GeBE-PIANO (GPT-4643) has a plastic framed aluminium housing. It is available in two versions, such as thermal desktop printer or, on request, with a lockable mounting plate.

The printer can be used as a form printer or graphic line printer. The form printer version completely transfers data and layout as text to the printer memory which then will be printed by command. In graphics mode, the printout is usually processed inside the connected computer by a driver and finally sent in full graphics mode.

On request, an UNICODE font, already implemented in the printer, is available for form mode. A QR barcode can be generated by the printer itself.

After inserting a new paper roll, the printer retracts the paper sensor-controlled to the beginning of the paper.

If the paper ends during a printing process, an invalidation process can be activated. In this case, the printer pulls back the paper to the beginning of the current print and overrides the started ticket to make it invalid. An invalidating event is reported. (Planned until Q3, 2017).

With an optional available CCD scanner, a barcode located at the paper/ticket backside can be read. The reading speed is up to 200 mm/s depending on the barcode size. The barcode data is passed transparently to the host, providing time and position information. Alternatively an RFID reader can be connected.

Optionally, a paper position sensor is available. This sensor measures the paper movement regardless of the print function. Thus the printer position counter and the sensor position counter are read out by command. A possible difference can be evaluated accordingly.

The messages from the printer are submitted in a CRC protected protocol to avoid misinformation. Thus, the printer guarantees a high data security in the communication to the host particularly during read-back barcodes or position reports.

For the output of ISO format tickets (86 x 54 mm) a stacking device is available.

On request, the printer can be equipped with an extension of the input voltage range from standard 10.8 - 26.5 VDC to 8 - 80 VDC.

## Typical application

This printer is specially tailored for the requirements in the ÖPNV markets.

Additional applications are vouchers for e.g. sport events, cinema, theater, concerts / ticket printing in parking decks, swimming halls / validation for e.g. parking time crediting for shopping centers

## Accessories

- motion sensor
- barcode reader
- Near-Paper-End sensor
- paper roll axis
- paper insert

On request for larger projects:

- stacking device for ISO tickets
- mounting plate for wall / desktop built-in
- 8 - 80 VDC power supply
- RFID reader

## Drivers

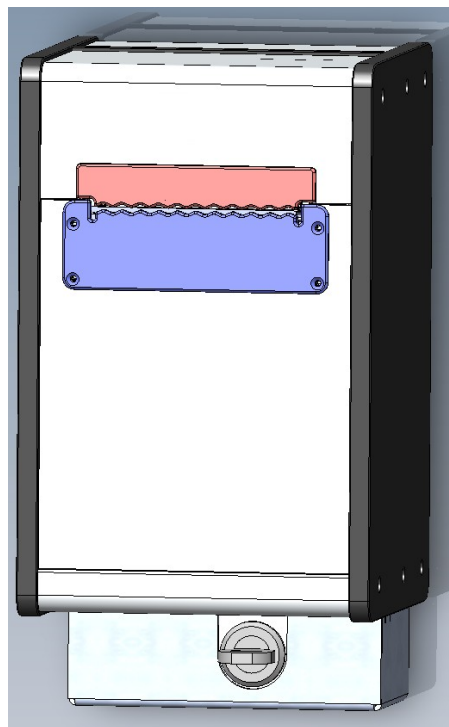
Windows® XP, Vista, 7, 8, 8.1, 10

On request, also:

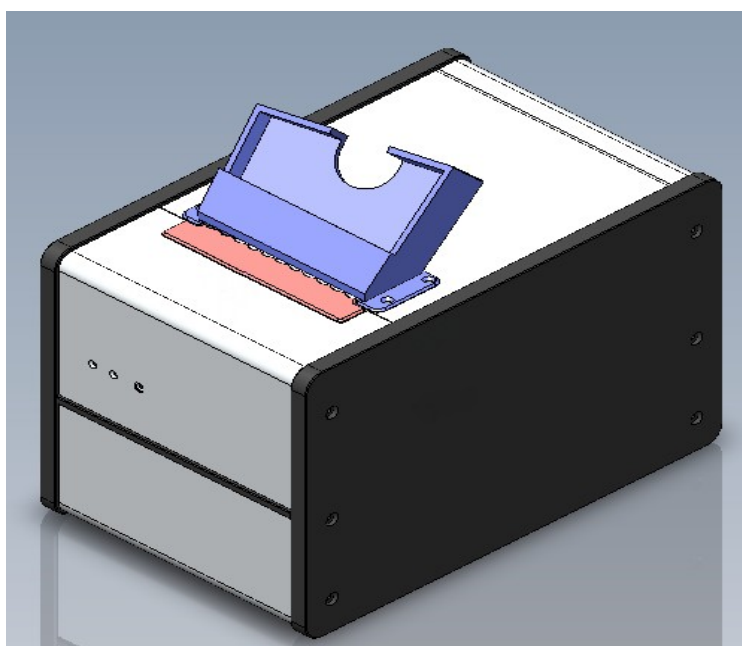
Windows® CE.Net 4.2, 5.0, 6.0, 7.0 and

Unix via Cups for Linux and Mac OS

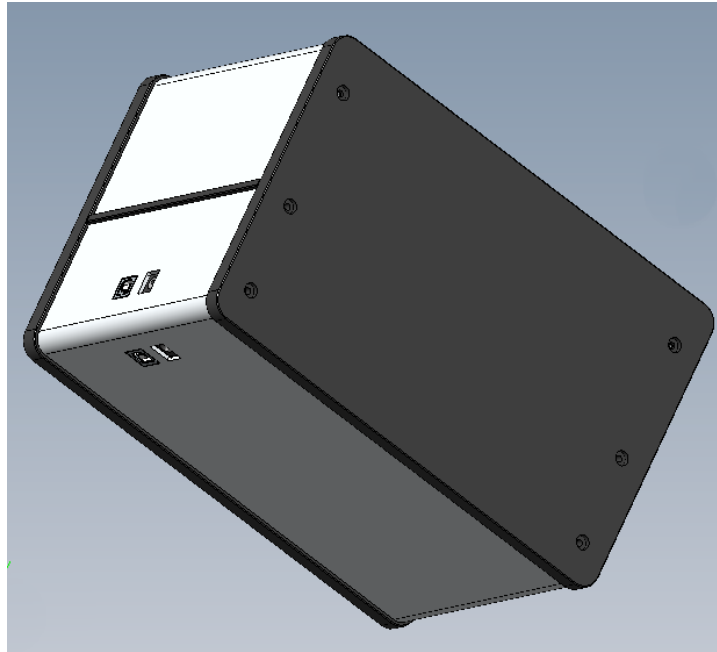
Technical drawings



Drawing 1: GeBE-PIANO Box for wall mounting with locking function



Drawing 2: GeBE-PIANO Box desktop with stacking device



Drawing 3: GeBE-PIANO Box - USB connections for desktop and mounting version

## Technical data details

	GPT-4643
Insert paper	easy loading
Print procedure	thermal direct print
Resolution	horizontal/vertical 11.82/12.37 dots/mm (960 dpi horizontal), 300x300 dpi
Print speed	max. 250 mm/s [9.84 inch/s]
Paper / print width	45 - 86 mm [1.77 - 3.39 inch] / 81.2 mm [3.19 inch]
Paper thickness	60 - 200 µm [2.36- 7.87 mils]
Paper roll diameter	120 mm [4.72 inch]
Ticket length	20 - 250 mm [0.79 - 9.84 inch]
Cutter	gioutine cutter for half/full cuts
Power supply	10.8 - 26.5 VDC
Current consumption	adjustable via command, max. 14 A
Possible interfaces	USB full speed
Fonts	IBM II or Unicode
Barcode	QR code, UPCA, EAN8 EAN13, 2of5 int., code 128, barcode scanner: CCD with scan width: 53.5 mm [2.11 inch]/ scan speed: 200 mm/s [7.87 inch/s]
Blackmark	min. 4x4 mm [0.157 x 0.157 inch] / recommended: 8x8 mm [0.31 x 0.31 inch]
Sensors	blackmark sensor: IR 940 nm paper exit sensor: IR 930 nm / paper end sensor: IR 940 nm / near paper end sensor: IR 880 nm paper motion sensor: up to 250 mm/s [ 9.84 inch/s]
MTBF*)	150 km [93.21 miles]/ 2 Mio cuts
Environment (only printer)	-20°C - +70°C [-4°F - 140°F] with specified paper
Humidity in operation	10 - 90% rel. humidity
Housing	PS and aluminium
Diameter	240 x 154 x 152 mm [9.45 x 6.06 x 5.98 inch]
Weight	990 g without paper roll

\*) Life cycle according to mechanism testing conditions of the manufacturer with specified paper only. Please inquire. The life cycle of the print head is an averaged expectable performance and no guaranteed data. Under optimum conditions, the above listed data can be achieved using specified paper according to our documentation TI-606.

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