

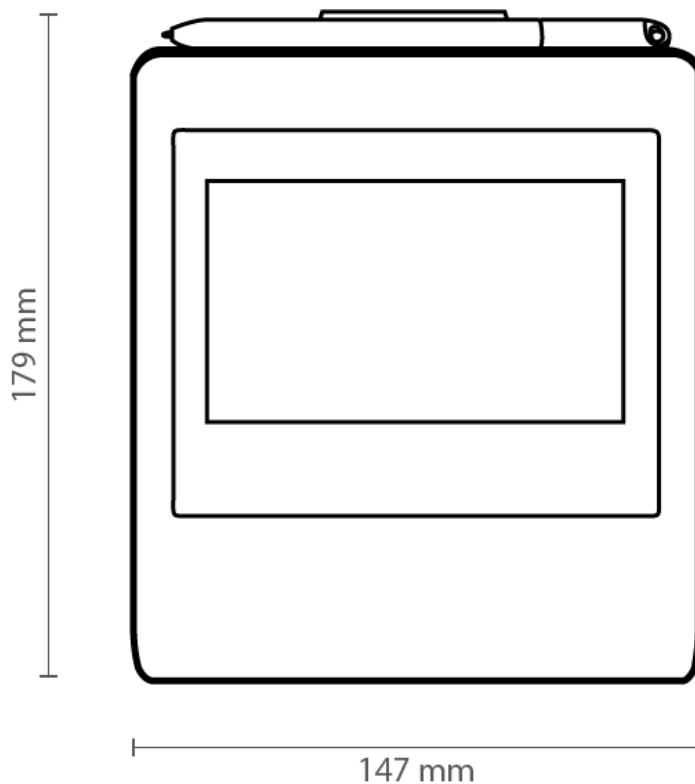
## signotec Gamma

# Highlights & Data Sheet



## HIGHLIGHTS

- 5" (12,6 cm) full-colour display.
- Extremely robust, hardened sensor glass (8H) with ER-technology.
- Signature capturing with 500 Hz 4D samples and 2.048 pressure stages (x, y, z, t).
- Unique RSA-signature creation and RSA-encryption methods inside the pad.
- Self-sufficient slideshow with up to 10 images.
- Battery-free pen with changeable pen tip.
- „Content Signing“ allows to sign the LCD-content with the captured signature.
- Secure Mode to display the signature on the screen in real-time.
- Delivery comes with completely assembled USB cable, pen and cord.
- Including free of charge software packages.



# TECHNICAL DATA

## General Data

|                   |                                                                       |
|-------------------|-----------------------------------------------------------------------|
| Dimensions        | 147 x 179 x 16 mm (W x D x H)                                         |
| Casing colours    | Upper shell: RAL 9005, jet black<br>Lower shell: RAL 9010, pure white |
| Cable port        | Micro-USB (with strain relief) to USB-A.                              |
| Cable length      | Approx. 2,7 meters. Optional 4,5 meters.                              |
| Power consumption | 450mA; Standby 18 mA (HID/WinUSB) and 16mA (FTDI)                     |
| Power supply      | USB                                                                   |
| Status-LED        | 2 coloured and freely programmable LEDs                               |
| Stand             | Compatible Multigrip™ plate available.                                |
| Weight            | Approx. 280 grams (incl. cable)                                       |
| Warranty          | 2 years, optional extension up to 5 years.                            |
| Country of origin | Germany                                                               |

## Display

|                            |                                                                               |
|----------------------------|-------------------------------------------------------------------------------|
| Type                       | Full-Colour-TFT                                                               |
| Size                       | 5" (12,6 cm)                                                                  |
| Colour space               | 16,7 million                                                                  |
| Backlight                  | LED-Backlight, brightness 300 cd/m²                                           |
| Configuration of backlight | The backlight can be adjusted in the service menu, API or configuration file. |
| Resolution                 | 800 x 480 pixels $\pm$ 188 x 188 ppi                                          |
| Pixel size                 | 0,135 x 0,135 mm                                                              |
| Visible area               | 108 x 64,8 mm                                                                 |
| Line of sight              | 6 o'clock                                                                     |
| Scroll-function            | Maximum size of the displayed image: 800 x 1.440 pixels.                      |

## Sensor

|                                         |                                                                         |
|-----------------------------------------|-------------------------------------------------------------------------|
| Type                                    | ERT (Electronic Resonance Technology)                                   |
| Active signing area                     | 108 x 64,8 mm                                                           |
| Resolution                              | 10.204 x 7.420 pixels $\pm$ 2.400 x 2.910 ppi                           |
| Linearity                               | $\pm$ 0,4 mm                                                            |
| Method of input                         | Special sensor for pen input (no influence by hand touch)               |
| Surface                                 | Extremely durable, hardened special (anti-glare) glass.                 |
| Surface hardness                        | 8H                                                                      |
| Life expectancy                         | Approx. 30 million signatures                                           |
| Pressure stages                         | 2.048 pressure stages from FW 1.37                                      |
| Output rate of coordinates              | 500 Hz 4D-samples (consisting of x, y coordinates, time and pressure)   |
| Internal sampling rate                  | 6.000 samples per second                                                |
| Stability of output rate                | Constant through integrated quartz                                      |
| Pen                                     | Active and battery-free pen with changeable pen tips.                   |
| Minimal pressure force                  | 0.098 N (10 gf)                                                         |
| Maximal pressure force                  | 7.845 N (800 gf)                                                        |
| Life expectancy of pen-tip (4 included) | Approx. 1,2 million signatures at 250 grams pressure and 2,5 cm length. |
| Pen tilt angle                          | +/- 45° (accuracy $\pm$ 2°)                                             |

|                            |                                                         |
|----------------------------|---------------------------------------------------------|
| Possible height of the pen | 5 - 15 mm                                               |
| Pen attachment             | Highly flexible textile-cord and horizontal pen holder. |

### Connection types

|                     |                                                                                                    |
|---------------------|----------------------------------------------------------------------------------------------------|
| USB                 | USB-HID and WinUSB                                                                                 |
| Serial              | Optional with internal USB-Serial-Converter (VCOM-Port) using FTDI or chargeable VCOM-Port-Driver. |
| USB-Standby-Support | Yes, if the corresponding signal is given, the device switches off.                                |
| Ethernet            | Yes, with an optionally available USB-to-Ethernet adapter.                                         |

### Driver and Software

|               |                                                       |
|---------------|-------------------------------------------------------|
| Driver        | No special driver is required for a USB connection.   |
| Plug and Play | Yes, available for all connection types.              |
| SDK (API)     | Several SDKs including updates and support available. |
| Tools         | Tools free of charge including updates and support.   |
| Software      | Further chargeable software available.                |

### System environment

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| Operating System           | Windows 10 or newer, Windows Server 2016 or newer (RDP, Citrix), Linux |
| Terminal Server and Citrix | <a href="#">Compatible with Windows Remote Desktop and Citrix ICA</a>  |
| Citrix Virtual Channel     | <a href="#">Optionally available</a>                                   |

### Security mechanisms

|                                      |                                                                                                                    |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Data transfer                        | AES-256 encrypted data transfer between host and pad via RSA key exchange.                                         |
| Encryption                           | RSA-Encryption unit inside the pad.                                                                                |
| Firmware                             | Flash memory is protected against data theft.                                                                      |
| Secure Mode                          | Real-time display of the signature without usable biometrics.                                                      |
| Signature unit                       | RSA signature creation unit in the pad.                                                                            |
| Key storage                          | Creation and storage of certificates in the pad.                                                                   |
| Key size                             | 4096 Bit                                                                                                           |
| Certificate Signing Request (CSR)    | CSR can be generated in the pad and extracted.                                                                     |
| Trusted certificates                 | The CSR can be signed by a root authority.<br>Additional information: <a href="#">eIDAS Organisation Seal</a>      |
| Supported Hash-algorithms            | SHA-1, SHA-256 and SHA-512                                                                                         |
| Signature-Performance                | Transmission and Signing of a SHA-256 Hash via WinUSB:<br>2048 Bit: 800 ms; 3072 Bit: 2.400 ms; 4096 Bit: 5.500 ms |
| signotec „Content-Signing“           | Yes                                                                                                                |
| Protection against forceful break in | The casing can be glued optionally.                                                                                |
| Protection against theft             | Security slot, 6mm (e.g. Kensington NanoSaver Security, Rev. G or newer)                                           |

### Miscellaneous

|                                                  |                                                                             |
|--------------------------------------------------|-----------------------------------------------------------------------------|
| Transport protection                             | No                                                                          |
| Individualization                                | Change of casing colour and logo print (on request).                        |
| Slideshow                                        | A standby slideshow with up to 10 images is freely configurable.            |
| Certifications and standards                     | CE, FCC, DIN EN 60950-1, DIN EN 61000-6-1, EN 61000-6-3, EN 55022, EN 55024 |
| RoHS                                             | RoHS-compliant according to EU-regulations.                                 |
| WEEE-Reg.-No. (German register for used devices) | DE 41995888                                                                 |

|                         |                                                                                                                                                           |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Packaging law Reg.-No.: | DE 3470684644700                                                                                                                                          |
| Serial number           | Unique and retrievable, internal serial number.                                                                                                           |
| Device label            | There is a label on the packaging and the device with information regarding the article number, hardware revision and serial number, including a barcode. |

### Operating- and storage conditions

|                                        |                        |
|----------------------------------------|------------------------|
| Operating temperature                  | -10°C to +45°C         |
| Storage temperature                    | -25°C to +70°C         |
| Air humidity for operation and storage | <= 90%, non-condensing |
| Air pressure for operation and storage | > 700 hPa              |
| Degree of protection                   | IP 52                  |

### Reliability / Quality assurance

|                                         |                                                                            |
|-----------------------------------------|----------------------------------------------------------------------------|
| Quality test                            | Individual testing of devices with test log.                               |
| High temperature test of the components | 240 hours at 80°C                                                          |
| Low temperature test of the components  | 240 hours at - 40°C                                                        |
| Humidity test of the components         | 240 hours at 60°C and 90% humidity                                         |
| Thermal shock test of the components    | 30 minutes at – 40°C and directly 30 minutes at + 80°C (10x in succession) |

### Article numbers

|                  |                                                                |
|------------------|----------------------------------------------------------------|
| ST-GERT-3-U100   | signotec Gamma USB, 2,7 m USB-cable                            |
| ST-GERT-3-UFT100 | signotec Gamma FTDI (VCOM) and USB approx. 2,7 m (USB 2serial) |

## Copyright

Copyright © 2000 - 2026 signotec GmbH

All rights reserved. This documentation and the components described therein are copyrighted products of signotec GmbH Ratingen in Germany. Partial or full reproduction is only permitted with the written consent of signotec GmbH. All hardware and software names used are trade names and / or trademarks of the respective manufacturers / owners. Subject to changes at any time. We accept no liability for errors in the documentation.