signotec
e-signature solutions

signotec Sigma

Highlights & Data Sheet



SecurITy made in Germany

MADE IN GERMANY
Quality • Security • Ecology

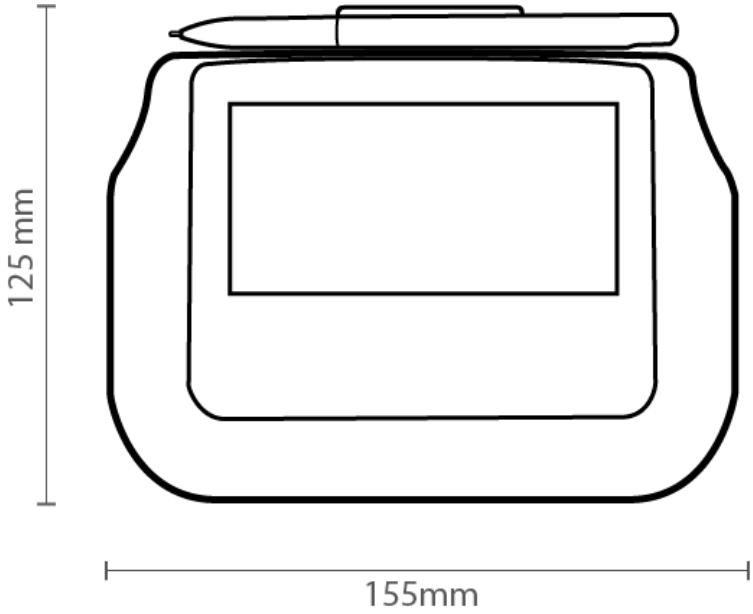
Version 2.3 from 09.07.2026

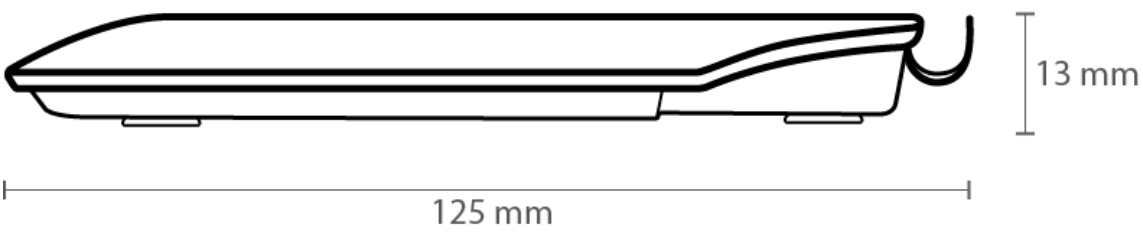
https://en.signotec.com/

HIGHLIGHTS

- Monochrome 4,0" (10,4 cm) TFT with optional back-light.
- Flat, light and cost-efficient build for stationary and mobile usage.
- Unique RSA-signature creation and RSA-encryption methods inside the pad.
- No special pen required (cheap replacement available).
- Battery-free pen with changeable pen tip.
- Signature capturing with 500 Hz 4D samples and 1.024 pressure stages (x, y, z, t).
- Compatible with all currently available Windows- and Linux- systems.
- Compatible with Windows Remote Desktop and Citrix ICA environments.
- 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	155 x 125 x 13 mm (W x D x H)
Casing colours	Upper shell: RAL 9005, jet black Lower shell: RAL 9005, jet black
Cable port	USB
Cable length	Approx. 2 meters, optional 5 meters
Power consumption	Standby status: <500 µA, Consumption without LCD-Backlight: 45 mA Consumption with LCD-Backlight: 165 mA
Power supply	USB
Status-LED	2 coloured and freely programmable LEDs
Stand	Mounting stand on the backside, compatible Multigrip™ plate available.
Weight	Approx. 230 grams (incl. cable)
Warranty	2 years, optional extension up to 5 years.
Country of origin	Germany

Display	
Type	Monochrome TFT
Size	4" (10,4 cm)
Colour space	Monochrome
Backlight	Optional, brightness: 158 cd/m²
Configuration of backlight	The backlight can be adjusted in the service menu, API or configuration file.
Resolution	320 x 160 pixels ≙ 86 x 86 ppi
Pixel size	0,275 mm
Visible area	95 x 47 mm
Line of sight	6 o'clock
Scroll-function	No

Sensor	
Type	Resistive Touch Panel (RTP)
Active signing area	91 x 45 mm
Resolution	4.096 x 4.096 pixels ≙ 2.214 x 1.130 ppi
Linearity	±1,5 % in x-, y- and z- direction
Method of input	Special sensor for pen input
Surface	Special foil surface with wear-protection.
Surface hardness	3H
Life expectancy	Approx. 1 million signatures
Pressure stages	1.024 pressure stages
Output rate of coordinates	500 Hz 4D-samples (x, y, z, t)
Internal sampling rate	6.000 samples per second
Stability of output rate	Constant through integrated quartz
Pen	Battery-less pen with special, springy mine (changeable).
Life expectancy of the pen	Approx. 150.000 signatures at 250 Gramm pressure and 2,5 cm length.
Pen tilt angle	No
Possible height of the pen	No
Pen attachment	Highly flexible textile-cord and horizontal pen holder. (assembled at the factory)

Connection Types	
USB	HID-USB 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	Compatible with Windows Remote Desktop and Citrix ICA
Citrix Virtual Channel	Optionally available

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. Additional information: eIDAS Organisation Seal
Supported Hash-algorithms	SHA-1, SHA-256 und SHA-512
Signature-Performance	Transmission and Signing of a SHA-256 Hash via WinUSB: 2048 Bit: 850 ms; 3072 Bit: 2.500 ms; 4096 Bit: 5.600 ms
signotec „Content-Signing“	No
Protection against forceful break in	The casing can be glued optionally.

Miscellaneous	
Individualization	Change of casing colour and logo print (on request).
Slideshow	The standby image 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 +60°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	
Without LCD-Backlight	
ST-ME105-2-U100	signotec Sigma with HID-USB and approx. 2 m USB-cable
With LCD-Backlight	
ST-BE105-2-U100	signotec Sigma Backlight with HID-USB and approx. 2 m USB-cable
ST-BE105-2-FT100	signotec Sigma Backlight with FTDI (VCOM) and approx. 2 m USB-cable
Kiosk-variant	
ST-BE105-2-UKIOSK	signotec Sigma Backlight kiosk variant with HID-USB and approx. 2m USB cable

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