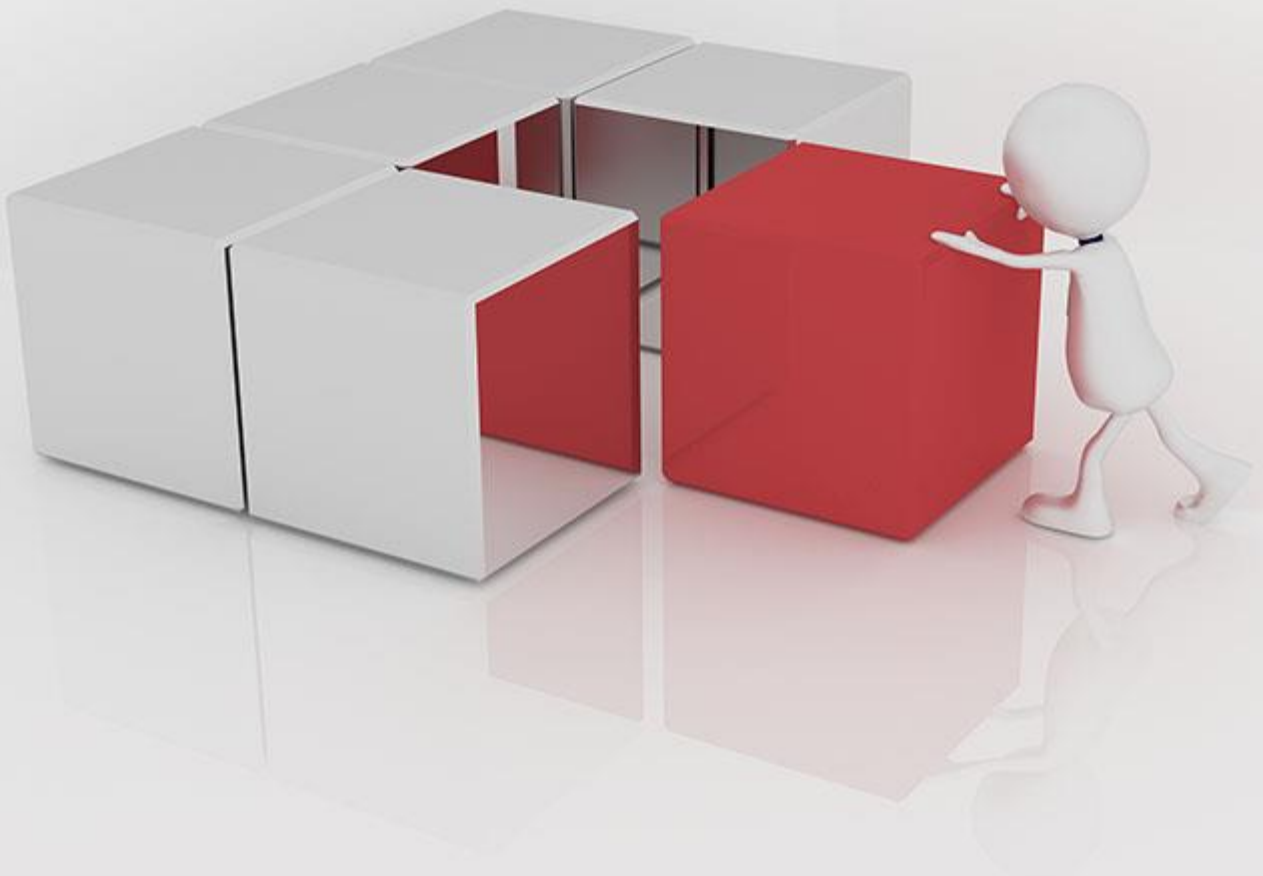# duraSign Pad Brilliance

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FOR STATIONARY USE

Technical Information of duraSign Pad Brilliance

The duraSign Pad Brilliance, with bright colour screen and USB port, was specially designed and manufactured for demanding and heavily frequented counter services by StepOver - Europe (StepOver GmbH) in Germany.

Specific features:

Its elegant and robust design, with a 3mm-thick polycarbonate casing and large hardened glass surface in the signing area, make this Pad a wear-resistant and good-looking solution for stationary use.

The duraSign Pad Brilliance features a stable and easily locatable lateral pen holder. The new "duraPen 1" battery-free electromagnetic pen is securely attached to the casing with a tearproof cord. Both pen and cord can be easily replaced by the User without needing to return the product or open up the casing.

Its USB port, located on the casing base and with a cable duct running to the back, combines the benefits of a fixed connection cable (unplugging not possible) with the flexibility of a changeable standard USB cable (various cable lengths, user can replace the cable without returning the product etc.).

The duraSign Pad Brilliance can also be secured with both a flat Kensington ClickSafe lock, as well as a conventional Kensington Lock.

The integrated colour screen shows the signature in real time and can be used to display texts, documents, graphics, excerpts, interactive buttons and your own individual advertising.

Its offset sensor surface, lower placement of the screen and "turn" button on the display, with which the sign pad and the surface for resting your hand can be rotated 180°, provide both left- and right-handed users with the optimal writing position, just like writing on a notebook.

The highest proof of security on the market

Each duraSign Pad Brilliance is provided with a unique certificate for the digital signing process (2048 bit RSA private key), with which the internal signature creation unit signs the document in a completely safe way. Furthermore, with this certificate the person examining the signed document can precisely assign the signature to a specific signature pad.

Apart from this, the processor of the signature pad contains a public key of a second key pair (RSA 2048 bit), generated by a notary public. By means of this key, the biometric data is already encrypted in the pad. This way, highly sensitive information can never be found in decrypted format in the unsafe "computer" environment (e.g. working space). The private key of this second key pair is safely deposited at a notary's office.

The unique safety concept of this StepOver signature pad offers the user the highest possible proof security, since it is the only way they can prove they have never used the biometric data of the signature for purposes other than intended (e.g. by intercepting and copying the data to another document).

The optional internal tamper-proof date stamp provides each captured signature with a date stamp independent of the computer.

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Optional opening recognition helps the operator identify possible tampering.

It is not necessary to install a driver for Win7, Win8, Win10 and Linux. In addition to the screen, the status LED indicates the specific operating mode (Off: no connection; Orange: stand-by; Green: capturing signature).

The device has two screw holes in the back that enable it to be fixed to a desk or wall. You can download the relevant drilling template here:

https://www.stepoverinfo.net/downloads/webseite/Bohrschablone-Brilliance_Vivid.pdf

Technical data:

Description	Reference	Value	Unit of Measurement
Pen	duraPen1 (battery-free EM pen) fastened to casing with spiral cord or simple cord upon request. Pen can be exchanged by the customer without the use of tools.	duraPen1	Name
Pressure resistance of pen	Max. pressure which can be applied to the tip of the pen.	800	Grams
Sensor durability	Max. amount of signatures possible with the sensor (with different pens, if applicable)	> 30 million	Signatures
Sensor material	Glass in the detection area with EMR sensor located underneath	Chemically-hardened glass	Surface material
Casing material	Signature pad casing	PC/ABS	Material description
Width	Casing	20	cm
Depth	Casing	17.3	cm
Height	Casing	1.7	cm
Anti-theft protection/Kensington Slot	The casing has a ClickSafe Kensington slot at the back. This slot is suitable for normal Kensington locks and flat ClickSafe Kensington locks (e.g. model K64637WW). The slot is reinforced inside with a small metal plate. Please pull only with mild to moderate force on the ClickSafe Security Anchor, as cracks could otherwise emerge in the casing.	Slot for flat ClickSafe Kensington locks	-
Width	Surface area of sensor and screen	10.9	cm
Depth	Surface area of sensor and screen	6.7	cm
Width	Active area of sensor	10.8	cm
Depth	Active area of sensor	6.5	cm
Length	Supplied connector cable 1x mini USB to USB	200	cm
Weight	Signature pad without connection cable	385	Grams
Temporal resolution output	Groups of 4D coordinates (Each group is made up of the coordinates X, Y, pressure and time)	274	Output per second
Spatial resolution	Definition of the captured X and Y coordinates (without adding some coordinates to other/without interpolation)	X = 2400 Y = 2900	LPI
Accuracy of repetition	Accuracy of repetition in X,Y measurements.	+/-0.5	mm
Display	x- and y resolution of integrated colour screen: **Note:** The pad screen displays the signature in real time and can be used to display texts, documents and virtual buttons. The LED backlight has an expected MTBF of 20,000 working hours. The screen can, however, be turned off and on again via software (recommended if the device is connected to a switched-on computer outside of working hours e.g. to a computer running 24/7).	800 x 480	pixels
Horizontal viewing angle	Left side / Right side	minimum 60° - typically 70°	°
Vertical viewing angle	Front / Opposite position	minimum 60° - typically 70° minimum 45° - typically 50°	°

duraSign Pad Brilliance TECHNICAL INFORMATION

Standard image resources	The duraSign Pad Brilliance can be equipped with the following image resources: **Standby mode:** If the customer has not loaded a slide show onto the signature pad, the operating mode will show the serial number, FW version, manufacturer's logo and further information. **Optional slide show:** In standby mode, advertising images (slide show) can be displayed. The signature pad also has an internal memory for at least four exchangeable advertising images. The advertising images/slide show images can be loaded and changed by the customer. **Standard signature mode**: The background images (capture area, bottom; information area, top) can be changed by the customer. Backgrounds are loaded onto the signature pad by default similarly to the image on the left. The text in the upper information area can be adapted dynamically via the signature software. A bar with the available functions is displayed on the right-hand side. **Signing in the document:** The area of the document around the signature field is displayed in the main field. A bar with the available functions is displayed on the right-hand side of the display. **Document view:** In "document view" mode, the User can view a multiple-paged document. You can navigate by using the function bar on the right-hand side. (Documents, signatures and advertising images are merely for illustration purposes.)	-	-
Measurement of pressure	Maximum number of differentiated pressure levels.	1024	Levels of pressure
Minimum pressure	Lowest measurable writing pressure.	approx. 0.5	Newtons
Maximum pressure	Highest measurable writing pressure.	approx. 8	Newtons
Connection	Standard Mini-USB	Port	-
Energy Use	Maximum power consumption	500	mAh
Type of transmission	Encrypted HID. This device does not require an HW driver. It is directly recognised by Windows/Linux similarly to a mouse or keyboard. Can be switched to serial transmission via USB (for port forwarding at the Thin Client). Driver for Windows, Windows Embedded and Win CE optionally available. Also compatible with Linux and Thin-OS.	USB/HID Can be switched to USB-CDC/ACM	USB 2.0 (USB 1.1 compatible)
Encryption Algorithm	Name of the standard cryptographic algorithm used for the transfer of data.	RSA 2048 bit AES 256 bit	-
Opening recognition (optional)	Opening recognition must be requested upon placing the order (subject to surcharge). It cannot be activated subsequently, as it requires an internal battery that supplies the internal memory with power. This internal memory unit holds a key that is unique to each pad, so long as it is supplied with power. If the casing is opened, the power supply is interrupted and the key is deleted. The next time it is switched on, the firmware integrated into the main processor ascertains that the key for the volatile memory is no longer equivalent to its own, and thus that the signature pad may have been tampered with. If the signature pad should exceed the life span of the battery, this can be renewed by StepOver. In this regard, the device is also checked for integrity (interference) and the alarm is reset.	Optional function	Subject to surcharge – only when ordered ex works.
Date stamp (optional)	The UTC/GMT date stamp must be requested upon placing the order (subject to fee). It cannot be activated subsequently, as it requires an internal battery that supplies an internal clock with power. The date stamp may deviate by one day per year, but can be set with an Internet connection of the processor with the aid of StepOver software. The software builds a secure (end-to-end encrypted) connection between the signature pad and the StepOver time server, which transmits the current time to the signature pad. If the signature pad should exceed the life span of the battery, this can be renewed by StepOver.	Optional function	Subject to surcharge – only when ordered ex works.

|			
Battery	Button cell (LI-MnO$_2$). The button cell is required for the optional functions of "opening recognition" and "date stamp". Signature pads that are not equipped with these functions ex works might contain no battery.	CR2032	Type
Working temperature	Temperatures at which the pad will function according to what is specified here.	0 to +50	°C | with a max. of 65% RH without condensation
	Limited temperature range in particularly humid environments.	0 to +40	°C | with a max. of 90% RH without condensation
Storage temperature	Temperatures at which the device can be transported and stored.	-10 to +70	°C | with a max. of 90% RH without condensation
	Storage temperature for the electronic pen (duraPen1)	-20 to +70	°C | with a max. of 65% RH without condensation
		-20 to +65	°C | with a max. of 95% RH without condensation
	Recommended storage temperature for the set	-10 to +65	°C | with a max. of 90% RH without condensation
IP class	Protection from penetrating foreign bodies. When cable is plugged in.	IP 52	IP class
Meets	Certificates / licences	CE, WEE	-
Software compatibility	In order to use this product fully, you will need a version of the following software that has, at the minimum, the same version number or higher.	eSignatureOffice from version 5.0 SimpleSigner from version 7.0 Device-API from version 5.6	-
Quality control / per device	Quality control and safety tests for all devices. The test protocols are linked to the serial number of the device and the coded initials of person who carried out the tests, and are available, free of charge, for our clients on request.	Testing of each device: Operation and margin for error in measurements	1/1
General quality control measures	Selection of component providers and standardised, documented production cycles. StepOver GmbH only works with ISO certificated providers and works according to ISO regulations	EN ISO 9000 ff	-
Identification / serial number	Each signature pad of this type has been given a unique serial number. The serial number can be found from the device's firmware and read on the display after insertion. There is also the option to add the serial number in figures for projects over 500 units and fix it as a barcode on the back of the device (subject to cost).	Code 39	Barcode type (Optional / Subject to surcharge – only when ordered ex works)
Recycling	This product can be almost entirely recycled. The parts, such as the casing, etc. are marked with information about the materials used.	WEE- Registration number	DE 27870259
Protecting the environment	For every signature pad sold, StepOver makes a donation to promote the planting of new trees. As of the end of 2014, a total area of 1.5 million m² has been planted in several projects across the world!	CO2 Neutral emissions	-
Manufacturer	StepOver Europe	StepOver GmbH Otto-Hirsch-Brücken 17 70329 Stuttgart Germany	Address
Country in which it is produced	Country in which the development, manufacture and quality control takes place.	Germany	Made in Germany
Accessories included	Standard Accessories.	Mini-USB-cable, operating manual in multiple languages	Per 1 unit
Order number	GTIN article number.	GTIN	4260130061081

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Original product:
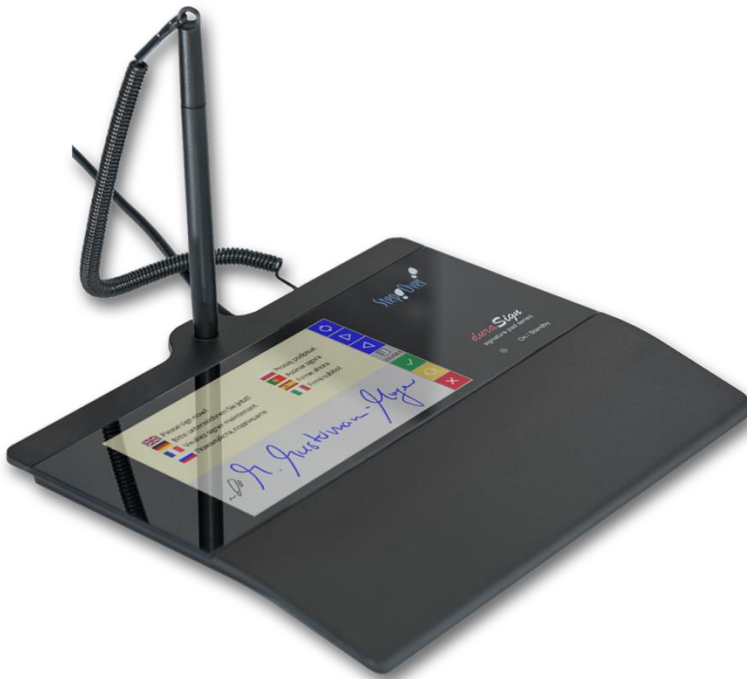
Important notes:

This product is protected by property rights and national and international patents.

We reserve the right to make technical changes that result in an improvement in the functioning of the device.

All names and trademarks are property of their respective owners. The content and structure of this documentation are protected by copyright. The reproduction of information, data, and especially of images, texts or sections of text requires the express permission of StepOver.

The indications given in the operating and security instructions must be followed. The operating instructions can be found in the electronic manual at www.StepOverInfo.net/MAN.

This product is not available for import, distribution or use in the USA. For products designated for the US market, contact StepOver Inc. www.StepOver.com/us.