nextGen Pad 5

Technical data sheet

5-inch next generation signature pad

network-ready, standalone pad with top-notch performance

StepOver GmbH

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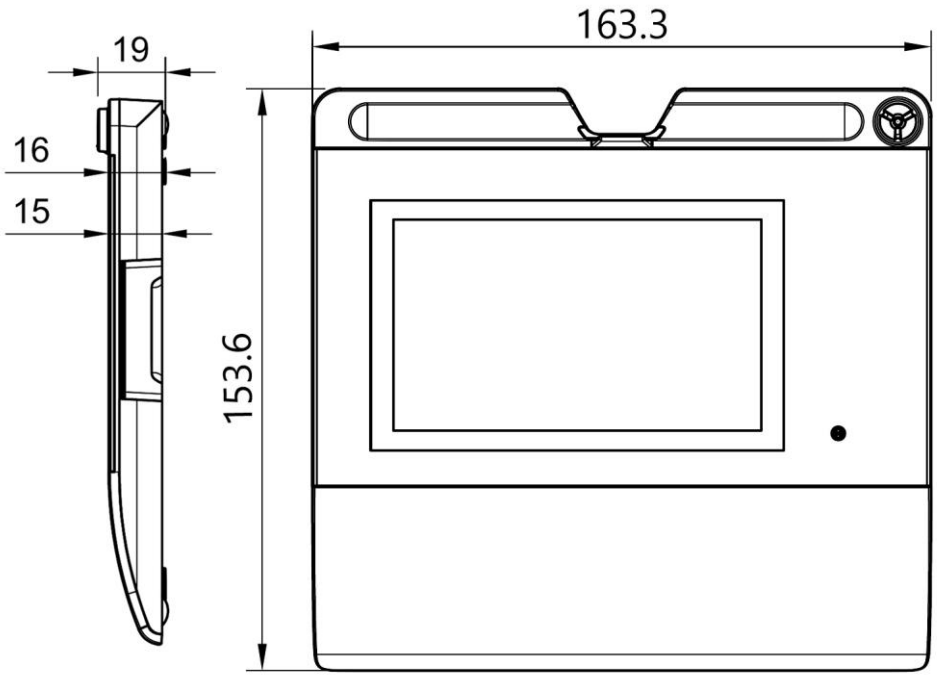
Technical Data Sheet

GENERAL			
Manufacturer	StepOver GmbH	StepOver GmbH Otto-Hirsch-Brücken 17 70329 Stuttgart Germany	address
Country of origin	Country where development, manufacturing and quality assurance take place.	Made in Germany	
Order number	GTIN item number	GTIN	4260130061470
Order number with 3 years warranty and barcode	GTIN item number	GTIN	4260130061654
Traceability/ serial number	Each signature pad of this type has been given a unique serial number. The serial numbers can be accessed from the device's firmware and read on the display after powered on. Optionally, for projects involving over 500 units, the serial number can be added to the back of the device in digits and as a bar code (subject to cost).	Code 39	barcode type (Optional / Subject to surcharge - Only when ordered ex-works)

DIMENSION / HOUSING / COMPOSITION			
Material	Housing	PC/ABS	
Width	Housing	16.3	cm
Depth	Housing	15.4	cm
Height	Housing	1.9	cm
Weight	Signature pad without USB cable.	325	grams
Cover lens	Chemically tempered glass over the display.		



PEN			
Pen type	duraPen (electro-magnetic pen; battery-free).	duraPen 1	
Pen force resistance	Max. force that may be applied to the pen tip.	8	Newtons
Pen attachment	Textile cord affixed to the housing. Pen is easy to replace, with no tools required.		

DISPLAY			
Display type	Color display TFT	64k	colors
Width	Active area – display	10.8	cm
Depth	Active area – display	6.5	cm
Display brightness	Values of display brightness	Max. 245	cd/m²
Display	X- and Y- resolution of the integrated color 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 lifespan of 20,000 operating hours. The screen can be switched off and on again via software (recommended if the device is also 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	min 60° - typically 70°	
Vertical viewing angle	Front / Opposite position	min 60° - typically 70° / min 45° - typically 50°	
Standard image resources	 **Standby mode:** The first 30 seconds, after the signature pad is connected or if the customer has not loaded a slide show/ video onto the signature pad, the standby mode will display the ip-address of the pad, FW version, manufacturer logo and additional 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.  **Optional Video playback:** In standby mode, a video can be played. The video is played in a loop until the device leaves standby mode. Note: The video resolution is lower than the native screen resolution. The video is scaled to the full screen size. Only the specified video format is supported. The unit has no speakers and therefore does not play sound. The device has an internal memory for a video that can be up to 30 minutes long.  **Signing in the document:** The section of the document around the signature field is displayed in the main field. A bar listing available functions is displayed on the right-hand side of the screen.  **Document view:** In document view mode, users can view a multiple-page document. A function bar located on the right-hand side, assists navigation.		The documents, signatures and advertisement images seen here are merely for illustration purposes.

SUPPORTED FILE FORMATS			
Document file format	PDF/A 1b, PDF/A 2b, PDF/A 3b, other PDF- Formats depending on tests.	PDF/A	1b, 2b, 3b, others PDF formats, if tested
Slide show and picture file format	PNG, JPG, BMP	800 x 480	pixels
Video file format	Codec: VP8, Resolution: 512x300 will be scaled to display size, Bitrate 512K, Refresh rate 24 Hz.	512 x 300 Pixels / 512K Bitrate / 24Hz	VP8

SIGNATURE CAPTURE			
Sensor type	Sensor type to capture signature data.	ERT	sensor
Sensor durability	Max. number of signatures possible (with different pens, if necessary).	> 30 million	signatures
Sensor material	Glass in the capture section with an ERT sensor situated underneath.	Chemically tempered glass	surface material
Width	Active area ERT sensor	10.8	cm
Depth	Active area ERT sensor	6.5	cm
Resolution	Resolution of captured X- and Y- coordinates (without interpolation/ without adding some coordinates to others).	X=3700 Y=3700	DPI/LPI
Accuracy of repetition	Accuracy of repetition of X-Y measurements.	+/- 0.4	mm
Temporal resolution output	Groups of 4D coordinates (Each group consists of X, Y, pressure and time).	500	output per second
Measurement of pressure	Maximum number of differentiated pressure levels.	1024	pressure levels
Minimum force	Lowest measurable writing force.	Approx. 0.5	Newtons
Maximum force	Highest measurable writing force.	Approx. 8	Newtons

SAFETY			
Protection of biometric data	Patented encryption method with RSA public key safely stored in the signature pad and RSA Private Key safely stored with a notary for decryption in case of dispute.		
Encryption algorithms and Signature algorithms	Name of the standard cryptographic algorithms used, which are used for encryption purposes in the pad.	Up to RSA 4096 bit, AES 256 bit, SHA 256 bit,	
Data communication between ERT sensor and main circuit board	Data transmission between the ERT sensor and the main board is encrypted using AES-256 encryption. Before each signature, a new, randomly generated key is transmitted to the sensor via a secure channel. This ensures that the biometric data of the signature is individually encrypted and effectively protected against eavesdropping and replay attacks. The opening detection required in previous models is therefore no longer necessary.	AES 256 bit	encryption
Kensington Slot anti-theft system	The back of the housing has a standard Kensington Security Slot. This slot is suitable for normal Kensington locks (T-Bar) and flat Click Safe Kensington locks (e.g. model K64637WW with T-Bar). Inside, the slot is reinforced with a metal plate. Only mild/moderate force should be applied to the Click Safe Security Anchor, otherwise the housing may crack.	Slot for Kensington locks	
Date stamp	The date and time stamp applied to each signature requires an internal battery to power the pad's internal clock. The date may be off by up to one day. When connected via the Ethernet Connection Kit, the date can also be obtained from an NTP time server.	Optional function	
Tamper detection (optional)	The tamper detection function must be requested when placing your order (subject to surcharge). It cannot be activated retrospectively, as it requires an internal battery that supplies an 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 housing is opened, the power supply is interrupted and the key is deleted. The next time it is used, the firmware integrated into the main processor detects that the key for the volatile memory is no longer equivalent to its own, and therefore that the signature pad may have been tampered with. If the signature pad should exceed the battery lifespan, it can be renewed by StepOver. In this regard, the device is also checked for integrity (tampering) and the alarm is reset.	Optional function	subject to surcharge – Only when ordered ex-works.

SYSTEM REQUIREMENTS		
Operating System	It is not necessary to install a driver. The device is detected as an external network device by Windows, Mac OS and most Linux distributions.	Windows 11 and above, macOS Catalina and above, Linux distributions
Use with a web browser	To take full advantage of this product, you need one of the following web browsers.	Chrome, Edge, Safari, Firefox
Software compatibility	In case you do not want to use the signature device with your web browser, you can use it together with the following software.	eSignatureOffice 7.X or higher SimpleSigner 8.X or higher Print2NG (latest version)
Developer Interface	Signature Pad has a REST API Interface which can be used to implement the signature pad with customer applications.	Internal REST API Next Gen API (.NET) swagger Interface

CONNECTIVITY / POWER SUPPLY			
USB-C cable	USB-C to USB-C + included USB-A adapter	Length	2 meters
Accessories included	Standard accessories	USB-C cable USB-A plug to USB-C socket adapter, Multi-lingual, operating manual	per 1 unit
Power consumption	Maximum power consumption	2.0	Watt (400 mA)
Connectivity	Encrypted HID. This device does not require any hardware drivers; it is recognized by Windows/Linux directly as a mouse or keyboard. Can be switched to serial transmission via USB (including for port forwarding at the Thin Client). Driver for Windows, Windows Embedded and Win CE available as optional. Also compatible with Linux and Thin-OS.	USB-HID	USB 2.0 device
Accessories (additional/ not included)	Ethernet Connection Kit 2.0. POE Connection Kit (IEEE 802.3af standard) for the nextGen Pad 5 (with or without a POE injector)	USB 2.0 Network Adapter, 10/100Mbit with USB power supply 7,5 Watt	per 1 unit

OTHER FEATURES			
Battery	Button cell (LI-MnO2). The button cell is required for the internal real time clock and the optional "opening recognition" function.	CR2032	type
Operating temperature	Temperatures at which the pad can function according to what is specified here.	0 to +50	°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 (duraPen 1).	-20 to +70	°C | With a max. of 65% RH without condensation
	Recommended storage temperature for the set.	-20 to +65	°C | With a max. of 95% RH without condensation
		-10 to +65	°C | With a max. of 90% RH without condensation
Conformity	Certifications / approvals	CE, UKCA, WEE, RoHS	
Quality assurance measures per device	QA tests of all devices. Test protocols are linked to the serial number of the device and the coded initials of the person who carried out the tests. They can be sent to the customer via email upon request, free of charge.	Each device tested for function and measurement error	
General quality assurance measures	Selection of component suppliers and standardized, documented production processes. StepOver GmbH works exclusively with ISO-certified component suppliers, and works in line with ISO regulations	EN ISO 9000 ff	
Recycling	Most of this product can be recycled. Components such as housing, etc. are labelled with information about the materials used.	WEE registration no.	DE 27870259
Environmental protection	StepOver offsets its CO2 emissions through a climate protection contribution to certified climate protection projects. For more information, please visit: https://www.primaklima.org/stepover-gmbh	CO2-neutral product	
Drilling jig	The device has two screw holes on the back for desktop or wall assembly.	Dimensions can be found on the StepOver Website	**Download PDF document**

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IMPORTANT INFORMATION:

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

We reserve the right to make technical modifications designed to improve this product.

All hardware and software names employed are registered trade names and/or trademarks of the respective manufacturer/owner. The content and structure of this documentation are protected by copyright. The reproduction of information or data, particularly text, sections of text and images, requires the prior consent of StepOver GmbH.

The safety and operating instructions provided in the operating manual must be observed. You will find an electronic operating manual online at: www.StepOverInfo.net/MAN

This product is not intended for import, distribution or use in the USA. Please contact StepOver International GmbH regarding products for the US market.

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