



DELL Precision 7680 Intel® Core™ i7 i7-13850HX Mobile workstation 40.6 cm (16") Full HD+ 32 GB DDR5-SDRAM 1 TB SSD NVIDIA RTX 3500 Ada Wi-Fi 6E (802.11ax) Windows 11 Pro US International Grey



Brand : DELL

Product family: Precision

Product code: 4W5KH

Product name : 7680

DELL Precision 7680. Product type: Mobile workstation, Form factor: Clamshell. Processor family: Intel® Core™ i7, Processor model: i7-13850HX. Display diagonal: 40.6 cm (16"), HD type: Full HD+, Display resolution: 1920 x 1200 pixels. Internal memory: 32 GB, Internal memory type: DDR5-SDRAM. Total storage capacity: 1 TB, Storage media: SSD. On-board graphics card model: Intel® UHD Graphics, Discrete graphics card model: NVIDIA RTX 3500 Ada. Operating system installed: Windows 11 Pro. Product colour: Grey

Design		Ports & interfaces	
Product type *	Mobile workstation	USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity	1
Product colour *	Grey	Ethernet LAN (RJ-45) ports	1
Form factor *	Clamshell	HDMI ports quantity *	1
Market positioning	Business	Thunderbolt 4 ports quantity	2
Introduction year	2023	Intel® Thunderbolt 4	✓
Intel® vPro™ Platform Eligibility	✓	Combo headphone/mic port	✓
		Power adapter barrel connector	7.4 mm
Display		Performance	
Display diagonal *	40.6 cm (16")	Ambient light sensor	✓
Display resolution *	1920 x 1200 pixels	Accelerometer	✓
Touchscreen *	✗	Hall sensor	✓
HD type	Full HD+	Keyboard	
Panel type	WVA	Pointing device	Touchpad
LED backlight	✓	Numeric keypad *	✓
Native aspect ratio	16:10	Keyboard backlit	✓
Anti-glare screen	✓	Keyboard language	US International
Display brightness	250 cd/m ²	Software	
Pixel density	142 ppi	Operating system architecture	64-bit
RGB colour space	NTSC	Operating system language	Multilingual
Colour gamut	45%	Trial software	No Microsoft Office License Included 30 day Trial Offer Only
Maximum refresh rate	60 Hz	Operating system installed *	Windows 11 Pro
Contrast ratio (typical)	1000:1	Processor special features	
Processor		Intel Flex Memory Access	✓
Processor manufacturer *	Intel	Intel VT-x with Extended Page Tables (EPT)	✓
Processor family *	Intel® Core™ i7	CPU configuration (max)	1
Processor generation	13th gen Intel® Core™ i7	Embedded options available	✗
Processor model *	i7-13850HX	Intel Virtualization Technology for Directed I/O (VT-d)	✓
Performance-core Max Turbo Frequency	5.3 GHz	Intel Virtualization Technology (VT-x)	✓
Efficient-core Max Turbo Frequency	3.8 GHz		
Processor cache	30 MB		
Processor cache type	Smart Cache		
Bus type	DMI4		
Configurable TDP-down	45 W		
Memory			
Internal memory *	32 GB		

Memory		Battery	
Internal memory type	DDR5-SDRAM	Battery technology	Lithium-Ion (Li-Ion)
Memory clock speed	5600 MHz	Number of battery cells	6
Memory form factor	CAMM module	Battery capacity *	93 Wh
Maximum internal memory *	128 GB	Battery voltage	11.55 V
Memory channels	Dual-channel	Battery recharge time	3 h
Non-ECC	✓	Fast charging	✓
Storage		Battery weight	410 g
Total storage capacity *	1 TB	Power	
Storage media *	SSD	AC adapter power	240 W
Total SSDs capacity	1 TB	AC adapter frequency	50 - 60 Hz
Number of SSDs installed	1	AC adapter input voltage	100 - 240 V
SSD capacity	1 TB	AC adapter output current	12.3 A
SSD interface	PCI Express 4.0	AC adapter output voltage	19.5 V
NVMe	✓	DC-in jack	✓
SSD form factor	M.2	Security	
Optical drive type *	✗	Cable lock slot	✓
Card reader integrated	✓	Cable lock slot type	Wedge
Compatible memory cards	SD, SDHC, SDXC	Smart card reader	✓
Graphics		Trusted Platform Module (TPM)	✓
Discrete graphics card model *	NVIDIA RTX 3500 Ada	Trusted Platform Module (TPM) version	2.0
Discrete graphics card memory	12 GB	Password protection	✓
Discrete graphics memory type	GDDR6	Operational conditions	
On-board graphics card *	✓	Operating temperature (T-T)	0 - 35 °C
On-board GPU manufacturer	Intel	Storage temperature (T-T)	-40 - 65 °C
Discrete graphics card *	✓	Operating relative humidity (H-H)	10 - 90%
On-board graphics card model *	Intel® UHD Graphics	Storage relative humidity (H-H)	0 - 95%
Audio		Operating altitude	-15.2 - 3048 m
Audio chip	Realtek ALC3281	Non-operating altitude	-15.2 - 10668 m
Number of built-in speakers	2	Operating shock	110 G
Speaker power	2 W	Non-operating shock	160 G
Built-in microphone	✓	Operating vibration	0.66 G
Number of microphones	2	Non-operating vibration	1.3 G
Camera		Weight & dimensions	
Front camera	✓	Width	356 mm
Front camera resolution (numeric)	0.92 MP	Depth	258.3 mm
Front camera resolution	1920 x 1080 pixels	Height (front)	2.23 cm
Front camera HD type	Full HD	Height (rear)	2.32 cm
Video capturing speed	30 fps	Weight *	2.6 kg
Infrared (IR) camera	✓	Carbon footprint	
Network		Total carbon footprint (kg of CO2e)	471
Top Wi-Fi standard *	Wi-Fi 6E (802.11ax)	Total carbon emissions, standard deviation (kg of CO2e)	93
Wi-Fi standards	802.11a, 802.11b, 802.11g, Wi-Fi 4 (802.11n), Wi-Fi 5 (802.11ac), Wi-Fi 6E (802.11ax)	Carbon emissions, manufacturing (kg of CO2e)	386
Mobile network connection *	✗	Carbon emissions, logistics (kg of CO2e)	16
Wi-Fi data rate (max)	2400 Mbit/s	Carbon emissions, energy usage (kg of CO2e)	66
Antenna type	2x2	Carbon emissions, end-of-life (kg of CO2e)	2
WLAN controller model	Intel Wi-Fi 6E AX211	Total carbon emissions, w/o use phase (kg of CO2e)	405
WLAN controller manufacturer	Intel	PAIA version	1.3.2
Ethernet LAN	✓	Packaging content	
Ethernet LAN data rates	10,100,1000 Mbit/s	Cables included	AC
Bluetooth	✓		
Ports & interfaces			
USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	2		



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Publication date: 03-APR-2025. Prints or copies of Information are only valid on the printed Publication date