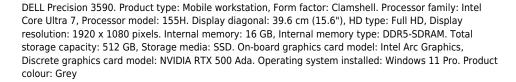![DELL logo]

DELL Precision 3590 Intel Core Ultra 7 155H Mobile workstation 39.6 cm (15.6") Full HD 16 GB DDR5-SDRAM 512 GB SSD NVIDIA RTX 500 Ada Wi-Fi 6E (802.11ax) Windows 11 Pro Grey

Brand : DELL   **Product family:** Precision   **Product code:** TFWWT

Product name : 3590

DELL Precision 3590. Product type: Mobile workstation, Form factor: Clamshell. Processor family: Intel Core Ultra 7, Processor model: 155H. Display diagonal: 39.6 cm (15.6"), HD type: Full HD, Display resolution: 1920 x 1080 pixels. Internal memory: 16 GB, Internal memory type: DDR5-SDRAM. Total storage capacity: 512 GB, Storage media: SSD. On-board graphics card model: Intel Arc Graphics, Discrete graphics card model: NVIDIA RTX 500 Ada. Operating system installed: Windows 11 Pro. Product colour: Grey

Design

Product type *	Mobile workstation
Product colour *	Grey
Form factor *	Clamshell
Market positioning	Business
Intel® vPro™ Platform Eligibility	✔

Display

Display diagonal *	39.6 cm (15.6")
Display resolution *	1920 x 1080 pixels
Touchscreen *	✘
HD type	Full HD
Panel type	IPS
LED backlight	✔
Native aspect ratio	16:9
Anti-glare screen	✔
Display brightness	250 cd/m²
Pixel density	141 ppi
Display diagonal (metric)	39.6 cm
RGB colour space	NTSC
Colour gamut	45%
Maximum refresh rate	60 Hz
Contrast ratio (typical)	700:1

Processor

Processor manufacturer *	Intel
Processor family *	Intel Core Ultra 7
Processor generation	Intel® Core™ Ultra (Series 1)
Processor model *	155H
Processor cores	16

Camera

Front camera resolution	1920 x 1080 pixels
Front camera HD type	Full HD
Video capturing speed	30 fps
Privacy camera	✔
Privacy type	Privacy shutter

Network

Top Wi-Fi standard *	Wi-Fi 6E (802.11ax)
Wi-Fi standards	802.11a, Wi-Fi 5 (802.11ac), 802.11b, 802.11g, Wi-Fi 4 (802.11n), Wi-Fi 6E (802.11ax)
Mobile network connection *	✘
Wi-Fi data rate (max)	2400 Mbit/s
Antenna type	2x2
WLAN controller model	Intel Wi-Fi 6E AX211
WLAN controller manufacturer	Intel
Ethernet LAN	✔
Ethernet LAN data rates	10,100,1000 Mbit/s
Bluetooth	✔
MIMO	✔
MIMO type	Multi User MIMO

Ports & interfaces

USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	2
Ethernet LAN (RJ-45) ports	1
HDMI ports quantity *	1
HDMI version	2.1
Thunderbolt 4 ports quantity	2
Intel® Thunderbolt 4	✔

Processor

Processor threads	22
Processor boost frequency	4.8 GHz
Performance cores	6
Efficient cores	8
Low Power Efficient-cores	2
Performance-core Max Turbo Frequency	4.8 GHz
Efficient-core Max Turbo Frequency	3.8 GHz
Low Power Efficient-core Max Turbo Frequency	2.5 GHz
Performance-core base frequency	1.4 GHz
Efficient-core base frequency	0.9 GHz
Low Power Efficient-core Base Frequency	700 MHz
Processor cache	24 MB
Processor cache type	Smart Cache
Processor base power	28 W
Maximum turbo power	115 W

Neural processor unit (NPU)

Neural processor unit (NPU)	Intel AI Boost
Maximum frequency NPU	1.4 GHz
Sparsity support	✔
Windows Studio effects support	✔
AI datatype support on NPU	FP16, FP32, Int8
AI software frameworks supported by NPU	DirectML, ONNX RT, OpenVINO, Windows ML

Memory

Internal memory *	16 GB
Internal memory type	DDR5-SDRAM
Memory form factor	SO-DIMM
Memory layout (slots x size)	1 x 16 GB
Memory slots	2x SO-DIMM
Maximum internal memory *	64 GB
Memory data transfer rate	5600 MT/s
Non-ECC	✔

Storage

Total storage capacity *	512 GB
Storage media *	SSD
Total SSDs capacity	512 GB
Number of SSDs installed	1
SSD capacity	512 GB
SSD interface	PCI Express 4.0
NVMe	✔
SSD form factor	M.2
SSD performance class	35
M.2 SSD size	2230 (22 x 30 mm)
Optical drive type *	✘
Card reader integrated	✔
Compatible memory cards	MicroSD (TransFlash), MicroSDHC, MicroSDXC

Graphics

Discrete GPU manufacturer	NVIDIA
Discrete graphics card model *	NVIDIA RTX 500 Ada
Discrete graphics card memory	4 GB
Discrete graphics memory type	GDDR6
On-board graphics card *	✔
On-board GPU manufacturer	Intel
Discrete graphics card *	✔
On-board graphics card family	Intel Arc Graphics

Ports & interfaces

Combo headphone/mic port	✔
Charging port type	USB Type-C
USB Type-C DisplayPort Alternate Mode	✔
PowerShare	✔

Performance

Motherboard chipset	Intel SoC
Ambient light sensor	✔

Keyboard

Pointing device	Touchpad
Keyboard language	Nordic
Numeric keypad *	✔
Keyboard backlit	✔
Keyboard number of keys	100

Software

Operating system architecture	64-bit
Operating system language	Danish, English, Finnish, Norwegian, Swedish
Trial software	No Microsoft Office License Included 30 day Trial Offer Only
Operating system installed *	Windows 11 Pro

Battery

Number of battery cells	3
Battery capacity *	54 Wh
Battery voltage	11.4 V
Battery recharge time	4 h
Fast charging	✔
Battery weight	220 g

Power

AC adapter power	130 W
AC adapter frequency	50/60 Hz
AC adapter input voltage	100 - 240 V
USB Power Delivery (USB PD) *	✔
USB charging voltage	20,5 V
USB charging current	6.5 A

Security

Cable lock slot	✔
Cable lock slot type	Wedge
Smart card reader	✔
Trusted Platform Module (TPM)	✔
Trusted Platform Module (TPM) version	2.0

Operational conditions

Operating temperature (T-T)	0 - 35 °C
Storage temperature (T-T)	-40 - 65 °C
Operating relative humidity (H-H)	10 - 90%
Storage relative humidity (H-H)	0 - 95%
Operating altitude	-15.2 - 3048 m
Non-operating altitude	-15.2 - 10668 m
Operating shock	110 G
Non-operating shock	160 G
Operating vibration	0.66 G
Non-operating vibration	1.3 G

Sustainability

Sustainability compliance	✔
Sustainability certificates	TCO, ENERGY STAR, EPEAT Gold

Graphics

On-board graphics card model *	Intel Arc Graphics

Audio

Audio system	MaxxAudio
Number of built-in speakers	2
Speakers manufacturer	Waves
Speaker power	2 W
Built-in microphone	✔
Number of microphones	2

Camera

Front camera	✔
Front camera resolution (numeric)	2.07 MP

Weight & dimensions

Width	357.8 mm
Depth	233.3 mm
Height (front)	2.08 cm
Height (rear)	2.28 cm
Weight *	1.62 kg

Carbon footprint

Total carbon footprint (kg of CO2e)	119
Carbon emissions, manufacturing (kg of CO2e)	86
Carbon emissions, logistics (kg of CO2e)	4
Carbon emissions, energy usage (kg of CO2e)	28
Carbon emissions, end-of-life (kg of CO2e)	1
Total carbon emissions, w/o use phase (kg of CO2e)	91
PAIA version	GaBi version 1, 2024

Packaging content

Cables included	AC

5397184816417