## Lenovo ThinkPad P71 Intel® Core™ i7 i7-7820HQ Mobile workstation 43,9 cm (17.3") Full HD 32 GB DDR4-SDRAM 1,51 TB HDD+SSD NVIDIA® Quadro® M2200 Wi-Fi 5 (802.11ac) Windows 10 Pro Black



Brand: Lenovo Product family: ThinkPad Product code: 20HKS0HP00

**Product name: P71** 

17.3,  $1920 \times 1080$ , Intel Core i7-7820HQ, 32GB DDR4, 1TB HDD, 512GB SSD, NVIDIA Quadro M2200, Windows 10 Pro + 3Y JL Warranty

Lenovo ThinkPad P71. Product type: Mobile workstation, Form factor: Clamshell. Processor family: Intel® Core™ i7, Processor model: i7-7820HQ, Processor frequency: 2,9 GHz. Display diagonal: 43,9 cm (17.3"), HD type: Full HD, Display resolution: 1920 x 1080 pixels. Internal memory: 32 GB, Internal memory type: DDR4-SDRAM. Total storage capacity: 1,51 TB, Storage media: HDD+SSD. On-board graphics card model: Intel® HD Graphics 630. Operating system installed: Windows 10 Pro. Product colour: Black



Design		Keyboard	
Product type *	Mobile workstation	Pointing device	ThinkPad UltraNav
Product colour *	Black	Numeric keypad *	1
Form factor *	Clamshell	Spill-resistant keyboard	✓
Housing material	Aluminium, Glass fibre, Magnesium, Polyphenylene sulfide (PPS)	Full-size keyboard	✓
Display		Windows keys	✓
Display diagonal *	43,9 cm (17.3")	Software	
Display resolution *	1920 x 1080 pixels	Operating system architecture	64-bit
Touchscreen *	×	Operating system installed *	Windows 10 Pro
HD type	Full HD	Processor special features	
Panel type	IPS	Intel® Wireless Display (Intel®	
LED backlight	✓	WiDi)	✓
Native aspect ratio Display surface	16:9 Matt	Intel® My WiFi Technology (Intel® MWT)	✓
Display brightness	300 cd/m <sup>2</sup>	Intel® Smart Response Technology	✓
Contrast ratio (typical)	800:1	Intel® Identity Protection Technology (Intel® IPT)	<b>✓</b>
Processor		Intel® Hyper Threading Technology	1
Processor manufacturer *	Intel	(Intel® HT Technology)	•
Processor family *	Intel® Core™ i7	Intel® Turbo Boost Technology	2.0
Processor generation	7th gen Intel® Core™ i7	Enhanced Intel SpeedStep Technology	✓
Processor model *	i7-7820HQ	Intel HD Graphics	<b>✓</b>
Processor cores	4	Intel® Clear Video HD Technology	
Processor threads	8	(Intel® CVT HD)	✓
Processor boost frequency	3,9 GHz	Intel Clear Video Technology	✓
Processor frequency * Processor cache	2,9 GHz 8 MB	Intel® InTru™ 3D Technology	✓
Processor cache type	Smart Cache	Intel® Quick Sync Video Technology	✓
Processor lithography	14 nm	Intel Flex Memory Access	✓
Processor operating modes	64-bit	Intel® Smart Cache	<b>✓</b>
Processor series	Intel Core i7-7800 Mobile Series	Intel® AES New Instructions (Intel®	
Processor codename	Kaby Lake	AES-NI)	<b>V</b>
Bus type	DMI3	Intel Trusted Execution Technology	✓
Thermal Design Power (TDP)	45 W	Intel Enhanced Halt State	✓
Configurable TDP-down	35 W	Intel VT-x with Extended Page	1
Tjunction	100 °C	Tables (EPT)	•
Maximum number of PCI Express	16	Intel® Secure Key	✓
lanes		Intel TSX-NI	✓

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Processor		Processor special features	
PCI Express slots version	3.0	Intel Stable Image Platform Program	<b>✓</b>
PCI Express configurations	1x16, 1x8, 2x4, 2x8	(SIPP) Intel® OS Guard	
ECC supported by processor	×		<b>✓</b>
Memory		Intel Software Guard Extensions (Intel SGX)	<b>✓</b>
Internal memory * Internal memory type	32 GB DDR4-SDRAM	Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT for MID)	1
Memory clock speed	2400 MHz	Intel 64	<b>✓</b>
Memory form factor	SO-DIMM	Execute Disable Bit	/
Memory slots	4x SO-DIMM	Idle States	1
Maximum internal memory *	64 GB		·
Storage		Thermal Monitoring Technologies	42 x 28 mm
Total storage capacity *	1,51 TB	Processor package size Supported instruction sets	AVX 2.0, SSE4.1, SSE4.2
Storage media *	HDD+SSD	CPU configuration (max)	1
HDD interface	SATA III	Embedded options available	X
HDD size	2.5"	Graphics & IMC lithography	14 nm
Optical drive type *	×	Intel Virtualization Technology for	
Card reader integrated	✓	Directed I/O (VT-d)	✓
Compatible memory cards	MMC, SD, SDHC, SDXC	Intel Identity Protection Technology	1,00
Graphics		version Intel Smart Response Technology	
Discrete graphics card model *	NVIDIA® Quadro® M2200	version	1,00
On-board graphics card * Discrete graphics card *	1	Intel Stable Image Platform Program (SIPP) version	1,00
On-board graphics card family	Intel® HD Graphics	Intel Secure Key Technology version	1,00
On-board graphics card model *	Intel® HD Graphics 630	Intel Small Business Advantage	1,00
On-board graphics card base	·	(SBA) version	·
frequency	350 MHz	Intel TSX-NI version	1,00
On-board graphics card dynamic frequency (max)	1100 MHz	Intel Virtualization Technology (VT-x)	<b>✓</b>
Maximum on-board graphics card memory	64 GB	Processor ARK ID Conflict-Free processor	97496 ✓
On-board graphics card DirectX version	12.0	Battery	
On-board graphics card OpenGL	4.4	Battery technology	Lithium-lon (Li-lon)
version On heard graphics card ID	0x591B	Battery capacity *	96 Wh
On-board graphics card ID	0x391B	Power	
Audio		AC adapter power	170 W
Audio chip	Realtek ALC3268	AC adapter frequency	50 - 60 Hz
Number of built-in speakers	2	AC adapter input voltage	100 - 240 V
Speaker power	2 W	Security	
Built-in microphone	<b>✓</b>	Cable lock slot	<b>✓</b>
Camera		Fingerprint reader	<b>✓</b>
Front camera	/	Trusted Platform Module (TPM)	✓
Front camera resolution	1280 x 720 pixels	Password protection	·
Front camera signal format	720p	Password protection type	HDD, Power on, Supervisor
Front camera HD type	HD		1155, I Office Oil, Supervisor
Network		Certificates	
Wi-Fi	<b>✓</b>	Compliance certificates	RoHS
Top Wi-Fi standard *	Wi-Fi 5 (802.11ac)	Sustainability	
Wi-Fi standards	802.11a, Wi-Fi 5 (802.11ac),	Sustainability certificates	ENERGY STAR
Ethernet LAN	802.11b, 802.11g, Wi-Fi 4 (802.11n)	Weight & dimensions	
		Width	416 mm
Ethernet LAN data rates	10,100,1000 Mbit/s	Depth	275,5 mm
Bluetooth	<b>√</b>	Height (front)	2,99 cm
Bluetooth version	4.1	Height (rear)	3,42 cm
Ports & interfaces		Weight *	3,3 kg
USB 3.2 Gen 1 (3.1 Gen 1) Type-A	4	Packaging content	
ports quantity *		AC adapter included *	✓

Ports & interfaces		Packaging content	
USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity	2	Manual	·
Ethernet LAN (RJ-45) ports	1	Power cord included	•
HDMI ports quantity *	1	Other features	
HDMI version	1.4b	Maximum internal memory (64-bit)	64 GB
Mini DisplayPorts quantity	1		
DVI port	×		
Headphone outputs	1		
Combo headphone/mic port	✓		
Docking connector	✓		
USB Sleep-and-Charge	✓		
USB Sleep-and-Charge ports	1		
Performance			
Motherboard chipset	Intel® CM238		

## **Catalog Object Cloud**



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