## **MSí**®

## Specification

## LAPTOPS Thin GF63 12U THIN GF63 12UCX-463TH

CPU	12th Gen Intel <sup>®</sup> Core™ i5-12450H processor
	8 cores (4 P-cores + 4 E-cores), Max Turbo Frequency 4.4 GHz
Operating Systems	Windows 11 Home (MSI recommends Windows 11 Pro for business.)
Display	15.6" FHD(1920x1080), 144Hz Refresh Rate, IPS-Level
Chipset	Integrated SoC
Discrete Graphics	NVIDIA <sup>®</sup> GeForce RTX <sup>™</sup> 2050 Laptop GPU
	Up to 1170MHz Boost Clock 45W Maximum Graphics Power with Dynamic Boost. *May vary by scenario
Video Memory	4GB GDDR6
Memory	8GB*2, DDR4-3200
Memory Slot and Max Capacity	2 Slots, Max 64GB
Storage	512GB*1 NVMe SSD PCIe Gen4
Storage Slot	1x M.2 SSD slot (NVMe PCIe Gen4)
	1x 2.5" SATA HDD
WebCam	HD type (30fps@720p)
Keyboard	Single Backlit Keyboard (Red)
Security	Kensington Lock
LAN	Gigabit Ethernet
Wi-Fi/ Bluetooth	Intel <sup>®</sup> Wi-Fi 6 AX201, Bluetooth v5.2
Audio	2x 2W Audio Speaker
	Nahimic 3 Audio Enhancer, Hi-Res Audio Ready
Audio Port	1x Mic-in, 1x Headphone-out
USB Ports	1x Type-C (USB3.2 Gen1 / DP)
	3x Type-A USB3.2 Gen1
Video Ports	1× HDMI™ (4K @ 30Hz)
Battery	3-Cell
	52.4 Whrs
AC Adapter	120W Adaptor
Dimension (WXDXH)	359 x 254 x 21.7 mm
Weight (W/ Battery)	1.86 kg
Chassis Color	Black
Warranty	2 years limited warranty