

# Product Specification

## 512 GB UltimaPro X M.2 2280 PCIe NVMe SSD TCG OPAL 2.0 Version 2



UltimaPro X M.2 PCIe NVMe SSDs are up to four times faster in performance when compared to SATA SSDs and are compatible with most computing hardware and software that support the NVMe standard, including small form factor machines (e.g Intel NUC), Ultrabooks and enthusiast desktops.

- PCIe Gen3x4
- Compliant with PCI Express Base Specification Rev 3.1
- Compliant with NVMe 1.3
- 3D TLC NAND Flash technology
- Non-volatile Flash Memory for outstanding data retention
- Ultra-efficient Block Management and Wear Levelling
- Supports S.M.A.R.T. - Self-Monitoring, Analysis and Reporting Technology
- 3 year warranty or TBW - whichever is earlier applies

<b>SKU</b>	INSSD512GM280NUPX2
<b>EAN</b>	5055288446106

	Width (mm)	Depth (mm)	Height (mm)	Weight (g)
<b>Product</b>	22	80	3.8	10
<b>Packaging</b>	65	8	114	58

<b>Capacity (GB)</b>	512 GB
<b>Form factor</b>	M.2
<b>Mean time between failures (MTBF) (hour)</b>	1800000
<b>TBW rating</b>	350
<b>Flash type</b>	3D TLC
<b>NVMe (Y/N)</b>	Y
<b>Controller type</b>	Phison E12
<b>S.M.A.R.T. support (Y/N)</b>	Y
<b>TRIM support (Y/N)</b>	Y
<b>Read speed (MB per second)</b>	3400
<b>Write speed (MB per second)</b>	2400
<b>Random read (4KB) (Input/Output Operations Per Second)</b>	190000
<b>Random write (4KB) (Input/Output Operations Per Second)</b>	570000
<b>Operating voltage (Volt)</b>	3.3
<b>Power consumption (read) (Watt)</b>	4.7
<b>Power consumption (write) (Watt)</b>	5.1
<b>Hardware encryption (Y/N)</b>	N

<b>Interface</b>	PCI Express 3.1
<b>Operating temperature (T-T) (degrees Celcius)</b>	0 - 70
<b>Storage temperature (T-T) (degrees Celcius)</b>	-40 - 85
<b>Operating relative humidity (H-H) (percent)</b>	5 - 95
<b>Non-operating shock (gravity)</b>	1500
<b>Certification</b>	CE, FCC