



Product Datasheet

512GB External NVME USB C SSD with C-C & C-A Cable



- **Product Code:** OSEC512NVME
- **Product EAN:** 5059902003461
- **Warranty:** 3 Year Advanced Replacement

The Inception TLC830 Pro range of SSD Solutions are manufactured by Origin using the highest quality Tier 1 NAND and the latest generation of controllers which enables us to provide both high performance and strong reliability. All of our Inception SSDs come with 3 years advanced replacement warranty alongside free, in-house pre and post sales technical support. We can supply the TLC830 Pro in form factors of 2.5", 3.5" & M.2 with either SATA or NVME interfaces, whilst being available in a range of capacities designed to increase the performance & extend the lifecycle of any laptop or desktop.

Technical Specifications

Ports & Interfaces

USB Connector:	USB Type-C
USB Version:	3.2 Gen 2 (3.1 Gen 2)
Wi-Fi:	No
Thunderbolt Technology:	No
Data Transfer Rate:	640 Gbit/s

Weight & Dimensions

Width:	117.5 mm
Depth:	13.5 mm
Height:	40 mm

Power

Operating Voltage:	3.3 V
Power Consumption (read):	2.84 W
Power Consumption (idle):	0.47 W
Power Consumption (write):	3.22 W
Power Consumption (average):	3.03 W
Power Consumption (max):	3.22 W

Operational Conditions

Operating Temperature (T-T):	0 - 70 °C
Storage Temperature (T-T):	-45 - 105 °C
Operating Relative Humidity (H-H):	5 - 98%
Storage Relative Humidity (H-H):	5 - 98%

Operating Shock:	1500 G
Operating Vibration:	16 G
Maximum Operating Altitude:	36576 m

Packaging Data

Package Type:	Blister
---------------	---------

Security

Hardware Encryption:	No
Password Protection:	No
TRIM Support:	Yes
S.M.A.R.T. Support:	Yes

Other Features

TBW Rating:	100
-------------	-----

Features

Product Colour:	Aluminium, Grey
Housing Material:	Aluminium, Plastic
Windows Operating Systems Supported:	Yes
Linux Operating Systems Supported:	Yes
Mean Time Between Failures (MTBF):	1000000 h
Compliance Certificates:	RoHS

Logistics Data

Harmonized System (HS) Code:	84717070
------------------------------	----------

Solid State Drive

SSD Capacity:	512 GB
NVMe:	Yes
Read Speed:	1050 MB/s
Write Speed:	1000 MB/s
SSD Form Factor:	M.2
Interface:	PCI Express 3.0
Memory Type:	3D TLC
Random Read (4KB):	179000 IOPS
Random Write (4KB):	102000 IOPS
Seek Time:	0 ms
Access Time:	0.2 ms

Origin Storage Limited

2-4 Rutherford Centre, Rutherford Road, Basingstoke, Hampshire, RG24 8PB UK

Tel: [+44 \(0\)1256 351500](tel:+441256351500) | **E-Mail:** sales@originstorage.com | **Web:** www.originstorage.com

Copyright 2025 - Origin Storage Limited | All trademarks are the property of their respective owners, E&OE.