

RRT-35NVMe-R

3.5 NVMe Enclosure with Removable Module

The 3.5" NVMe enclosure with removable SSD module is for applications that require the frequent removal of SSD, fast transfer rates and large capacities.

It consists of two components; the 3.5" NVMe enclosure with PCIe Gen 3x4 interface that has standard 3.5" mounting holes and removable NVMe SSD module. The connectors between the drive module and the enclosure are rated for 100,000 mating cycles to support frequent insertions and removals.

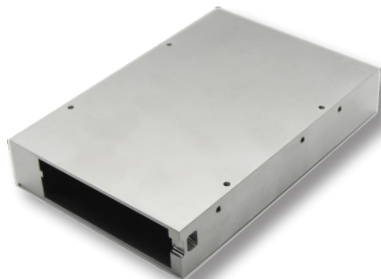
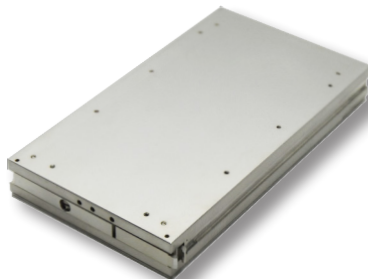
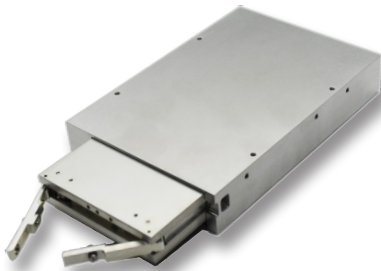
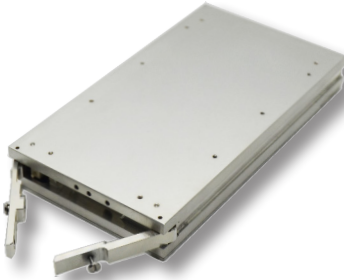
The NVMe SSD module can use any COTS NVMe Solid State Drive (SSD), providing capacities up to 15TB and transfer rates of up to 3,940 MB/S. Options for FIPS140-2, FIPS197, TCG opal, and military erase secure.



FEATURES

- Capacities up to 15 TB
- 3,940 MB/S Transfer rates
- Removable SSD module
- PCIe Gen 3x4 interface
- 100,000 mating cycles
- 3.5" form factor
- Boot and/or disk storage
- COTS COTS NVMe SSDs
- Military erase options
- FIPS140-2, FIPS197, TCG Opal options
- Rugged design
- Current limited
- VxWorks, Linux, and Windows support

**EASILY REMOVE SATA DRIVE
MODULE FROM**



3.5" NVMe Enclosure RRT-35NVMe-R-□-□

OPTIONS (MAY BE LEFT BLANK)	
CONFORMAL COATING	
UR	POLYURETHANE
AR	ACRYLIC
EXTENDED TEMP. RANGE	
X	-40° C to 85° C

EXAMPLES:

RRT-35-NVMe-R
RRT-35-NVMe-R-UR-X

Removable NVMe SSD Drive Module RRT-DM2-NVMe-□-□-□-□-□-□

REQUIREMENTS	
NAND FLASH TYPE	
SLC	SINGLE LEVEL CELL
MLC	MULTI LEVEL CELL
TLC	TRI LEVEL CELL
CAPACITY	
CAPACITIES UP TO 15TB	
OPTIONS (MAY BE LEFT BLANK)	
EXTENDED TEMP. RANGE	
X	-40° C to 85° C
CONFORMAL COATING	
UR	POLYURETHANE
AR	ACRYLIC
SECURITY	
FE	FAST ERASE
SE1	NSA/CSS MANUAL 9-12 ERASE
SE2	RCC-TG IRIG 106-07 CHAPTER 10 ERASE
OPAL	TCG OPAL
FIPS140-2	FIPS140-2 COMPLIANT
FIPS197	FIPS197 COMPLIANT
TOOLS	
TS	THUMB SCREWS

EXAMPLES:

RRT-DM2-NVMe-TLC-15TB
RRT-DM2-NVMe-MLC-8GB-UR-X-SE1
RRT-DM2-NVMe-SLC-480GB

3.5" NVMe Enclosure with Removable NVMe Module

PERFORMANCE			
NAND FLASH TYPE	TLC	MLC	pSLC
CAPACITIES ¹	UP TO 15TB	UP TO 8TB	UP TO 4TB
INTERFACE ²	PCIe Gen 3 x4	PCIe Gen 2 x4	PCIe Gen 2 x4
THROUGHPUT - SUSTAINED	3940 MB/S	800 MB/S	1000 MB/S
RELIABILITY			
MTBF-DRIVE	1 MILLION HOURS	1 MILLION HOURS	2 MILLION HOURS
MTBF-3.5" ENCLOSURE ⁶	3 MILLION HOURS		
DATA RETENTION	1 YEAR	1 YEAR ⁴	5 YEARS ⁵
ENDURANCE (100GB) TOTAL BYTES WRITTEN	70 TBW	70 TBW	250 TBW
ENDURANCE RATING ⁷	5 YEARS		
CARRIER/DRIVE MODULE MATING CYCLES	100,000 CYCLES		
POWER			
VOLTAGE	12V +/- 5%, +5V +/- 5%, +3.3V +/- 5%		
WATTS (IDLE)	7 W	1.5 W	1.5 W
WATTS (ACTIVE)	20 W	10 W	10 W
ENVIRONMENTAL			
OPERATING TEMP. ³	0° to 55° C	0° to 55° C	0° to 60° C -40° to +80° C -X option
STORAGE TEMP.	-40° C to 85° C		
ALTITUDE	80,000 FT (24,000 METERS)		
RELATIVE HUMIDITY	5% TO 95%		
SHOCK	40 g 11 MILLISECOND HALF-SINE		
VIBRATION	0.1 g ² /HZ 100 HZ TO 1000 HZ		
PHYSICAL			
FORM FACTOR	3.5"		
WEIGHT	30 OZ (849 G)		
DIMENSIONS	4.0" x 5.75" x 1.625" (101.6mm x 146.1mm x 41.3mm)		
NOTES			
(1) Larger capacities available as new COTS U.2 NVMe drives released (2) Interface connected via PCIe x4 IPASS connector (3) Thermal qualification per MIL-STD-810F, Method 501 Procedure II, and MIL-STD-810F, Method 502, Procedure II (4) MLC: 10 years at 0% TBW ramping down to 1 year at 100% TBW (5) SLC: 10 years at 10% TBW ramping down to 1 year at 100% TBW (6) Telcordia SR-332, issue 3, operating temp (40C), electrical stress (50%), environmental factor (1.0) (7) Based on JESD218 standard with 4KB random write workload			

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