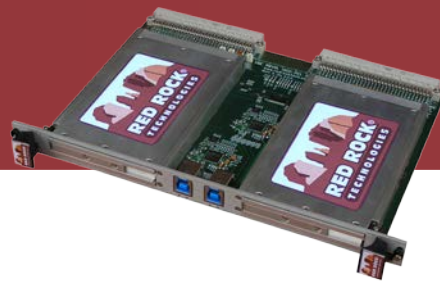


# 6U VME USB3 Carrier with Removable Drive Modules



## RRT-6UVME-USB-R

The 6U VME USB3 Carrier with Removable Drive Modules consists of 2 components; the 6UVME carrier board mounted in the 6U VME chassis and support for one or two removable drive modules. The connectors between the drive module and carrier are rated for 100,000 mating cycles to support frequent insertions/removals.

The drive module can use any COTS 2.5" SATA Hard Disk Drive (HDD) or Solid State Drive (SSD) providing capacities up to 4TB (2x2TB) and sustained transfer rates up to 200 MB/S. Options for discrete, controlled secure erase.

### FEATURES INCLUDE

- USB interfaces factory configured for front panel, P0 or P2
- Provides boot and/or disk storage
- Up to 4TB of removable storage
- Commercial and extended temperature versions
- Rugged removable module connectors rated for 100,000 mating cycles
- Drive Modules uses COTS 2.5" SATA drives for a wide variety of options
- Options for discrete controlled secure erase
- Robust design for high temperature, shock and vibration environments
- High performance USB3 transfer rates. Backwards compatible with USB1 and USB2
- Compatible with all CPUs with a USB controller
- Front panel activity LEDs
- Current limited
- No additional software required
- Power supplied from VME backplane

# Security Options

## ERASE/DESTROY OPTIONS INVOKED BY DISCRETE INPUT

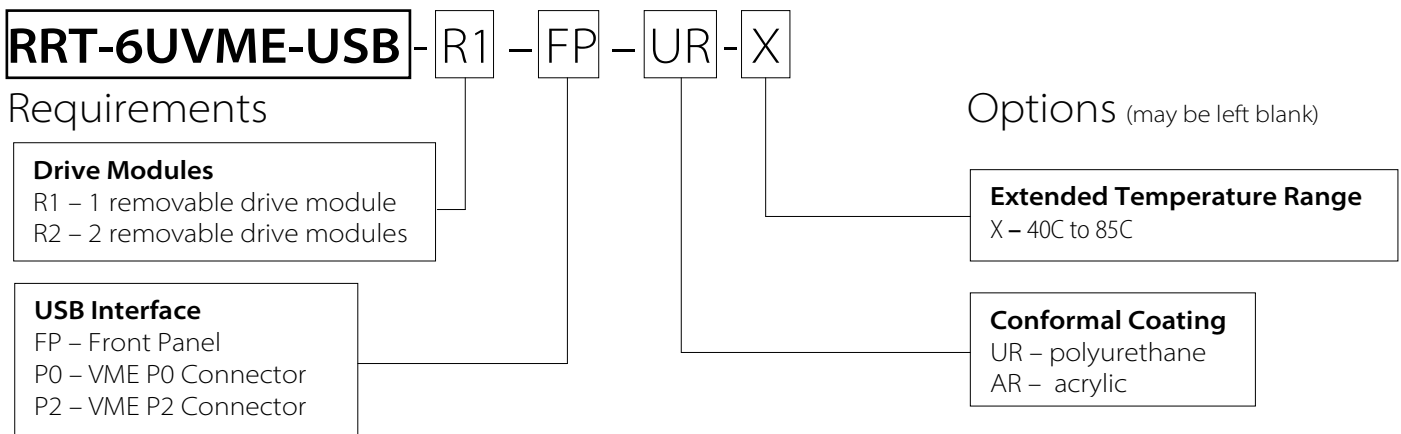
**Fast Erase** Sets all locations to set value

**NSA/CSS Manual 9-12 Erase** Erases all locations, including bad blocks, then sets all locations to 0x55, then internal verification is performed reading 1% of capacity confirming data pattern

**RCC-TG IRIG 106-07 Chapter 10 Erase** Erases all locations, including bad blocks, then sets all locations to 0x55, then sets all locations to 0xAA, and finally erased

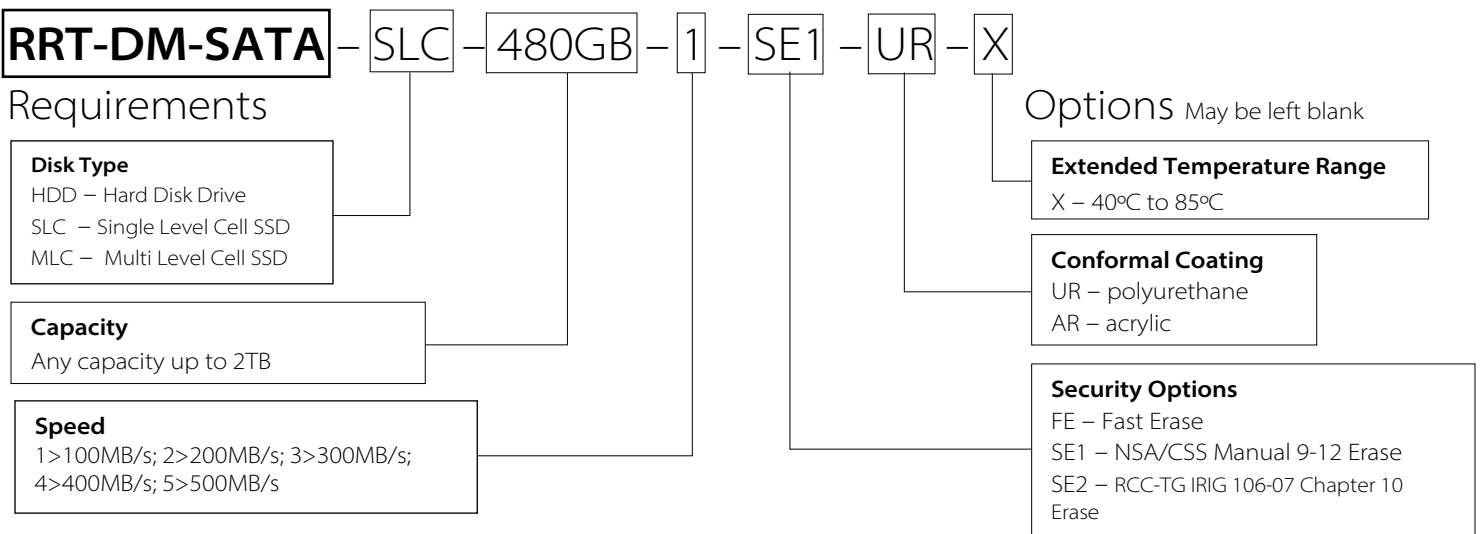
**Drive Destroy** Performs erase of all NAND flash including internal SSD firmware, file system, and tables which makes the drive unusable and unreadable

# Ordering Information



Example: RRT-6UVME-USB-R1-P0-UR-X

Example: RRT-6UVME-USB-R2-FP



Example: RRT-DM-SATA-SLC-480GB-1-SE1-UR-X

Example: RRT-DM-SATA-MLC-60GB-2

# 6U VME USB Carrier w/ Rem Drive Module Specifications

Performance				
Version	HDD	SSD-SLC	SSD-MLC	SSD-Secure Erase
Capacities (1)	Up to 2TB	Up to 480GB	Up to 2TB	Up to 480GB
NAND FLASH Type	NA	SLC	MLC	SLC
Interface (2)	USB3, USB2, or USB1			
Sustained Throughput	130 MB/S	220 MB/S		
Sector Size	512 bytes			
Reliability				
MTBF Drive (hours)	500,000 hrs	3 million hours	1 million hours	1 million hours
MTBF Drive Module (3)	3 million hours			
MTBF Carrier (3)	3 million hours			
Carrier/Drive Module Mating Cycles	100,000			
Power				
Voltage	+5V +/- 5%			
Watts – Idle	1	1.2	1.2	1
Watts – Active	2.5	2.5	2.5	2
Environmental (3)				
Temperature Operating, VITA 47 Class	0 to 60C, CC1	-40 to 85C, CC4, AC3 for -X option 0 to 70C, CC1, AC1 for Standard SSD		
Temperature Storage	-40 to 70C	-40 to 85C		
Relative Humidity	5% to 95%			
Altitude	10,000 ft (3,000 meters)	80,000 ft. (240,000 meters)		
Shock, VITA 47 Class	20G, OS1	40g, 11 millisecond half-sine, OS2		
Vibration, VITA 47 Class	0.04 g2/Hz, V2	0.1 g2/Hz, 100 Hz to 1000 Hz, V3		
Physical				
Form Factor	6U VME			
Weight	11 oz (310 grams) max for carrier, 8.5 oz (245 grams) max per drive module 28 oz (800 grams) max total (carrier + 2 drive modules)			
(1) Larger capacities available as new COTS 2.5" drives released. (2) Interface connected via front panel, P0 or P2. (3) Telcordia SR-322, issue 3, operating temp (40C), electrical stress (50%), environmental factor (1.0)				

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