



SANBlaze SBExpress-RM4 Dual Port NVMe Drive Test System

## Overview

The SANBlaze SBExpress-RM4 is a complete turnkey PCIe® Gen 4 NVMe 2.5" SSD validation test system. The SBExpress-RM4 feature set provides unique functions applicable to all aspects of a product lifecycle - from engineering development, through validation and QA, to manufacturing test environments.

The ability to drive NVMe SSDs with a wide range of configurable attributes provides engineers with a flexible, multi-controller supported validation test platform.

Development, qualification, and certification test cycles can be highly automated, thus reducing overall test time, and rapidly surfacing errors and non-conformance.

The SANBlaze SBExpress-RM4 hardware provides a rackmount chassis with sixteen dual or single port front-accessible drives. The hardware can be easily daisy chained for maximum scalability and provides excellent air flow for thermal chamber testing.

## Dimensions

Height: 3.5"	Depth w/out handles: 21 3/4"
Width w/out Ears: 17 1/8"	Depth with handles: 22 3/4"
Width w/ Ears: 19"	

## Thermal Characteristics

Temperature Rating

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-5C to 75C

Humidity

95% RH Non-condensing

## Power

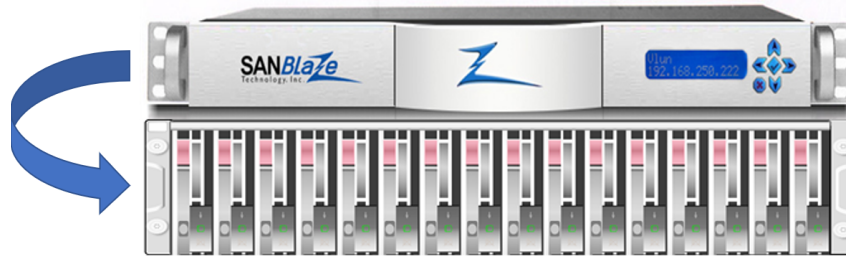
AC input 100-127 Vac/200-240 Vac  
Max 14A at 100V

## System Features

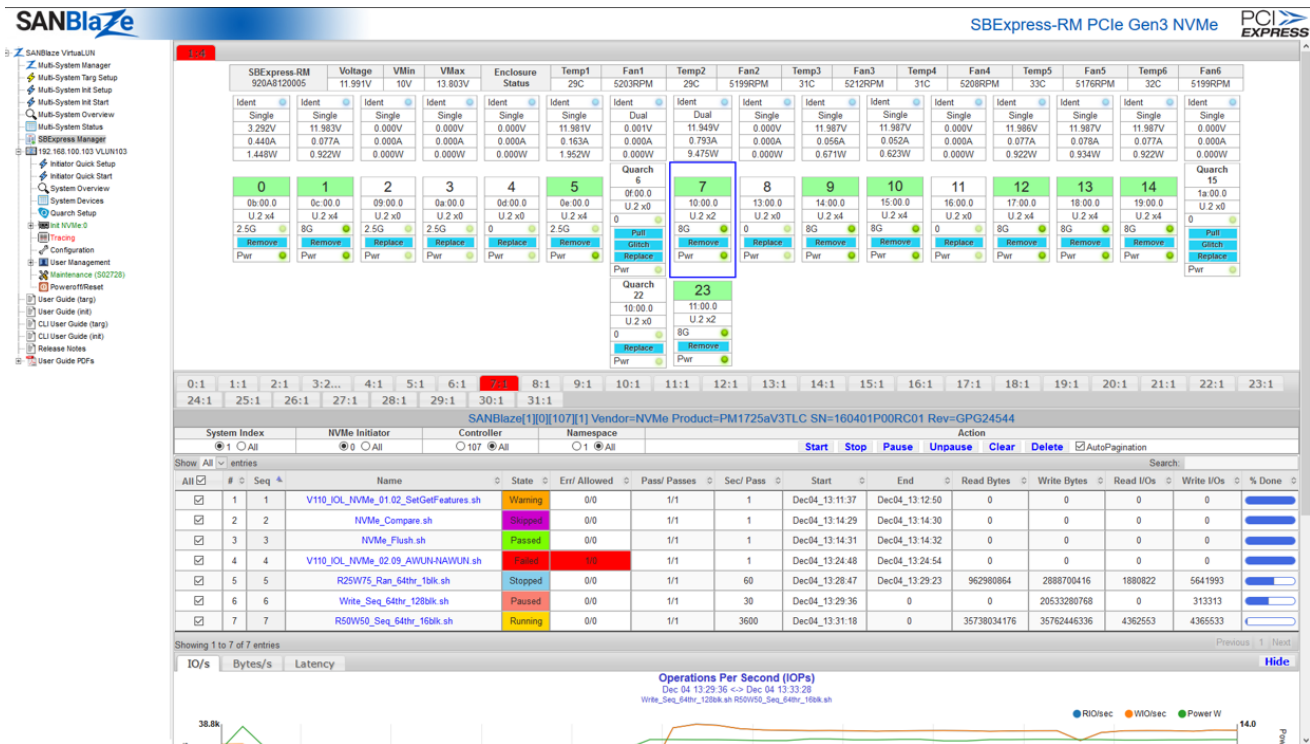
- PCIe® Gen 4
- Multiple clocking architecture support (SRIS/SRNS)
- VDM
- Gen4 PCIe NVMe testing on a Gen3 or Gen4 host
- Sixteen drives, all front accessible
- Hot plug, slot power, and drive presence under software control
- U.2 single/dual port risers (switchable)
- U.3 single/dual port risers (switchable)
- EDSFF
- M.2 Adapter support
- Field-installable riser cards support both single or dual port drives
- Measure voltage and power at each drive
- Optimal thermal design with unobstructed air flow
- Six fans speed-controlled through temperature sensing on each fan (user controllable through config file)
- LFM for 15mm drive is 1,373
- 38 temperature monitoring points
- 25W per slot at 75C
- Voltage margining +/- 15%

## Software Features

- Test coverage for all aspects of the NVMe specification
- UNH Conformance Testing supported
- NVMe-MI (Management Interface) testing over SMBus supported
- SGL, SR-IOV, full namespace control and reservations
- Drive multiple ports of traffic simultaneously
- Send specific or custom op codes in an easy to use scriptable format
- Read / write / compare testing
- Error injection
- Vendor-unique commands supported
- Drive and test single or multiple NVMe target devices
- SBCert (Certified by SANBlaze) test suite
- ZNS



SANBlaze VLF Gen4 Server and SBExpress-RM4



SANBlaze SBExpress Manager

### SBExpress VLF Gen4 Server

SBExpress-S4E04: SANBlaze SBExpress Gen4 NVMe SSD Test System, 4 Slot Server  
 SBExpress-S4E08: SANBlaze SBExpress Gen4 NVMe SSD Test System, 8 Slot Server  
 SBExpress-S4E016: SANBlaze SBExpress Gen4 NVMe SSD Test System, 16 Slot Server

### SBExpress Rack/Software

SBExpress-RME04: SANBlaze SBExpress Gen4 NVMe SSD Test Rack with 4 Slot License  
 SBExpress-RME08: SANBlaze SBExpress Gen4 NVMe SSD Test Rack with 8 Slot License  
 SBExpress-RME16: SANBlaze SBExpress Gen4 NVMe SSD Test Rack with 16 Slot License