***w w w . i ei w or l d .c om***

GRAND-SE

The GRAND-SE is a powerful network storage system powered by a high-performance AMD quad-core processor. It can support 10GbE network card, and doubles the encrypted file transfer performance with the AES-NI hardware-accelerated encryption engine to over 800 MB/s. The GRAND-SE is designed for small and medium-sized businesses looking for backup, restoration, private cloud, storage for virtualization, and to future-proof their IT infrastructure for 10GbE networks.

# *Features*


## The power of 64-bit quad-core processor with AES-NI support

* 2 x SODIMM Slots, up to 16 GB memory with 2 x 8GB DIMMs
* Ready to support 10GbE network card

 Quad-Core 2.0GHz ● Storage expandable via USB 3.1 Gen 1 (5Gb/s), up to 200TB

**SATA 6Gb/s**

**4GB DDR3L**

**Max. 16GB RAM**

**x 4**

**Quad Gbe Ports**

**SFP+ 10GbE**

**10GbE**

**SFP+ Port**

**AES-NI**

**Storage Expansion**

**Redundant Single PSU**

**Speedy transfer and hardware-accelerated encryption with AES-NI**

The GRAND-SE is equipped with an energy-efficient 64-bit AMD quad-core 2.0GHz processor with maximum 16GB, SATA 6Gb/s, support one SFP+ 10GbE and four Gigabit LAN ports for lightning-fast multi-tasking performance with SSD cache support. The GRAND-SE is a powerful storage server that delivers up to 1,059 MB/s sequential read throughput with expanding one 10GbE configuration. The GRAND-SE's hardware-accelerated encryption engine provides unmatched encryption performance in its class, up to 822 MB/s with AES-256 bit full storage server volume encryption, boosting system performance & security while ensuring the safety of sensitive business data stored in the GRAND-SE.

**Throughput (1 x 10GbE)**

Download

**1037**

Upload

443

MB/s 0

**AES 256-bit Encrypted Transfer (1 x 10GbE)**

Download

**822**

Upload

334

250

500 750

1000

# *Specifications*

**Windows Download / Upload (10GB File)**

GRAND-SE-2019-V10

***Data Storage***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Model** | **GRAND-SE-04A** | **GRAND-SE-04A- RP** | **GRAND-SE-08B** | **GRAND-SE-08B- RP** | **GRAND-SE-12B** | **GRAND-SE-12B- RP** |
| **CPU** | 64-Bit Quad-Core AMD® G-Series 2.0GHz |
| **Memory** | Total memory slots: 2 SODIMM; Memory expandable up to 16GB DDDR3L (8GB x 2) |
| **Max. HDDs/SSDs** | 4 | 8 | 12 |
| **HDDs/SSDs Type** | 2.5" or 3.5" SATA 6Gb/s, 3Gb/s; hot-swappable |
| **Expansion Unit Support** | Max. 1 expansion unit |
| **LAN Ports** | 4 x GbE ports |
| **USB Ports** | USB 3.1 Gen 1 (5Gb/s): 2, USB 2.0: 3 | USB 3.1 Gen 1 (5Gb/s): 2, USB 2.0: 2 | USB 3.1 Gen 1 (5Gb/s): 2, USB 2.0: 2 |
| **PCIe Slot** | 1 x PCIe 2.0 x 4 slot |
| **LED Indicators** | Status, LAN, USB, HDD1-4 | Power, Status, LAN, USB, HDD1-8 | Power, Status, LAN, USB, HDD1-12 |
| **Buttons** | Power, Reset, USB Auto Copy | Power, Reset | Power, Reset |
| **Form Factor** | 1U Rackmount | 2U Rackmount | 2U Rackmount |
| **Dimensions (HxWxD)** | 1.73 x 17.28 x 19.65 inch | 89 x 482 x 534 mm / 3.50 x 18.97 x 21.02 inch |
| **Weight (Net/Gross)** | 7.63 / 11.60 kg16.82 / 25.57 lb | 11.02 / 19.26 kg24.29 / 42.46 lb | 16.14 / 19.41kg35.58 / 41.84 lb |
| **Temperature and Humidity** | 0-40ºC, 5~95% RH non-condensing, wet bulb: 27ºC |
| **Power Supply****Specification** | Input: 100-240V AC, 50/60Hz; Output: 250W |
| 250W | 2 x 250W | 250W | 2 x 250W | 250W | 2 x 250W |

# *Ordering Information Options*

|  |  |
| --- | --- |
| **Part No.** | **Description** |
| **GRAND-SE-04A-R10** | 1U 4Bay front 3.5" HDD or SSD support, rackmount storage server system (Barebone) with AMD GX-424CC, 250W single PSU, RoHS |
| **GRAND-SE-04A-RP-R10** | 1U 4Bay front 3.5" HDD or SSD support, rackmount storage server system (Barebone) with AMD GX-424CC, 250W redundant PSU, RoHS |
| **GRAND-SE-08B-R10** | 2U 8Bay front 3.5" HDD or SSD support, rackmount storage server system (Barebone) with AMD GX-424CC, 250W single PSU, RoHS |
| **GRAND-SE-08B-RP-R10** | 2U 8Bay front 3.5" HDD or SSD support, rackmount storage server system (Barebone) with AMD GX-424CC, 250W redundant PSU, RoHS |
| **GRAND-SE-12B-R10** | 2U 12Bay front 3.5" HDD or SSD support, rackmount storage server system (Barebone) with AMD GX-424CC, 250W single PSU, RoHS |
| **GRAND-SE-12B-RP-R10** | 2U 12Bay front 3.5" HDD or SSD support, rackmount storage server system (Barebone) with AMD GX-424CC, 250W redundant PSU, RoHS |

|  |  |  |
| --- | --- | --- |
| **Item** | **Order P/N** | **Description** |
| **Network card** | **LAN-10G2SF- MLX** | Dual-port 10GbE SFP+ network expansion card |
| **Network card** | **LAN-10G2T-X550** | Dual-port 10GbE 10GBASE-T network expansion card |
| **Network card** | **LAN-1G2T-I210** | Dual-port Gigabit network expansion card |
| **USB card** | **USB-U31A2P01** | USB 3.1 Gen 2 10Gbps Type-A dual-port PCIe card |
| **Rail kit** | **RAIL-B02** | B02 series slide for 1U,2U chassis |

***Packing List***

|  |  |
| --- | --- |
| Ethernet Cable x 2 | Flat head screws (for 2.5” HDD) |
| Power cord x 2 (non RP model only one power cord) | Flat head screws (for 3.5” HDD) |

\*Pre-install Memory by Request