

# IBM FlashSystem A9000R

## IBM FlashSystem A9000R Spec Table

| IBM FlashSystem A9000R at a glance                    |  |       |       |       |                        |       |       |       |                        |       |       |       |
|---|--|-------|-------|-------|------------------------|-------|-------|-------|------------------------|-------|-------|-------|
| Model   | 9835-425 (1-year warranty), 9837-425 (3-year enterprise-class warranty), 9837-U25 (1-year warranty)  |       |       |       |                        |       |       |       |                        |       |       |       |
| Controllers   | Up to 8 active grid controllers, each containing: <ul style="list-style-type: none"> <li>• Two Intel Xeon E5 v4 12-core 2.2 GHz processors</li> <li>• 384 GB DDR4 memory</li> <li>• Redundant battery backup units and power supply units</li> </ul> |       |       |       |                        |       |       |       |                        |       |       |       |
| Software  | IBM FlashSystem A9000 and IBM FlashSystem A9000R software v12  |       |       |       |                        |       |       |       |                        |       |       |       |
| Flash type  | IBM-enhanced 3D TLC  |       |       |       |                        |       |       |       |                        |       |       |       |
|   | 720 TB configuration   |       |       |       | 1,700 TB configuration |       |       |       | 3,600 TB configuration |       |       |       |
| Effective capacity* (TB)                              | 180  | 360   | 540   | 720   | 425                    | 850   | 1,275 | 1,700 | 900                    | 1,800 | 2,700 | 3,600 |
| Maximum capacity† (TB)                                | 1,200  | 2,400 | 3,600 | 4,800 | 1,200                  | 2,400 | 3,600 | 4,800 | 1,200                  | 2,400 | 3,600 | 4,800 |
| Physical capacity‡ (TB)                               | 36   | 72    | 108   | 144   | 85                     | 170   | 255   | 340   | 180                    | 360   | 540   | 720   |
| Raw capacity (TB)                                     | 55.3   | 110.6 | 166.1 | 221.2 | 129                    | 258   | 387   | 516   | 258                    | 516   | 774   | 1,032 |
| Grid controllers                                      | 3  | 4     | 6     | 8     | 3                      | 4     | 6     | 8     | 3                      | 4     | 6     | 8     |
| Flash enclosures                                      | 1  | 2     | 3     | 4     | 1                      | 2     | 3     | 4     | 1                      | 2     | 3     | 4     |
| IBM MicroLatency modules per flash enclosure          | 12 x 3.6 TB  |       |       |       | 12 x 8.5 TB            |       |       |       | 12 x 18 TB             |       |       |       |
| Performance: Scaled-out configuration 8 grid elements |  |       |       |       |                        |       |       |       |                        |       |       |       |
| IOPS  | 2,400,000  |       |       |       |                        |       |       |       |                        |       |       |       |
| Maximum bandwidth                                     | 26 GB/s  |       |       |       |                        |       |       |       |                        |       |       |       |
| Minimum latency                                       | 250 µs   |       |       |       |                        |       |       |       |                        |       |       |       |
| Data reduction and efficiency                         | <ul style="list-style-type: none"> <li>• Pattern removal</li> <li>• Global, inline deduplication</li> <li>• Inline compression</li> <li>• Space-efficient snapshots</li> <li>• Thin provisioning</li> </ul>  |       |       |       |                        |       |       |       |                        |       |       |       |
| Encryption  | Hardware-based AES-XTS 256-bit with centralized key management   |       |       |       |                        |       |       |       |                        |       |       |       |
| Host connectivity options                             | Per grid controller: 4 x 16 Gb Fibre Channel + 2 x 10 Gb iSCSI, or 4 x 10 Gb iSCSI   |       |       |       |                        |       |       |       |                        |       |       |       |

| <b>IBM FlashSystem A9000R at a glance</b> |   |
|---|---|
| Backplane interconnect                    | InfiniBand  |
| Power                                     | Entry configuration: 1.914 KW (typical); 2.806 KW (max) Scaled out configuration: 5.13 KW (typical); 8.57 KW (max)            |
| Rack dimensions (H x W x D)               | 201.5 cm (42U) x 64.4 cm x 129.7 cm (79.3 in x 25.4 in x 51.1 in)   |
| Weight                                    | Entry configuration: 550 kg (1,212 lb) Scaled out configuration: 774 kg (1,706 lb)  |
| Client operating system support           | For a current list of platforms supported, please visit the <a href="#">IBM System Storage Interoperation Center (SSIC)</a> . |

\* Typical effective capacity is the available capacity after system overhead (including flash media over-provisioning and RAID protection) and after the data reduction benefits of pattern removal, deduplication and compression. This assumes data reduction of 5 to 1.

†Maximum capacity refers to the effective capacity provisioning limit.

‡Physical capacity is the available capacity after system overhead, including flash media over-provisioning and RAID protection.



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