

IBM Elastic Storage Server

Elastic Storage Server Models GS1S, GS2S, GS4S

Storage units	5147-024: 24-slot 2U enclosure for 2.5" SSDs
Number of drive enclosures	1, 2 or 4
Drive capacity	3.84 TB or 15 TB 2.5" SSDs
Number of drives	24 - 96 SSDs
Maximum usable capacity per ESS	60 TB (GS1S) to 1.1 PB (GS4S)

Elastic Storage Server Models GL1S, GL2S, GL4S, GL6S

Storage units	5147-084: 84-slot 5U enclosure for 3.5" HDDs
Number of drive enclosures	1, 2, 4 or 6
Drive capacity	4, 8 or 10 TB NL-SAS 3.5" HDDs
Number of drives	82 - 502 HDDs
Maximum usable capacity per ESS	600 TB (GL1S) to 3.9 PB (GL6S)

Elastic Storage Server Models GH12, GH14, GH24

Storage units	5147-024: 24-slot 2U enclosure for 2.5" SSDs; 5147-084: 84-slot 5U enclosures for 3.5" HDDs
Number of drive enclosures	Qty=1 or 2, 24 drive enclosures for SSDs; Qty=2 or 4, 84-slot drive enclosures for HDDs
Drive capacity	3.84 TB or 15 TB 2.5" SSDs; 4, 8 or 10 TB NL-SAS 3.5" HDDs
Number of drives	24 - 48 SSDs & 168 or 336 HDDs
Maximum usable capacity per ESS	60 TB SSD + 1 PB HDD (GH14) to 530 TB SSD + 2.5 PB HDD (GH24)

Elastic Storage Server Models GL1C, GL2C, GL4C, GL6C

Storage units	5147-106: 106-slot 4U drive enclosure for 3.5" HDDs
Number of drive enclosures	1, 2, 4 or 6
Drive capacity	10 TB NL-SAS HDDs
Number of drives	104 - 634 HDDs

Maximum usable capacity per ESS	0.7 PB (GL1C) to 4.6 PB (GL6C)
---------------------------------	--------------------------------

System information

Systems	IBM Power 5148-22L ESS Data Server (two per Building Block); IBM Power 5148-21L ESS Management Server (one per cluster)
Interconnects	Ethernet: 10GbE, 40GbE, 100GbE; Infiniband: 56 Gbps FDR, 100 Gbps EDR
Operating system	Red Hat Enterprise Linux (RHEL) Little Endian
Software	IBM Spectrum Scale: Data Access Edition or Data Management Edition xCAT
Supported RAID levels	Erasure coding: 3-way or 4-way mirroring, 8+2P or 8+3P, or a combination

Rack cabinets

Rack cabinet	IBM 7014-T42, IBM 7965-S42. IBM ESS is also supported in compatible racks from other vendors
Power	Multiple rack PDU options- see IBM ESS Planning information in IBM Knowledge Center
Scalability	IBM Elastic Storage Server (ESS) scales in a building block approach—capacity, bandwidth and the single namespace increases as more building blocks are added. Clusters using other servers and storage running IBM Spectrum Scale may be scaled out using IBM ESS units.
Services	<ul style="list-style-type: none"> • IBM Elastic Storage Server hardware installation is included at no charge. • IBM Lab Services are available for planning, configuration and implementation support. Complimentary services may be included with some ESS purchases, other services are at additional cost.
Warranty	Limited warranty: 3-year parts, customer-replaceable unit (CRU) or on-site labor, with individual nodes retaining the warranty and service upgrade offerings for that IBM machine type. Base support is 9x5, next business day. Warranty service upgrades are available at additional cost. Standard software subscription and support.

Capacities shown are approximate using 8+2P erasure coding and a single Data + Metadata pool.
Example configurations are shown for minimum and maximum capacity figures- other intermediate options are also available.



To view the full asset, click [here](#)