

UK Biobank Research Analysis Platform

Rate Card

All costs are quoted in GBP / £

RAP Storage and Egress Rate Card

Storage: 0.0141 £ per GB per month (excludes data dispensed by UKB RAP)

Egress: 0.0396 £ per GB

RAP Compute Rate Card

DNAexus Instance Type	EC2 Instance Type	GPUs	vCPUs	Memory (GiB)	Storage (GiB)	Storage Type	On-demand GBP/hr	Spot GBP/hr
mem1_ssd1							0.0248*	0.0066
mem1_ssd1_v2_x2	c5d.large		2	4	50	SSD	0.0496	0.0132
mem1_ssd1_v2_x4	c5d.xlarge		4	8	100	SSD	0.0992	0.0264
mem1_ssd1_v2_x8	c5d.2xlarge		8	16	200	SSD	0.1984	0.0528
mem1_ssd1_v2_x16	c5d.4xlarge		16	32	400	SSD	0.3968	0.1056
mem1_ssd1_v2_x36	c5d.9xlarge		36	72	900	SSD	0.8928	0.2376
mem1_ssd1_v2_x72	c5d.18xlarge		72	144	1800	SSD	1.7856	0.4752
mem1_ssd2							0.0319	0.0167
mem1_ssd2_v2_x2	c5.large		2	4	159	EBS-gp2	0.0638	0.0334
mem1_ssd2_v2_x4	c5.xlarge		4	8	318	EBS-gp2	0.1276	0.0668
mem1_ssd2_v2_x8	c5.2xlarge		8	16	639	EBS-gp2	0.2552	0.1336
mem1_hdd1							0.0315	0.0124
mem1_hdd1_v2_x2	c5.large		2	4	200	EBS-st1	0.0630	0.0248
mem1_hdd1_v2_x4	c5.xlarge		4	8	400	EBS-st1	0.1260	0.0496
mem1_hdd1_v2_x8	c5.2xlarge		8	16	800	EBS-st1	0.2520	0.0992
mem1_hdd1_v2_x16	c5.4xlarge		16	32	1600	EBS-st1	0.5040	0.1984

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mem1_hdd1_v2_x36	c5.9xlarge		36	72	3600	EBS-st1	1.1340	0.4464
mem1_hdd1_v2_x72	c5.18xlarge		72	144	7200	EBS-st1	2.2680	0.8928
mem1_hdd1_v2_x96	c5.24xlarge		96	192	9600	EBS-st1	3.0240	1.1904
mem1_hdd1_x2	c4.large		2	3.75	200	EBS-st1	0.0630	0.0248
mem1_hdd1_x4	c4.xlarge		4	7.5	400	EBS-st1	0.1260	0.0496
mem1_hdd1_x8	c4.2xlarge		8	15	800	EBS-st1	0.2520	0.0992
mem1_hdd1_x16	c4.4xlarge		16	30	1600	EBS-st1	0.5040	0.1984
mem1_hdd1_x36	c4.8xlarge		36	60	3600	EBS-st1	1.1340	0.4464
mem2_hdd2							0.0528	0.0355
mem2_hdd2_v2_x2	m5.large		2	8	1000	EBS-st1	0.1056	0.0710
mem2_hdd2_v2_x4	m5.xlarge		4	16	2000	EBS-st1	0.2112	0.1420
mem2_ssd1							0.0283	0.0066
mem2_ssd1_v2_x2	m5d.large		2	8	75	SSD	0.0566	0.0132
mem2_ssd1_v2_x4	m5d.xlarge		4	16	150	SSD	0.1132	0.0264
mem2_ssd1_v2_x8	m5d.2xlarge		8	32	300	SSD	0.2264	0.0528
mem2_ssd1_v2_x16	m5d.4xlarge		16	64	600	SSD	0.4528	0.1056
mem2_ssd1_v2_x32	m5d.8xlarge		32	128	1200	SSD	0.9056	0.2112
mem2_ssd1_v2_x48	m5d.12xlarge		48	192	1800	SSD	1.3584	0.3168
mem2_ssd1_v2_x64	m5d.16xlarge		64	256	2400	SSD	1.8112	0.4224
mem2_ssd1_v2_x96	m5d.24xlarge		96	384	3600	SSD	2.7168	0.6336
mem2_ssd2							0.0352	0.0167
mem2_ssd2_v2_x2	m5.large		2	8	160	EBS-gp2	0.0704	0.0334
mem2_ssd2_v2_x4	m5.xlarge		4	16	320	EBS-gp2	0.1408	0.0668
mem2_ssd2_v2_x8	m5.2xlarge		8	32	640	EBS-gp2	0.2816	0.1336
mem2_ssd2_v2_x16	m5.4xlarge		16	64	1280	EBS-gp2	0.5632	0.2672
mem2_ssd2_v2_x32	m5.8xlarge		32	128	2560	EBS-gp2	1.1264	0.5344
mem2_ssd2_v2_x48	m5.12xlarge		48	192	3840	EBS-gp2	1.6896	0.8016
mem2_ssd2_v2_x64	m5.16xlarge		64	256	5120	EBS-gp2	2.2528	1.0688
mem2_ssd2_v2_x96	m5.24xlarge		96	384	7480	EBS-gp2	3.3792	1.6032
mem2_ssd2_x2	m4.large		2	8	160	EBS-gp2	0.0704	0.0334
mem2_ssd2_x4	m4.xlarge		4	16	320	EBS-gp2	0.1408	0.0668

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mem2_ssd2_x8	m4.2xlarge		8	32	640	EBS-gp2	0.2816	0.1336
mem2_ssd2_x16	m4.4xlarge		16	64	1280	EBS-gp2	0.5632	0.2672
mem2_ssd2_x40	m4.10xlarge		40	160	3200	EBS-gp2	1.4080	0.6680
mem2_ssd2_x64	m4.16xlarge		64	256	5120	EBS-gp2	2.2528	1.0688
mem2_ssd1_gpu							0.0380	0.0310
mem2_ssd1_gpu_x16	g4dn.4xlarge	1	16	64	225	SSD	0.6080	0.4960
mem2_ssd1_gpu1							0.0344	0.0281
mem2_ssd1_gpu1_x32	g4dn.8xlarge	1	32	128	900	SSD	1.1008	0.8992
mem2_ssd1_gpu1_x64	g4dn.16xlarge	1	64	256	900	SSD	2.2016	1.7984
mem2_ssd1_gpu4							0.0412	0.0336
mem2_ssd1_gpu4_x48	g4dn.12xlarge	4	48	192	900	SSD	1.9776	1.6128
mem3_hdd2							0.0464	0.0211
mem3_hdd2_v2_x2	r5.large		2	16	500	EBS-st1	0.0928	0.0422
mem3_hdd2_v2_x4	r5.xlarge		4	32	1000	EBS-st1	0.1856	0.0844
mem3_hdd2_v2_x8	r5.2xlarge		8	64	2000	EBS-st1	0.3712	0.1688
mem3_ssd1							0.0365	0.0066
mem3_ssd1_v2_x2	r5d.large		2	16	75	SSD	0.0730	0.0132
mem3_ssd1_v2_x4	r5d.xlarge		4	32	150	SSD	0.1460	0.0264
mem3_ssd1_v2_x8	r5d.2xlarge		8	64	300	SSD	0.2920	0.0528
mem3_ssd1_v2_x16	r5d.4xlarge		16	128	600	SSD	0.5840	0.1056
mem3_ssd1_v2_x32	r5d.8xlarge		32	256	1200	SSD	1.1680	0.2112
mem3_ssd1_v2_x48	r5d.12xlarge		48	384	1800	SSD	1.7520	0.3168
mem3_ssd1_v2_x64	r5d.16xlarge		64	512	2400	SSD	2.3360	0.4224
mem3_ssd1_v2_x96	r5d.24xlarge		96	768	3600	SSD	3.5040	0.6336
mem3_ssd1_gpu							0.1960	0.1605
mem3_ssd1_gpu_x8	p3.2xlarge	1	8	61	160	EBS-gp2	1.5680	1.2840
mem3_ssd1_gpu_x32	p3.8xlarge	4	32	244	640	EBS-gp2	6.2720	5.1360
mem3_ssd1_gpu_x64	p3.16xlarge	8	64	488	1280	EBS-st1	12.5440	10.2720
mem3_ssd2							0.0391	0.0319
mem3_ssd2_v2_x2	i3.large		2	15.25	475	SSD	0.0782	0.0638
mem3_ssd2_v2_x4	i3.xlarge		4	30.5	950	SSD	0.1564	0.1276

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mem3_ssd2_v2_x8	i3.2xlarge		8	61	1900	SSD	0.3128	0.2552
mem3_ssd2_v2_x16	i3.4xlarge		16	122	3800	SSD	0.6256	0.5104
mem3_ssd2_v2_x32	i3.8xlarge		32	244	7600	SSD	1.2512	1.0208
mem3_ssd2_v2_x64	i3.16xlarge		64	488	15200	SSD	2.5024	2.0416
mem3_ssd3							0.0568	0.0463
mem3_ssd3_x2	i3en.large		2	16	1250	SSD	0.1136	0.0926
mem3_ssd3_x4	i3en.xlarge		4	32	2500	SSD	0.2272	0.1852
mem3_ssd3_x8	i3en.2xlarge		8	64	5000	SSD	0.4544	0.3704
mem3_ssd3_x12	i3en.3xlarge		12	96	7500	SSD	0.6816	0.5556
mem3_ssd3_x24	i3en.6xlarge		24	192	15000	SSD	1.3632	1.1112
mem3_ssd3_x48	i3en.12xlarge		48	384	30000	SSD	2.7264	2.2224
mem3_ssd3_x96	i3en.24xlarge		96	768	60000	SSD	5.4528	4.4448
mem4_ssd1							0.0567	0.0463
mem4_ssd1_x128	x1.32xlarge		128	1952	3840	SSD	7.2576	5.9264

* Numbers in bold fonts are in **GBP/core hr** and used as unit pricing in invoice calculation. For example, 3 hours of mem1_ssd1_v2_x2 usage, will be translated into 6 core hours of mem1_ssd1 usage in the final invoice.