

Technical Specifications

Product Name	CarouselAI Upgrade™
Model Name (Per CE Declaration)	RPC (Robotic Pick Cell) Pick Release
Region	Europe and North America
Manufacturer	Berkshire Grey
Dimensions	L: 2.9 m / W: 2.3 m / H: 2.5 m
Weight	1,300 kg
Average Weight Distribution	100 kg / m2
Inbound Container Specifications	AutoStore Bin presented through CarouselPort™
Inbound Container Compartment Support	2, 4
Outbound Container Specifications	Plastic Bin: L: 325 – 675 mm / W: 250 – 475 mm / H: 165 – 390 mm Corrugate: L: 375 – 675 mm / W: 300 – 475 mm / H: 250 – 390 mm
Takeaway Mechanism	Top of Roller: 600 mm – 835 mm and top of outbound container not to exceed 1,020 mm from floor
Item Eligibility	Rigid SKUs: Large Containers, L: 30 – 300 mm / W: 30 – 300 mm / H: 5 – 250 mm / 20 g – 3.5 kg Rigid SKUs: Small Containers, L: 30 – 200 mm / W: 30 – 200 mm / H: 5 – 150 mm / 20 g – 3.5 kg Bagged Apparel: Large Containers, L: 30 – 400 mm / W: 30 – 400 mm / H: 5 – 300 mm / 20 g – 3.5 kg Bagged Apparel: Small Containers, L: 30 – 250 mm / W: 30 – 250 mm / H: 5 – 150 mm / 20 g – 3.5 kg
Acceptable Item Types	Securely closed bags, boxes, bottles, blister packs, clamshells, envelopes, tubes / Cardboard or other boxes that are taped closed, have interlocking tabs or otherwise secured lids / Securely grouped multipacks of the above / Grooved and uneven surface items / Porous items
Unacceptable Item Types	Fragile glass items (e.g., candles, unless reasonably packaged against damage) / Items with exposed wires or hooks / Sharp, dangerous, or hazardous items / Nestable items / Thin unbagged apparel
Picking Throughput	650 UPH
Machine Rate Min. Item Picking Cycle Time	4 seconds
AutoStore Bin Min. Bin Exchange Time	2.5 seconds
Storage Temperature	-25 °c to +55 °c
Operating Temperature	+2 °c to +40 °c
Operating Humidity	40 to 90 % non-condensing
Noise Level	80 dBA at 1 m (steady state operations)
Power Requirements	380 – 415 VAC, 30 A, 3 PH, 3 P+N+PE, 50/60 Hz, & 100 – 240 VAC, 1P + PE, 10 A 200 – 220 VAC, 50 A, 3 PH, 3 P+N+PE, 50/60 Hz, & 100 – 240 VAC, 1P + PE, 10A
Power Consumption	Idle: 0.6 kW Average Active: 4.3 kW Peak: 6.6 kW
Electrical Power Feed	Handwired
Bandwidth Requirements	20 Mbps symmetric bandwidth in dedicated WAN circuit, up to 5 RPC systems; not real time production requirement
Berkshire Grey Access	IPSEC tunnel with BG equipment (over dedicated WAN circuit)
Server Room Requirements	Space for Server Rack: L: 1,070 mm / W: 600 mm / H: 1,991 mm; rack and server(s) provided by Berkshire Grey Server Power Requirements: 200/208 VAC, 15 A, 1 PH, 50/60 Hz; 200/208 VAC, 15 A, 1 PH, 50/60 Hz, UPS back up
Physical Network Connections	Wired connection from server to cell(s), customer provided: Cat6 A copper acceptable for distances <90 m / Single mode fiber with LC connector required for distances >90 Intermediate Distribution Frame (IDF) available Physical network design depends on site layout, to be reviewed jointly with customer
WMS / WES Connection	Two (2) 1000BaseT uplinks to customer network Two (2) IP addresses on customer network for WMS/WES communications
Host System Integration	API standard; other integrations available
Compliant to	ANSI B11.19, ANSI B11.20, ANSI/ASME B20.1, ANSI/ASSE Z244.1, ANSI/RIA 15.06, NFPA70 and NFPA 70E, NFPA 79, OSHA 29 CFR 1910, UL-508A, ISO 10218-1:2011, ISO 10218-2:2011, ISO 12100:2010, ISO 13850:2015, ISO 13855, ISO 14118:2018, ISO 14119:2013, ISO14120:2015, ISO 13732-1:2008, ISO 13849-1 & 2:2015, EN 60204-1:2018, JIS B 9960-1:2019, JIS C 8201-1:2020, EN 61439-2, IEC 60364, EN 61000-6-2, -3 and -4