

Kardex Shuttle VLM Model	: SHUTTLE-01-500-2450x864x6750		
Quantity of Units	: 1		
Overall Unit Height	: 6750 mm	22 feet, 1.75 in.	
Required Room Height	: 6770 mm	22 feet, 2.52 in.	
The required room height (unit height + 20mm /0.79") is the absolute minimum measure. Possible floor / ceiling unevenness and slope must be considered therein.			
Overall Unit Width	: 2780 mm	109.45 in.	
Unit Depth	: 3073 mm	120.98 in.	
Add Extraction Table Depth	: n/a mm		
Overall Unit Depth	: 3073 mm		
1st Front MASTER access - table height (TH1)	: Floor @ 0 mm = table height 833 mm	Floor @ 0 in. = table height 32.8 in.	
2nd Front Access - table height (TH2)	: N/A		
Add Rear Access - table height (TH3)	: N/A		
Unit Weight without Trays	: 2936 kg. (6473 lbs.)	(Per unit)	TOTAL UNIT LOAD (Unit Capacity): 70000 kg. (154322 lbs.)
Dead Weight of configured Trays	: 6486 kg. (14299 lbs.)	(Per Unit)	Unit Capacity minus Dead Weight of configured Trays: 63514 kg. (140023 lbs.)
Unit Weight with Configured Trays (empty)	: 9422 kg. (20772 lbs.)	(Per Unit)	Payload: Max. Tray Capacity x Qty. of trays configured/unit: 49680 kg. (109525 lbs.)
Total unit weight (w/configured Trays loaded)	: 59102 kg. (130297 lbs.)	(Maximum per Unit)	Gross Load (Payload + dead weight of trays)/unit as configured: 56166 kg. (123824 lbs.)
Average Qty. Trays / Unit			
Average Qty. Trays / Unit	Tray Type	Clear Width x Depth	Maximum Load/Tray lbs. Capacity/Sq.Ft. lbs. Access Height / Lower Edge of tray bottom TH1 mm + mm = (in.) Retrieval position /upper edge of tray bottom TH1 mm + mm = (in.)
0	Light	2450 mm x 863.6 mm	96.46 in. x 34 in. 230 507 22.3 833 + 21 (33.62 in.) 833 + 22.5 (33.68 in.)
138	Medium	2450 mm x 863.6 mm	96.46 in. x 34 in. 360 794 34.9 833 + 21 (33.62 in.) 833 + 23 (33.7 in.)
0	Strong	2450 mm x 863.6 mm	96.46 in. x 34 in. 500 1102 48.4 833 + 21 (33.62 in.) 833 + 23.5 (33.72 in.)
0	66-1-Medium-100	2450 mm x 863.6 mm	96.46 in. x 34 in. 525 1157 50.8 833 + 21 (33.62 in.) 833 + 23 (33.7 in.)
0	75-2-Medium-100	2450 mm x 863.6 mm	96.46 in. x 34 in. - - - 833 + 21 (33.62 in.) 833 + 23 (33.7 in.)
0	75-3-Medium-100	2450 mm x 863.6 mm	96.46 in. x 34 in. - - - 833 + 21 (33.62 in.) 833 + 23 (33.7 in.)
0	100-3-Medium-100	2450 mm x 863.6 mm	96.46 in. x 34 in. - - - 833 + 21 (33.62 in.) 833 + 23 (33.7 in.)
0	100-3-Medium-110	2450 mm x 863.6 mm	96.46 in. x 34 in. - - - 833 + 21 (33.62 in.) 833 + 23 (33.7 in.)
0	100-2-Medium-100	2450 mm x 863.6 mm	96.46 in. x 34 in. - - - 833 + 21 (33.62 in.) 833 + 23 (33.7 in.)
0	100-2-Medium-110	2450 mm x 863.6 mm	96.46 in. x 34 in. - - - 833 + 21 (33.62 in.) 833 + 23 (33.7 in.)
0	100-2-Medium-130	2450 mm x 863.6 mm	96.46 in. x 34 in. - - - 833 + 21 (33.62 in.) 833 + 23 (33.7 in.)
0	121-4-Medium-100	2410 mm x 863.6 mm	94.88 in. x 34 in. - - - 833 + 66 (35.39 in.) 833 + 68 (35.47 in.)
0	121-4-Medium-110	2410 mm x 863.6 mm	94.88 in. x 34 in. - - - 833 + 66 (35.39 in.) 833 + 68 (35.47 in.)
0	121-4-Medium-120	2410 mm x 863.6 mm	94.88 in. x 34 in. - - - 833 + 66 (35.39 in.) 833 + 68 (35.47 in.)
0	121-4-Medium-130	2410 mm x 863.6 mm	94.88 in. x 34 in. - - - 833 + 66 (35.39 in.) 833 + 68 (35.47 in.)
Minimum Tray Spacing	: 75 mm / 2.95 in.	on 25 mm / 0.98 in. increments	Depends on unit drive and Tray Type selection
Maximum Product Height	: 727 mm / 28.62 in.		Depends on Tray Type selection
Clearance Required Above Product	: 20 mm / 0.78 in.		
Storage Surface Area Net Offered /Unit	: 292.06	Avg. Sq. Meters of Surface Area	3,144 Avg. Sq. Ft. of Surface Area
Max. Useable Cube w/Trays installed Net / Unit	: 15.17	Approx. Cubic Meter	535 Approx. Cubic Feet
Useable Cube @ 80% Tray Utilization /Unit	: 12.13	Approx. Cubic Meter	428 Approx. Cubic Feet
Vertical Lifting Speed (@ 100% load)	: 57.61	meters/min.	189.00 ft./min.
Vertical Lifting Speed if Extractor is w/o a Tray	: 90.01	meters/min.	295.30 ft./min.
Horizontal Extractor (Storage/Removal) Speed	: 0.60	meters/sec.	23.62 in./sec.
Pick Performance (Average Qty.)	: 94	Trays/hour (does not consider operator picking time)	
Average Access Time	: 38	Seconds	20 Seconds
Maximum Access Time	: 45	Seconds	23 Seconds
Complete Cycle (Storage + Retrieval)		Single Cycle (Tray Retrieval only)	
Calculation of access times is based on: 1) Speed adjustment lift (vertical) at 100%; extractor (horizontal) at 100%. Note: 100% extractor speed is not recommended for some storage goods. All delivered units have a pre-defined setting of 70%. 2) Shutter door is set to "only closed during lift travel," i.e. tray positioned in access opening is in 'fingerhold.' Note: This setting is only possible with units equipped with 1 access opening. With the setting "always closed," the access times will increase by ~6 seconds. 3) Options chosen on POF: automatic extraction or pneumatic tray locking will affect times outlined above.			
4) If "Speed and Control" Functions, including weight management, will not be used the "Complete Cycle" times outlined can be reduced by 5 seconds ▼			
For very tall units which contain a large number of trays, the average and maximum access times can increase as a result of the required internal computing time of the controller during the return of stock. With time-critical units (e.g. high performance order picking units or robot handling with cycle times) a prior consultation with the factory is recommended.			
Power	: 480 / 3 / 60 (Volts / Phase / Hz)		
Maximum Power Consumption	: 15 kVA		
Connection Voltage - Recommended mains fuse	: 30 Amp Per Machine		
Connection Voltage - Mains current (FLA)	: 20.9 Amp Per Machine		
Typical Energy Consumption / STORAGE (5 cycles/hr)	: 0.74 KWh		
Typical Energy Consumption / ORDER PICKING (20 cycles/hr)	: 1.16 KWh		
Included with this configured Shuttle			
Color Panels and Load Profiles	: RAL 7035 Light Grey		
Color Shutter Door, Cover Under Access Opening	: RAL 230/60/15 Silver Fir Blue		
Color Access Opening Inside: cover and floor	: RAL 7035 Light Grey		
Color Shelf Rail Panels	: RAL 7035 Light Grey		
Side Service Panels	: 1 of 1 units include: One side Swing / one side Fixed (Standard Maintenance and Side Panels)		
Confirmed : Customer has no lateral access to the unit			
External Unit Support	: Self-supported		
External supports are Only for stand-alone units (not for units positioned side by side!)			
Tooth Belt Drive	: Yes		
Safety Shutter Door System	: Yes, required		
Overhead Lighting in Access	: LED Lighting 60 Hz		
Control Type	: TIC Unit Controls		
Storage Management System	: OPTIC		
Operator Panel / Mounting Location	: OPTIC /		Outside (Right)/access
Data interface / USB Port	: Yes		
Universal 15 A UL power socket (NEMA 5/15 socket)	: No		
Secure Site Control	: Yes, Virtual Site Control - without license		software license required, and not selected at this time
Hardware Handshake	: No		
Access Ready Lights	: N/A		
Confirmation Bar	: Yes		
Display LED Navigator	: Yes (without Legacy Interface)		1st Front Access Opening
Light Pointer	: Yes LED SPOT, 40 mm dia.		1st Front Access Opening
Position Indicator Light Bar	: No		
Transport Cart	: No		
Crane and Support Frame	: No		
Extraction Table	: No		
Vertical Photocells to Monitor Extractor Column	: Yes		
ESD Equipped Trays	: No		
Height Measurement system MLG2	: Yes		
Not included:	: Communication Cable - Cat5 or Cat6 cable		