

Aichikikai Techno System's

"CarryBee"

(AGV)

Automatic Guided Vehicle

will solve problems in industrial field!

want to
process more
efficiently!

want to
reduce the
investment!

want to
improve
productivity
further!

want to
save
workforce
more!

want to
save time for
re-layout!

Best for the transportation
between buildings

Outdoor AGV

Outdoor AGV that can turn around in a small area.
Same usability as conventional AGV.

Wide range of running zones among buildings in a plant.

Forward/Short revers(OP)
Transportable weight : ~ 3000kg

CarryBee is an unmanned transportation system developed with our own long cultivated know-how in the automobile production, It can rationalize manufacturing processes in various scenes such as conveyance between processes, parts supply to production lines and celler manufacturing lines, "Assembly on AGV".

Low Height Type

Sliding under the cart, towing, automatic connecting and detaching are possible.

[S type • M type]

This lower type is very useful under the cart with automatic pin hook. Connect to or detach from the cart automatically.

Short-type [S type]



Forward 2WD
L840×W350×H350
Transportable weight : 300 kg



Forward & reverse 4WD
L1400×W350×H350
Transportable weight : 600 kg

Mid-sized type [M type]



Forward 2WD
L1390×W350×H272
Transportable weight : 500 kg



Forward & reverse 4WD
L2129×W350×H272
Transportable weight : 750 kg

[H type • L type]

We provide heavy loads type and the lowest height type in the industry, respond to various uses of production line.

Heavy Duty type [H type]



Forward 2WD
L1670×W480×H290
Transportable weight : 750kg



Forward & reverse 4WD
Transportable weight : 1500kg
L2660×W480×H290

Super Low type [L type]



Forward 2WD
L1945×W350×H170
Transportable weight : 500kg



Forward & reverse 4WD
L2640×W350×H170
Transportable weight : 750kg

※1 Increase conveying weight by torque up (option) ※2 Sideways run · Spin turn possible (optional)

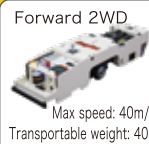
To discover a new concept AGV
in future.



Enhance your KAIZEN project
High performance & reasonable price model

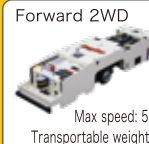


KAI I



Max speed: 40m/min
Transportable weight: 400kg

KAI II



Max speed: 50m/min
Transportable weight: 500kg



Max speed: 50m/min
Transportable weight: 750kg

The lowest price
in Low height type

Easy maintenance, High speed, Precise stopping

Dolly Type [D type • DB type]

Easy to introduce

Can tow your own cart, bring cargo by putting on the deck

Towing Type



Forward 2WD
Transportable weight:
400kg·500kg·750kg·
1000kg·1500kg

Loading Type



Forward 2WD
Forward & Reverse 4WD
Transportable weight
:400kg·500kg·750kg

DB type AGV



Forward 2WD
Transportable
weight:500kg
※ Reverse only for connecting

Kit [K type]

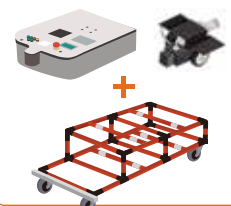
Using the basic unit of the control box and the drive unit, you can also convert your dolly or a body to AGV. Easily assembled by anyone! Customized freely at low cost!

Kit for dolly typed AGV

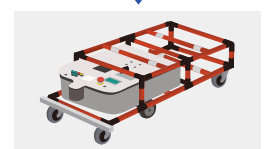


You can choose from many variations
according to transport weight.
Please contact us.

Low Height Kit



Samples



There are variations in the kit type.



Outline of standard specifications for general export excluding Europe/CE

✓ : available as standard, - : Not available, Opt: Option, FWD: Forward, RWD: Reverse, 2WD: two wheel drive, 4WD: four wheel drive, pcs: pieces

Specification		Low Height Type (24V)											
		Short-type		Mid-sized type		Heavy Duty type		改"Kai" type			Super Low Height type		
		S type		M type		H type		Kai I		Kai II	L type		Super slow "Lw"
Basic Specification	Running direction	FWD	FWD & RWD	FWD	FWD & RWD	FWD	FWD & RWD	FWD	FWD	FWD & RWD	FWD	FWD & RWD	FWD
	Drive method	2WD	4WD	2WD	4WD	2WD	4WD	2WD	2WD	4WD	2WD	4WD	2WD
	Quantity of control box	1pcs	2pcs	1pcs	2pcs	1pcs	2pcs	1pcs	1pcs	2pcs	1pcs	2pcs	1pcs
	Quantity of drive unit	1pcs	2pcs	1pcs	2pcs	1pcs	2pcs	1pcs	1pcs	2pcs	1pcs	2pcs	1pcs
Dimension	Length	840	1400	1390	2129	1670	2660	1270	1270	2014	1945	2640	1445
	Width	350	350	350	350	480	480	350	350	350	350	350	450
	Height	350	350	272	272	290	290	272	272	272	170	170	170
Performance	Maximum speed Maximum transportation weight / Maximum traction force ³	50m/min 300kg/191N	50m/min 600kg/382N	50m/min 500kg/319N	50m/min 750kg/478N	50m/min 1000kg/637N	50m/min 1500kg/956N	40m/min 400kg/255N	50m/min 500kg/319N	50m/min 750kg/478N	50m/min 500kg/319N	50m/min 750kg/478N	0.1~50m/min 750kg/478N
	Gear ratio torque up (one rank)	-	-	40m/min 750kg/478N	40m/min 1000kg/637N	40m/min 2000kg/1274N	40m/min 1500kg/956N ¹ (3000kg/1911N) ²	-	-	-	-	-	-
	Gear ratio torque up (another rank)	-	-	25m/min 1000kg/637N	25m/min 1500kg/956N	-	-	-	-	-	-	-	-
	Drive motor	DC brushless direct drive						DC brush chain drive		DC brushless direct drive			stepping motor
	Tires	special rubber						rubber		special rubber			
	Motor brake (on motor axis)	Opt						Opt		Opt			na
	Automatic drive unit lift / down function	✓						Opt		Opt			✓
	Programmable (Count up)	✓						✓		✓			✓
Control	Reading scheme	Spot marker count						Spot marker count			Spot marker count		
	Guidance Method	Magnetic						Magnetic			Magnetic		
	Obstacle laser sensor	✓ (UST)						Opt			✓ (UST)		
Safety	Melody unit/ Signal tower (2 colors)	✓						Opt			✓		

Specification		Type	Dolly type (24V)											Outdoor type(48V)
		Towing type					Loading type						Towing type	
		Dtype 42W	Dtype 100W		Dtype 200W		Dtype 42W	Dtype 100W		Dtype 200W		DBtype		
Basic Specification	Running direction	FWD	FWD	FWD & RWD	FWD	FWD & RWD	FWD	FWD	FWD & RWD	FWD	FWD & RWD	FWD & RWD	FWD	
	Drive method	2WD	2WD	4WD	2WD	4WD	2WD	2WD	4WD	2WD	4WD	2WD	4WD	
	Quantity of control box	1pcs	1pcs	1pcs	1pcs	1pcs	1pcs	1pcs	1pcs	1pcs	1pcs	1pcs	1pcs	
	Quantity of drive unit	1pcs	1pcs	2pcs	1pcs	2pcs	1pcs	1pcs	1pcs	1pcs	2pcs	2pcs*5	2pcs	
Dimension	Length	932		1065		(1110)		1065		(1110)		890	1545	
	Width	600		600		(775)		600		(775)		430	732	
	Height	941		941		(1080)		941		(1080)		683	1445	
Performance	Maximum speed Maximum transportation weight / Maximum traction force ³	40m/min 400kg/255N	50m/min 500kg/319N	50m/min 750kg/478N	50m/min 1000kg/637N	50m/min 1500kg/956N	40m/min 200kg	50m/min 250kg	50m/min 300kg	50m/min 600kg	50m/min 750kg	50m/min 500kg/319N	120m/min 500kg/1431N on 5° slope	
	Gear ratio torque up (one rank)	-	40m/min 750kg/478N	40m/min 1000kg/637N	40m/min 2000kg/1274N	40m/min 1500kg/956N ¹ (3000kg/1911N) ²	-	40m/min 300kg	40m/min 500kg	40m/min 750kg	40m/min 1500kg	-	80m/min 1000kg/2391N on 5° slope	
	Gear ratio torque up (another rank)	-	25m/min 1000kg/637N	25m/min 1500kg/956N	-	-	-	25m/min 500kg	25m/min 750kg	-	-	-	40m/min 2500kg/4782N on 5° slope	
	Drive motor	DC brush chain drive	DC brushless direct drive				DC brush chain drive	DC brushless direct drive				DC brushless direct drive		
	Tires	rubber	special rubber				rubber	special rubber				special rubber		
	Motor brake (on motor axis)	Opt												✓
	Automatic drive unit lift / down function	✓											*5	na
	Programmable (Count up)	✓												✓
Control	Reading scheme	Spot marker count											Spot marker count	
	Guidance Method	Magnetic											Magnetic	
	Obstacle laser sensor	✓ (UST)											✓ (UST)	✓
Safety	Melody unit/ Signal tower (2 colors)	Opt											✓	✓

Specification		Type	Kit type (24V)										Note: *1: Towing weight for switching forward and reverse is 1500kg weight. However depending on condition of the floor and wheel of cart, it might be possible to tow over 1500kg. If AGV tows over 1500kg, please contact us. *2: 3000kg is the weight applied only for forward or reverse move. If AGV tows over 1500kg, direction of wheel need to be turned to running direction in advance. *3: The traction force "N" is calculated from transportation weight under the condition that coefficient of friction is 65/1000. This value is decided by considering condition of the floor, rolling resistance etc. *4: short reverse. *5: direct installation to the frame of AGV
		Low Height Kit					Dolly type Kit						
		N type Kit		H type Kit		Dtype 42W Kit		Dtype 100W Kit		Dtype 200W Kit			
Basic Specification	Running direction	FWD	FWD & RWD	FWD	FWD & RWD	FWD	FWD & RWD	FWD	FWD & RWD	FWD	FWD & RWD		
	Drive method	2WD	4WD	2WD	4WD	2WD	4WD	2WD	4WD	2WD	4WD		
Dimension of control box	Quantity of control box	2pcs	2pcs	1pcs	2pcs	1pcs	1pcs	1pcs	1pcs	1pcs	1pcs		
	Quantity of drive unit	1pcs	2pcs	1pcs	2pcs	1pcs	2pcs	1pcs	2pcs	1pcs	2pcs		
	Length	456	456	375.5	375.5	160	160	160	160	160	160		
	Width	326	326	460	460	400	400	500	500	500	500		
	Height	121	121	145	145	500	500	400	400	500	500		
Performance	Maximum speed Maximum transportation weight / Maximum traction force*3	50m/min 500kg/319N	50m/min 750kg/478N	50m/min 1000kg/637N	50m/min 1500kg/956N	40m/min 400kg/255N	40m/min 600kg/382N	50m/min 500kg/319N	50m/min 750kg/478N	50m/min 1000kg/637N	50m/min 1500kg/956N		
	Gear ratio torque up (one rank)	40m/min 750kg/478N	40m/min 1000kg/637N	40m/min 2000kg/1274N	40m/min 1500kg/956N*1 (3000kg/1911N)*2	-	-	40m/min 750kg/478N	40m/min 1000kg/637N	40m/min 2000kg/1274N	40m/min 1500kg/956N*1 (3000kg/1911N)*2		
	Gear ratio torque up (another rank)	25m/min 1000kg/637N	25m/min 1500kg/956N	-	-	-	-	25m/min 1000kg/637N	25m/min 1500kg/956N	-	-		
	Drive motor	DC brushless direct drive				DC brush chain drive		DC brushless direct drive					
	Tires	special rubber				rubber		special rubber					
	Motor brake (on motor axis)	Opt											
	Automatic drive unit lift / down function	✓											
	Programmable (Count up)	✓											
Control	Reading scheme	Spot marker count											
	Guidance Method	Magnetic											
	Obstacle laser sensor	Opt											
Safety	Obstacle laser sensor	Opt											
	Melody unit/ Signal tower (2 colors)	✓					Opt						

Contact information



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