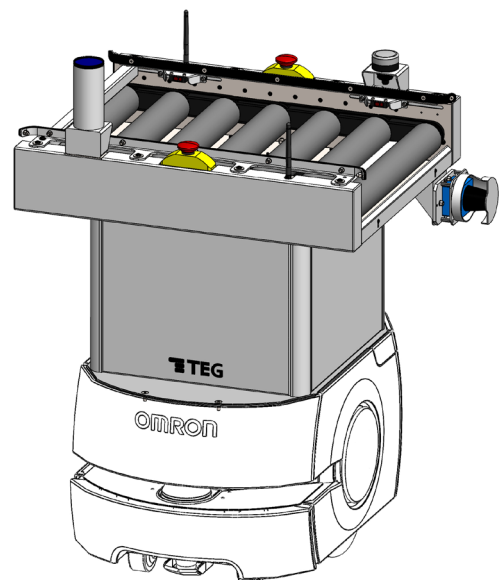
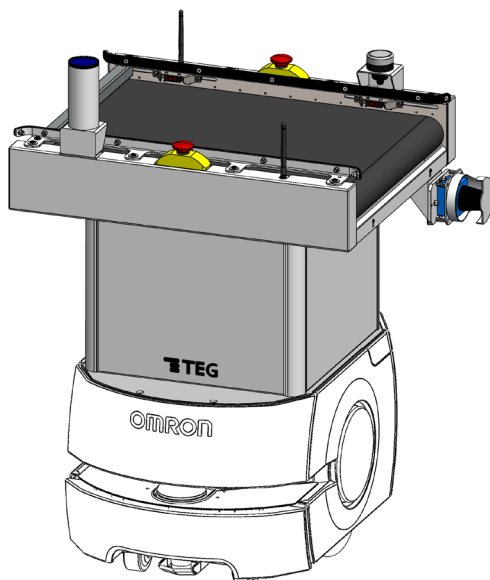
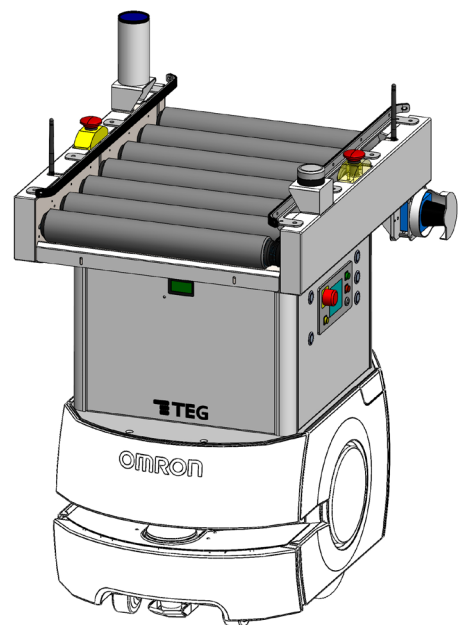
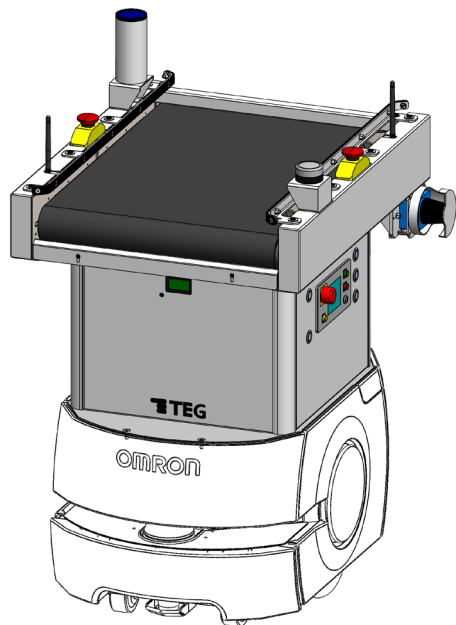


Conveyor Top

for Omron LD-60/LD-90 Autonomous Mobile Robots

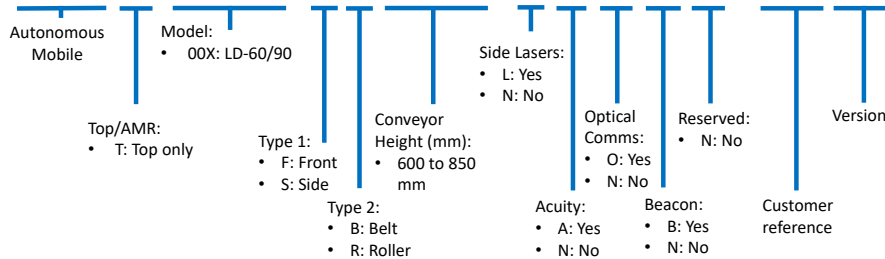
Datasheet



1. Type designation

- Available models for Front or Side loading/unloading
- Conveyor options: Belt or Rollers
- Customizable conveyor height from 600 to 850 mm
- Pushbuttons for Top control: Conveyor Forward/Backward, Docking, Start, Wait/Go
- Safety option: Side lasers

AMT-00X-FB800-LN>NNN-0001



2. Technical specifications

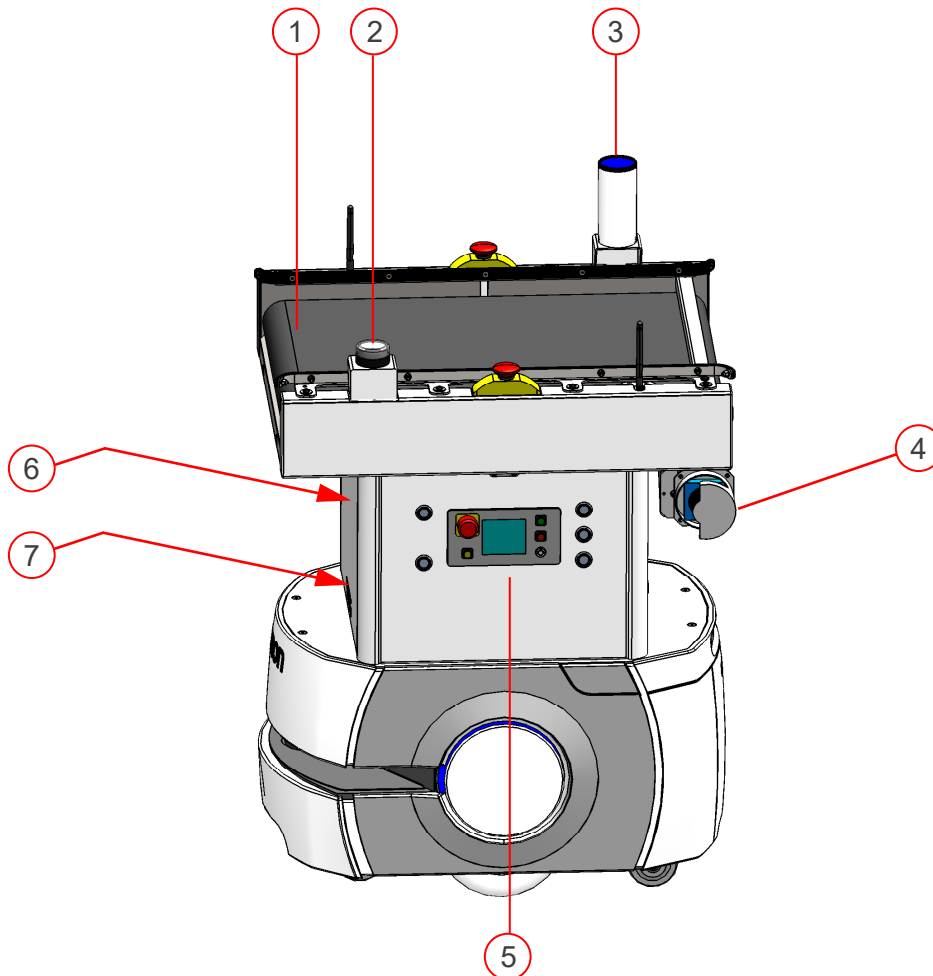
		Dimensions			
		Front belt AMT-00X-FB[]	Front roller AMT-00X-FR[]	Side belt AMT-00X-SB[]	Side roller AMT-00X-SR[]
Length (mm)	Top	690		564	
	Conveyor	420			
Width (mm)	Top only	564		690	
	Top including side lasers option	662		848	
	Conveyor	600			
Height (mm)	Total (Top with no options + LD)*	740 - 990			
	Conveyor (Top + LD)*	600 - 850			
	Total with Acuity option*	805 - 1055			
Radius (mm)	Top only	439			
	Top including side lasers option	475		492	
Minimum door width (mm)	Top only	1100			
	Top including side lasers option	1200			
Weight (kg)	Top only	36	42	36	42
	Top + LD	98	104	98	104
Shipping box	Length (mm)	980			
	Width (mm)	910			
	Height (mm)	870			
	Weight (kg)	90	96	90	96
Max payload (kg)	Top + LD-60	24	18	24	18
	Top + LD-90	40	50	40	50
Battery run time (h) Top + LD		12 - with 200 complete conveyor pickup/dropoff operations every 3 minutes			
* Customizable conveyor height from 600 to 850 mm (by height increments of 10 mm).					

Materials				
	Front belt AMT-00X-FB[]	Front roller AMT-00X-FR[]	Side belt AMT-00X-SB[]	Side roller AMT-00X-SR[]
Materials (excluding belts and rollers)	Stainless steel, aluminum, polycarbonate, steel			
Structure color	RAL 9003 white, sprayed, low gloss finishing			
Belt/rollers color	Black	Gray	Black	Gray

Control				
	Front belt AMT-00X-FB[]	Front roller AMT-00X-FR[]	Side belt AMT-00X-SB[]	Side roller AMT-00X-SR[]
Emergency pushbuttons	3 (1 at operator panel - left side, 1 at top - left side, 1 at top - right side)		3 (1 at operator panel - rear, 1 at top - front side, 1 at top - rear side)	
Top pushbuttons	5 pushbuttons (left side) 1 brake release pushbutton (rear left)		5 pushbuttons (rear) 1 brake release pushbutton (rear right)	
Pb1	Conveyor manual run (Forward/Dropoff)			
Pb2	Conveyor manual run (Backward/Pickup)			
Pb3	Dock/Localize at goal (4 seconds)			
Pb4	Spare - Start (Configurable)			
Pb5	Wait/Continue (4 seconds)			
Top controller model	NX1P2-9024DT1 (With optical coupler option, a NX-ID4442 is added)			
Top controller access	Sysmac Studio accessible via WiFi (when Ethernet Forwarding is configured)			
LD Core access	Easy access by swinging the Top conveyor			
Conveyor belt/rollers speed (m/s)	0,01 - 0,20, adjustable by roller drive controller switches			
Conveyor/belt direction (both ways)	Front - Rear		Left - Right	
Conveyor inlet	Front		Left and Right	
Optical payload detectors	2 Omron E3Z-LS photoelectric sensors			

Note: Please refer to the Omron LD Datasheet (I828) for the LD specifications.

3. Parts description



1.- Conveyor (Belt or Rollers)

2.- Beacon (optional) Status indicator.

3.- Acuity Localization (optional) Used where laser localization is not possible and ceiling lights are adapted to light localization.

4.- Side lasers (optional) Used to detect obstacles that are at heights that the safety scanning laser of the LD cannot detect.

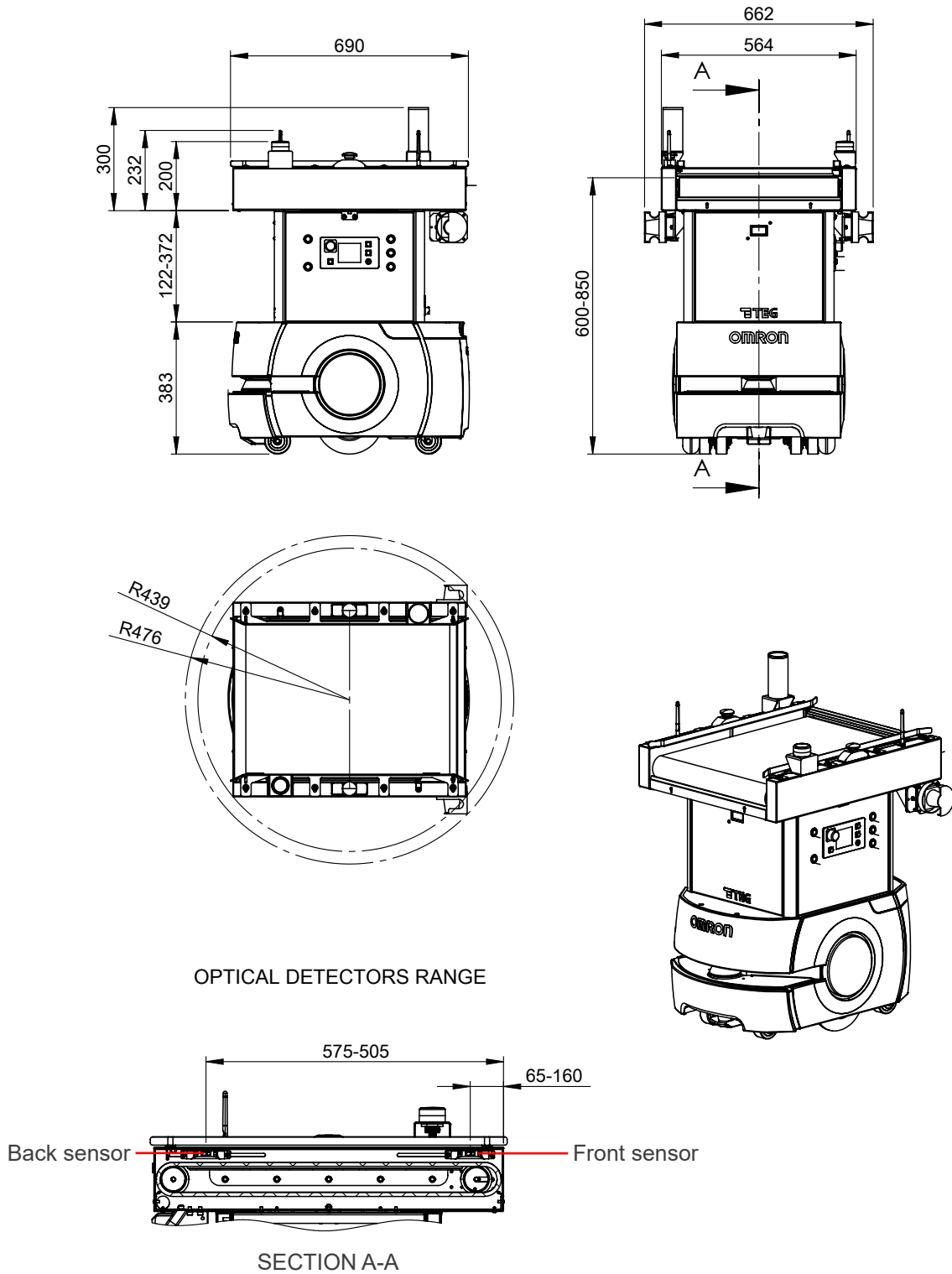
5.- Omron Operator Panel and Top Pushbuttons

6.- Optical communications (optional) Used for direct I/O status exchange between the AMR and the fixed conveyor.

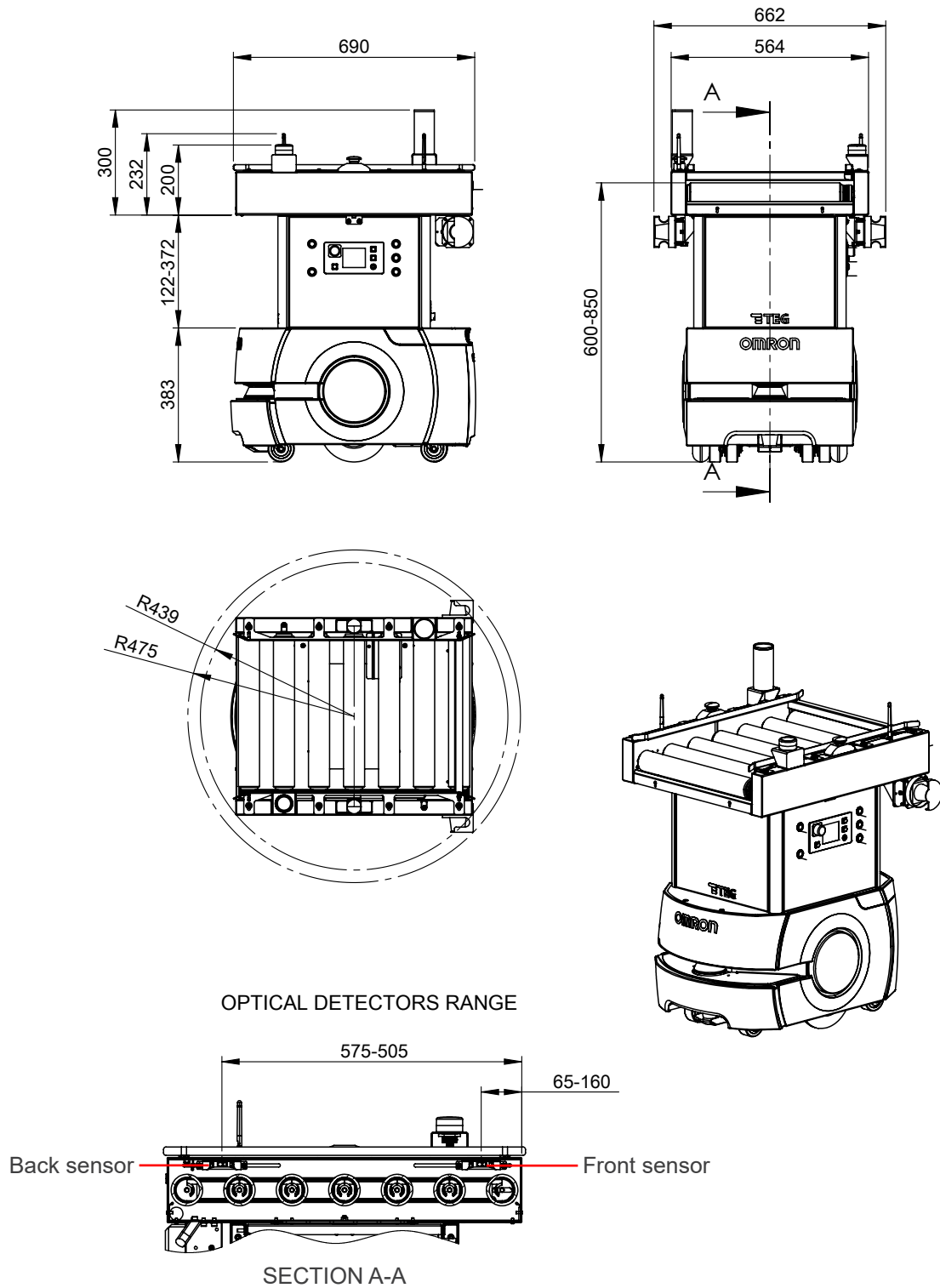
7.- Electrical system (inside)

4. Dimensions

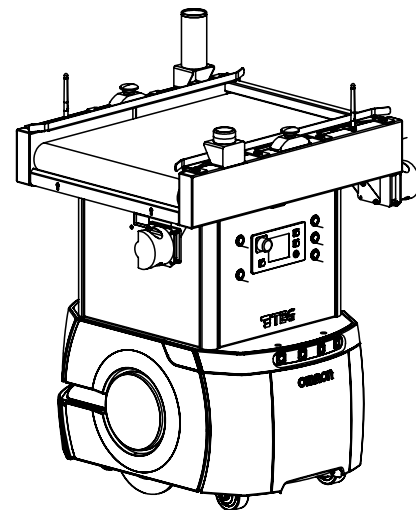
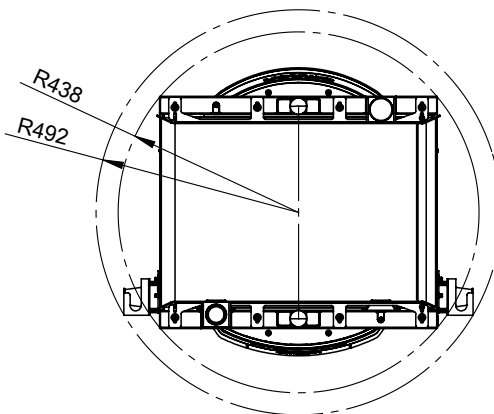
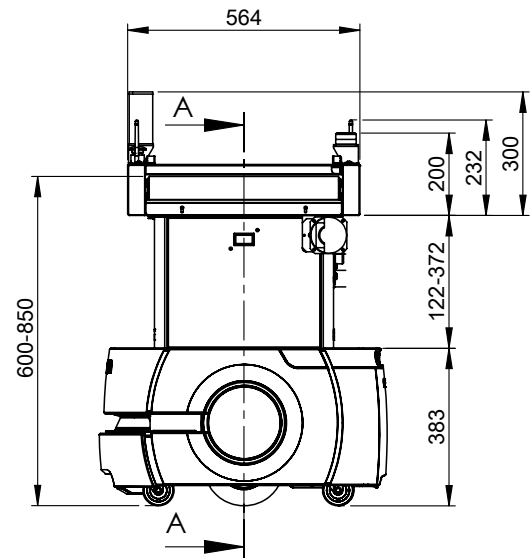
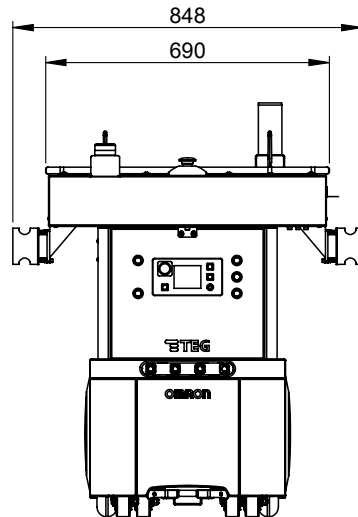
4.1. Front belt model (AMT-00X-FB[])



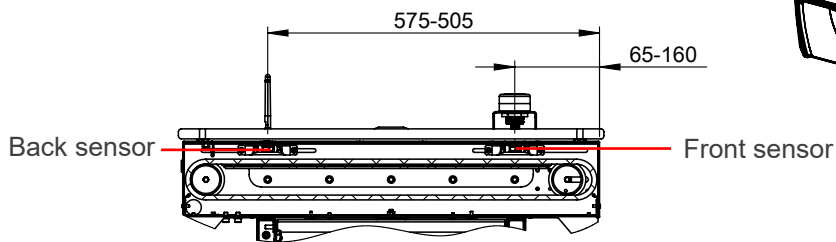
4.2. Front roller model (AMT-00X-FR[])



4.3. Side belt model (AMT-00X-SB[])

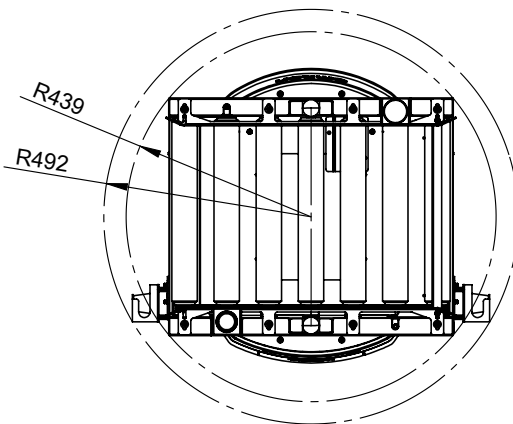
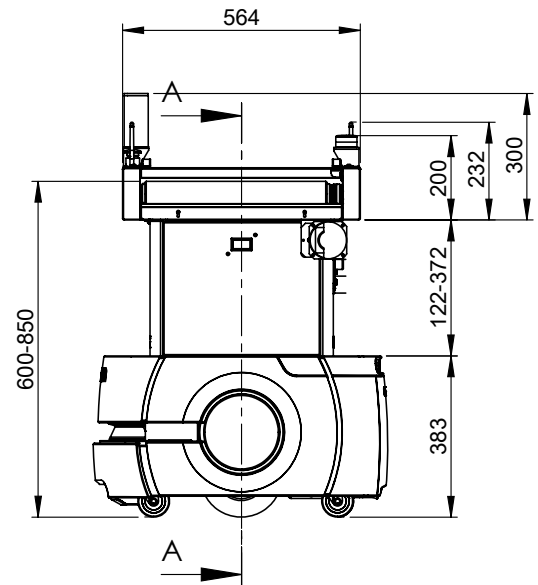
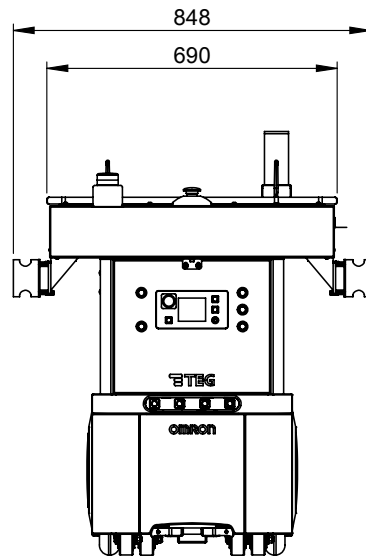


OPTICAL DETECTORS RANGE

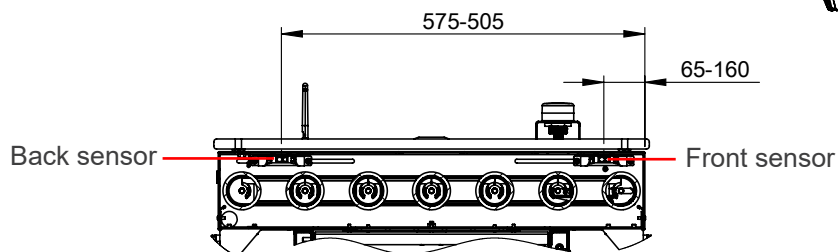


SECTION A-A

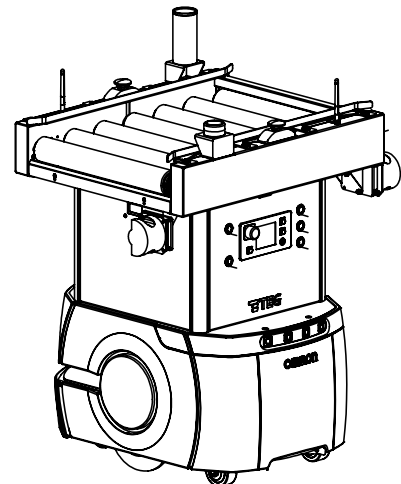
4.4. Side roller model (AMT-00X-SR[])



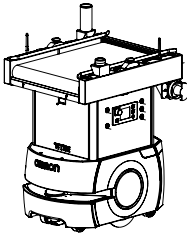
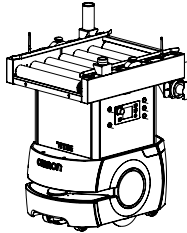
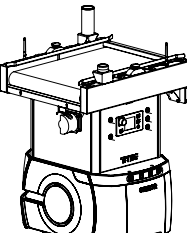
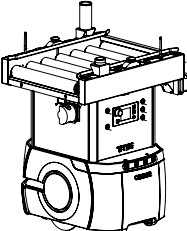
OPTICAL DETECTORS RANGE



SECTION A-A



5. Ordering information

Appearance	Top type	Conveyor height*	Options				Order code
			Side lasers	Acuity Localization	Optical Communications	Beacon	
	Front belt	600 - 850 mm	•	•	•	•	AMT-00X-FB000-LAOBN-0000
					-	-	AMT-00X-FB000-LAONN-0000
					•	•	AMT-00X-FB000-LANBN-0000
					-	-	AMT-00X-FB000-LANNN-0000
				-	•	•	AMT-00X-FB000-LNOBN-0000
					-	-	AMT-00X-FB000-LNONN-0000
					•	•	AMT-00X-FB000-LNNBN-0000
					-	-	AMT-00X-FB000-LNNNN-0000
			-	•	•	AMT-00X-FB000-NAOBN-0000	
				-	-	AMT-00X-FB000-NAONN-0000	
				•	•	AMT-00X-FB000-NANBN-0000	
				-	-	AMT-00X-FB000-NANNN-0000	
				•	•	AMT-00X-FB000-NNOBN-0000	
				-	-	AMT-00X-FB000-NNONN-0000	
				•	•	AMT-00X-FB000-NNNBN-0000	
				-	-	AMT-00X-FB000-NNNNN-0000	
	Front roller	600 - 850 mm	•	•	•	•	AMT-00X-FR000-LAOBN-0000
					-	-	AMT-00X-FR000-LAONN-0000
					•	•	AMT-00X-FR000-LANBN-0000
					-	-	AMT-00X-FR000-LANNN-0000
				-	•	•	AMT-00X-FR000-LNOBN-0000
					-	-	AMT-00X-FR000-LNONN-0000
					•	•	AMT-00X-FR000-LNNBN-0000
					-	-	AMT-00X-FR000-LNNNN-0000
			-	•	•	AMT-00X-FR000-NAOBN-0000	
				-	-	AMT-00X-FR000-NAONN-0000	
				•	•	AMT-00X-FR000-NANBN-0000	
				-	-	AMT-00X-FR000-NANNN-0000	
				•	•	AMT-00X-FR000-NNOBN-0000	
				-	-	AMT-00X-FR000-NNONN-0000	
				•	•	AMT-00X-FR000-NNNBN-0000	
				-	-	AMT-00X-FR000-NNNNN-0000	
	Side belt	600 - 850 mm	•	•	•	•	AMT-00X-SB000-LAOBN-0000
					-	-	AMT-00X-SB000-LAONN-0000
					•	•	AMT-00X-SB000-LANBN-0000
					-	-	AMT-00X-SB000-LANNN-0000
				-	•	•	AMT-00X-SB000-LNOBN-0000
					-	-	AMT-00X-SB000-LNONN-0000
					•	•	AMT-00X-SB000-LNNBN-0000
					-	-	AMT-00X-SB000-LNNNN-0000
			-	•	•	AMT-00X-SB000-NAOBN-0000	
				-	-	AMT-00X-SB000-NAONN-0000	
				•	•	AMT-00X-SB000-NANBN-0000	
				-	-	AMT-00X-SB000-NANNN-0000	
				•	•	AMT-00X-SB000-NNOBN-0000	
				-	-	AMT-00X-SB000-NNONN-0000	
				•	•	AMT-00X-SB000-NNNBN-0000	
				-	-	AMT-00X-SB000-NNNNN-0000	
	Side roller	600 - 850 mm	•	•	•	•	AMT-00X-SR000-LAOBN-0000
					-	-	AMT-00X-SR000-LAONN-0000
					•	•	AMT-00X-SR000-LANBN-0000
					-	-	AMT-00X-SR000-LANNN-0000
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				-	-	AMT-00X-SR000-NNNNN-0000	

* Customizable conveyor height from 600 to 850 mm (by height increments of 10 mm)

6. Related manuals

Manual number	Title
I611	Mobile Robots LD Platform User's Guide
I613	Mobile Robots LD Platform Peripherals Guide
I616	Mobile Robot Safety Guide
I631	Enterprise Manager 2100 User's Guide
I635	Fleet Operations Workspace Core User's Guide
ARCL_Comms_Lib_1.4.1	Sysmac Function Block Library for Omron Mobile Robots
TOP0100man	TEG Conveyor Top Assembly Manual



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