

# AMR TOP MODULE AMR S- AND M-PLATFORM

48V

400V



## Product description

AMRs are used in a variety of applications, including material handling, transportation, and fulfillment. They are often used to automate tasks that are repetitive, dirty, or dangerous for humans to perform, and can operate in a variety of environments. AMRs are used in a wide range of industries, from manufacturing and health care to logistics and more.

## Scope of delivery

- Belt or roller conveyor module
- Standard or ESD version
- Build in safety system
- Build in control, photo sensor and communication module
- Designed for Interroll LCP stationary modules



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## Stationary Components

### Robot S-Platform

LCP conveyor for mobile robot application (W=420 mm) with:

- LCP control
- Wireless communication module
- Navigation plate
- Fixed side guides
- Leg system (H=640 to 800 mm)

Configuration:

- Standard belt conveyor configuration (W=420 mm)
  - L=1000 mm
  - L=2000 mm
  - L=3000 mm
- ESD belt conveyor configuration (W=420 mm)
  - L=1000 mm
  - L=2000 mm
  - L=3000 mm

### Robot M-Platform

LCP conveyor for mobile robot application (W=620 mm) with:

- LCP control
- Wireless communication module
- Navigation plate
- Fixed side guides
- Leg system (H=640 to 800 mm)

Configuration:

- Standard belt conveyor configuration (W=620 mm)
  - L=1000 mm
  - L=2000 mm
  - L=3000 mm
- ESD belt conveyor configuration (W=620 mm)
  - L=1000 mm
  - L=2000 mm
  - L=3000 mm



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## Mobile components

### Robot S-Platform

LCP AMR Top-Module (W=420 mm) with:

- Adapter module for mobile robot
- Conveyor module (L=800 mm, W=420 mm)
- AMR control
- Build in safety system
- Wireless communication module
- Fixed side guides

Configuration:

- Mobile module standard belt conveyor configuration
  - Interroll adapter with cabling for OMRON LD60 and LD90
- Mobile module ESD conveyor configuration
  - Interroll adapter with cabling for OMRON LD60 and LD90
- Mobile module with roller conveyor
  - Interroll adapter with cabling for OMRON LD60 and LD90

### Robot M-Platform

LCP AMR Top-Module (W=620 mm) with:

- Adapter module for mobile robot
- Conveyor module (L=1000 mm, W=620 mm)
- AMR control
- Build in safety system
- Wireless communication module
- Fixed side guides




Configuration:

- Mobile module standard belt conveyor configuration
  - Interroll adapter with cabling for MiR250
  - Interroll adapter with cabling for OMRON LD250
- Mobile module ESD conveyor configuration
  - Interroll adapter with cabling for MiR250
  - Interroll adapter with cabling for OMRON LD250
- Mobile module with roller conveyor
  - Interroll adapter with cabling for MiR250
  - Interroll adapter with cabling for OMRON LD250



# AMR TOP MODULE AMR S- AND M-PLATFORM

## Technical data

Mobile Robot S-Platform			
			
<b>General technical data</b>			
Feature	Standard belt conveyor	ESD belt conveyor	Roller conveyor
Design	The AMR Top is designed based on Interroll LCP		
Brand design	OMRON LD60 OMRON LD90		
Dimensions of conveyed goods	VDA boxes, plastic bags • min. 80 x 80 x 20 mm • max. 600 x 400 x 600 mm		
Conveyor load (equal spread over the belt in max. height of 300 mm)		Up to 50 kg	Up to 25 kg
Top module weight (conveyor and skirt)		25 kg	27,5 kg
Incline/decline	0°		
Ambient temperature	Operation: +5 to +40 °C		
Humidity	93 %		
Degree of cleanliness	Operating environment: IP22		
Noise level	Leq < 60 db(A)		
Conveyor size	800 x 420 mm		
<b>Belt drive and idler pulley</b>			
Drive voltage	24 – 48 BLDC		
Conveyor speed	0,11 to 0,30 m/s (chosen via gear rational)		
Power consumption continuously	0,002 kWh		
Power consumption belt operating	0,06 kWh		
Belt direction	Bi-directional	Mono directional	Bi-directional
Ø Belt drive		80 mm	50 mm
Ø Idler pulley		40 mm	50 mm
Ø Support roller	50 mm		
<b>Materials</b>			
Frame	Aluminum		
Conveyor surface	Flex belt	ESD belt	Roller pitch
<b>Certificates and approval</b>			
ESD certificate	No	Yes	No
Approval	Designed for meeting European standards		




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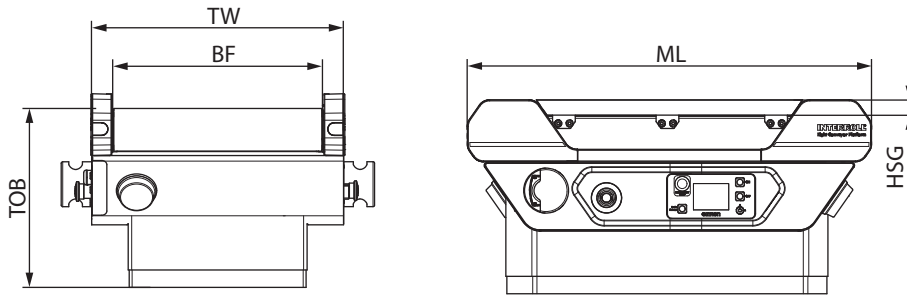
400V



Mobile Robot M-Platform			
			
<b>General technical data</b>			
Feature	Standard belt conveyor	ESD belt conveyor	Roller conveyor
Design	The AMR Top is designed based on Interroll LCP		
Brand design	MIR 250 OMRON LD250		
Dimensions of conveyed goods	VDA boxes, plastic bags <ul style="list-style-type: none"> <li>• min. 80 x 80 x 20 mm</li> <li>• max. 800 x 600 x 600 mm</li> </ul>		
Conveyor load (equal spread over the belt in max. height of 300 mm)		Up to 50 kg	Up to 25 kg
Top module weight (conveyor and skirt)		35 kg	39,5 kg
Incline/decline	0°		
Ambient temperature	Operation: +5 to +40 °C		
Humidity	93 %		
Degree of cleanliness	Operating environment: IP22		
Noise level	Leq < 60 db(A)		
Conveyor size	1000 x 620 mm		
<b>Belt drive and idler pulley</b>			
Drive voltage	24 – 48 BLDC		
Conveyor speed	0,11 to 0,30 m/s (chosen via gear rational)		
Power consumption continuously	0,002 kWh		
Power consumption belt operating	0,06 kWh		
Belt direction	Bi-directional	Mono directional	Bi-directional
Ø Belt drive		80 mm	50 mm
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<b>Materials</b>			
Frame	Aluminum		
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<b>Certificates and approval</b>			
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## Dimensions



			Small platform		Large platform	
			OMRON LD60/LD90	MIR 250	OMRON LD250	
BF	Rated width	OBC	400 mm		600 mm	
		AMR conveyor	420 mm		620 mm	
		Stationary conveyor				
TOB	Top of Belt		min. 733 mm - robot height max. 883 mm - robot height	min. 560 mm - robot height max. 710 mm - robot height	min. 643 mm - robot height max. 793 mm - robot height	
ML	Module length	OBC	600 mm		600 mm	
		AMR belt conveyor	800 mm		1000 mm	
		AMR roller conveyor	781 mm		961 mm	
		Stationary conveyor	1000 mm		1000 mm	
TW	Module width		506 mm		706 mm	
HSG	Side guide height			30 mm		