Catalog | August 2020



Harmony® eXLhoist

Wireless industrial remote control





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Advanced operator interface and industrial relays

Harmony operator interface and industrial relays enhance operational efficiency and equipment availability across industrial and building applications. Harmony includes intelligent connected products and edge terminals that visualize, gather and process data, enabling informed operator decisions.

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- Harmony Push Buttons and Switches
- Harmony HMI Operator Terminals, IPC and EdgeBox
- Harmony Signaling Devices
- Harmony Electrical Relays
- Harmony Safety



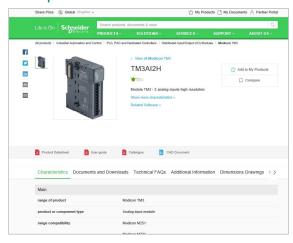


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- Product image, Instruction sheet, User guide, Product certifications, End of life manual



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Harmony® eXLhoist, wireless industrial remote control

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Wireless industrial remote control

Innovative operator control offer for hoisting applications



The Harmony® eXLhoist range of wireless remote control systems is an operator control station used in hoisting and material handling applications. It is based on 2 types of device:

- > Remote control device, which is the operator interface with the machine.
- > Base station, which is hardwired to the machine. It receives control commands from the remote device and transmits information to the operator.

The remote control system is a combination of these devices which communicates via radio transmission.

Dedicated ergonomics

Its innovative design and the button positions on the remote device allow intuitive and easy one-hand operation.



Remote device design allows the operator to control the machine without focusing on the buttons, but concentrating on the load instead

Maximize application uptime

 Advanced battery technology ensures quick charging time, a long working life and excellent autonomy.



30 hrs runtime (1) (2) 15 min to recharge Up to 5 years of working life Improve energy saving and optimize energy consumption while communicating via the remote control system

Operator protection

The Harmony eXLhoist station incorporates devices to prevent unexpected operation and helps to protect the operator, equipment, and load.

- The wireless Emergency stop is compliant up to Performance Level 'e' according to EN ISO 13849-1, and SIL 3 in accordance with IEC 61508 and IEC 62061
- In-built protection against unintended operation is compliant with Performance Level 'c' according to EN ISO 13849-1, and SIL 1 in accordance with IEC 61508 and IEC 62061.
- An accelerometer is embedded in the remote control device to detect and stop the system if the operator trips or falls.





Robust performance and safety compliance

- (1) Typical at temperature of 25°C/77°F
- (2) Runtime will be slightly reduced in the MBC (Multi base control) application



First worldwide automation supplier to offer a complete range of hoisting solutions

Wireless industrial remote control

Universal and reliable application

- Harmony eXLhoist uses the globally-compatible 2.4 GHz frequency which is in unrestricted worldwide use.
- > It helps prevent interference between several remote control stations, allowing up to 50 systems to run simultaneously in a 100 x 100 m/328 x 328 ft area.



Unrestricted worldwide use with a global frequency



Up to 50 systems running at the same time

Easy maintenance

> Remote diagnostic capabilities to reduce machine downtime.

Over-load

Over-wind

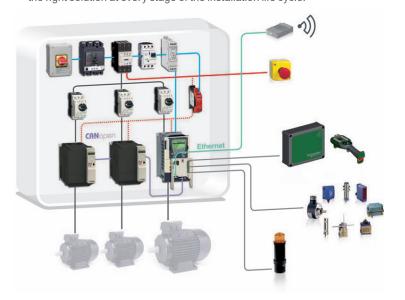
Discovering function allows the remote device to be replaced automatically without intervention by the base station.



Key diagnostic data at the user's fingertips. Alarm notification by vibrate function

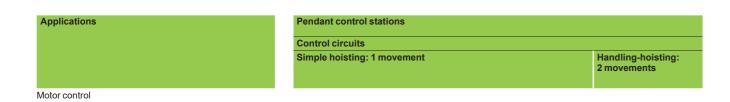
Complete offer

> Tested, validated, and documented architectures for optimized results providing the right solution at every stage of the installation life cycle.



Pendant control stations

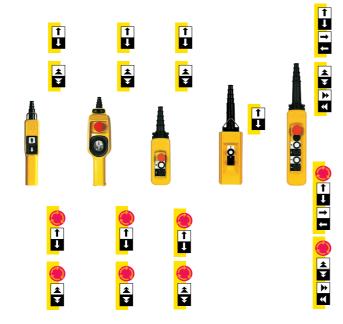
Complete stations "ready for use"





2-speed
Emergency stop





Number of operators	
Enclosure material	
Shock resistance	Conforming to standard IEC 60068-2-27
Conformity to standards	
Protective treatment	
Degree of protection	Conforming to standard IEC 60529
	Conforming to standard EN 50102
Cable entries	

2	1 (2-directional)	2	2	4
Polypropylene			Polyester	Polypropylene
100 gn	70 gn	100 gn		
EN/IEC 60947-5 EN/IEC 60204-3 UL 508, CSA 22-2 No. 14 EN/IEC 60947-5 EN/ISO 13850 (1	2, , and -5,		EN/IEC 60947-5-1 and CSA 22-2 No. 14	EN/IEC 60947-5-1, EN/IEC 60204-32, UL 508, CSA 22-2 No. 14, and EN/IEC 60947-5-5, EN/ISO 13850 (1)
Standard version	ı, "TH"			
IP65				
IK08				
Rubber sleeve with stepped entry diameter for cable Ø 7 to 15 mm/ 0.28 to 0.59 in.	Rubber sleeve with stepped entry diameter for cable Ø 7 to 18 mm/ 0.28 to 0.71 in.	Rubber sleeve with stepped entry diameter for cable Ø 8 to 26 mm/ 0.31 to 1.02 in.	Rubber sleeve with stepped entry diameter for cable Ø 7 to 13 mm/0.28 to 0.51 in., Ø 10 to 22 mm/0.39 to 0.87 in., Ø 22 to 35 mm/0.87 to 1.38 in.	Rubber sleeve with stepped entry diameter for cable Ø 8 to 26 mm/0.31 to 1.02 in.
XACA	XACD	XACA	XACB	XACA

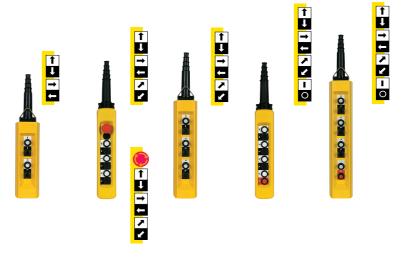
(1) For versions with trigger action Emergency stop.

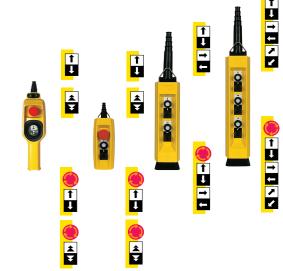
Click here for Pendant control station catalog

Operator control station type reference









4	6	6	8	8	1 (2-directional)	2	4	6
Polyester	Polypropylene	Polyester	Polypropylene	Polyester	Polypropylene	Polyester		
100 gn					100 gn			
EN/IEC 60947-5-1, CSA 22-2 No. 14 EN/IEC 60947-5-1 and CSA 22-2 No. 14 EN/IEC 60947-5-1 and CSA 22-2 No. 14 EN/IEC 60204-32, UL 508, CSA 22-2 No. 14, and EN/IEC 60947-5-5, EN/ISO 13850 (1) EN/IEC 60947-5-5, EN/ISO 13850 (1) EN/IEC 60947-5-5, EN/ISO 13850 (1)					EN/IEC 60947-5 EN/IEC 60204-3 UL 508, CSA 22-2 No. 14 EN/IEC 60947-3 and EN/IEC 60947-5 EN/ISO 13850 (1)	1, ,		
Standard version,	"TH"				Standard version, "TH"			
IP65					IP65			
IK08					IK08			
Rubber sleeve with stepped entry diameter for cable on to 13 mm/ on 10 to 22 mm/ on 39 to 0.87 in., on 22 to 35 mm/ on 87 to 1.38 in. Rubber sleeve with stepped entry diameter for cable on the stepped entr					Rubber sleeve with stepped entry diameter for cable Ø 7 to 18 mm/ 0.28 to 0.71 in.	for cable	e with stepped ei	•
XACB	XACA	XACB	XACA	XACB	XACD	XACB	XACB	XACB



Pendant control stations

Variable composition stations

Applications	Pend	Pendant control stations		
	Control circuits			
Number of cut-outs	1 or 2	2		2, 3, 4, 6, 8, or 12 in 1 row or 2 rows of 6



Enclosure material		Polypropylene		Polyester
Shock resistance	Conforming to standard IEC 60068-2-27	100 gn		
Conformity to standards		EN/IEC 60947-5-1, EN/IEC 60204-32, UL 508, CSA 22-2 No. 14, EN/IEC 60947-3, and EN/IEC 60947-5-5, EN/ISO 13850 (1)		
Protective treatment		Standard version, "TH"		
Degree of protection	Conforming to standard IEC 60529	IP65		
	Conforming to standard EN 50102	IK08		
Equipment		 Emergency stop (front mounted) Contact blocks for 1 or 2 speeds 	 Pushbuttons Selector/key switches Pilot lights Emergency stop (front or base mounted) Wobblesticks Contact blocks for 1 or 2 speeds 	 Pushbuttons Selector/key switches Pilot lights Emergency stop (front or base mounted) Wobblesticks Contact blocks for 1 or 2 speeds
Cable entries		Rubber sleeve with stepped entry diameter for cable Ø 7 to 18 mm/0.28 to 0.71 in.	Rubber sleeve with stepped entry diameter for cable Ø 8 to 26 mm/0.31 to 1.02 in.	Rubber sleeve with stepped entry diameter for cable Ø 10 to 22 mm/0.39 to 0.87 in.
Operator control station ty	/pe reference	XACD	XACA	XACB









Polyester	Polypropylene	Polyester
100 gn	100 gn	
EN/IEC 60947-5-1, EN/IEC 60204-32, UL 508, CSA 22-2 No. 14, EN/IEC 60947-3, and EN/IEC 60947-5-5, EN/ISO 13850 (1)	EN/IEC 60947-5-1, EN/IEC 60204-32, UL 508, CSA 22-2 No. 14, EN/IEC 60947-3, and EN/IEC 60947-5-5, EN/ISO 13850 (1)	
Standard version, "TH"	Standard version, "TH"	
IP65	IP65	
IK08	IK08	
 Pushbuttons Selector/key switches Pilot lights Emergency stop (front or base mounted) Wobblesticks Contact blocks for 1 or 2 speeds 	■ Emergency stop (front mounted) ■ Contact blocks for 1 or 2 speeds	 Pushbuttons Selector/key switches Pilot lights Emergency stop (front or base mounted) Wobblesticks Contact blocks for 1 or 2 speeds
Rubber sleeve with stepped entry diameter for cable Ø 10 to 22 mm/0.39 to 0.87 in. and Ø 22 to 35 mm/0.87 to 1.38 in.	Rubber sleeve with stepped entry diameter for cable Ø 7 to 18 mm/0.28 to 0.71 in.	Rubber sleeve with stepped entry diameter for cable Ø 10 to 22 mm/ 0.39 to 0.87 in.
XACF	XACD	XACB



Schneider Belectric

Operator control stations

Complete stations "ready for use"

Applications

Number of operators

Wireless remote control stations

Control circuits

Handling-hoisting: 3 movements









Enclosure material

Shock resistance Conforming to standard IEC 60068-2-27

Conformity to standards

Protective treatment

Degree of protection Conforming to standard IEC 60529
Conforming to standard EN 50102

Cable entries

(1) For versions with trigger action Emergency stop.

Operator control station type reference

Polycarbonate (PBT)

100 gn

EN/IEC 60947-5-1, EN/IEC 60204-32, UL 508, CSA 22-2 No. 14, EN/ISO 13849-1, EN/IEC 62061, EN/IEC 61508, EN/ISO 13850, EN 13557, and EN 15011

Standard version, "TC"

IP65 IK08

XAR

Schneider Electric Wireless remote control stations

Control circuits







3, 4, 6, 8, and 10

Polyurethane

-

For receiver: EN 300 328 V2.1.1: 2016-11 EN 301 489-1 V2.1.1: 2017-02 EN 301 489-17 V3.1.1: 2017-02 EN 60950-1:2006 + A11: 2009 EN 50581: 2012

For transmitter: EN 300 440 V2.1.1: 2017-03 EN 301 489-1 V2.1.1: 2017-02 EN 301 489-3 V2.1.1: 2017-03 EN 60950-1:2006 + A11: 2009 + A1: 2010 + A12: 2011 EN 62479: 2010 EN 50581: 2012

Standard version, "TC"

IP67 for transmitter and IP66 for receiver

-

PVC torsion cable, largest single wire Ø 0.21 mm (0.008 in.), outer Ø 12.0 mm (0.47 in.)

ZAR

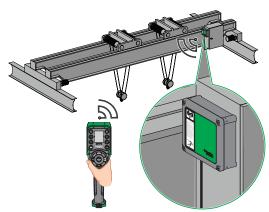
Click here for Harmony eXLhoist catalog



More technical information on www.schneider-electric.co



Wireless industrial remote control



Example of single mode

Example of MBC mode



Configuration software window

Presentation

The Harmony eXLhoist range of wireless remote control systems provides complete innovative crane operator control solutions to help improve machine and crane operator efficiency, protect people and equipment, and reduce installation and maintenance downtime.

The XARS remote control system is a combination of remote control device (or transmitter: XART) and base station (or receiver: XARB), which transmits commands and information from the operator to the machine and vice versa by wireless transmission.

The XARS system offers movement in 3 directions (for example: hoist, bridge, and trolley) at 2 speeds (low and high) for each movement.

The 2 modes available in the system are:

- Single mode: The remote control device controls one base station.
- MBC mode (1): The remote control device controls 2 base stations simultaneously.

Radio communication

Each base station has a unique identification code (2) managed by Schneider Electric. The radio communication frequency is 2.4 GHz and automatic frequency hopping allows up to 50 systems to run at the same time in a 100 x 100 m/328 x 328 ft area.

eXLhoist configuration software

Free software with a graphic user interface can be downloaded by the customer to configure the remote control station. This software has a standard Windows® interface. The configuration file is password protected and can be used to configure the following parameters:

- Base station pairing to the remote control device
- Relay-pushbutton assignment and interlocking
- Access and restart sequence
- Standby time-out duration
- Machine number assignment

Environment

Degree of protection:

- IP 65 for the base station
- IP 65 and NEMA 4 for the wireless control device

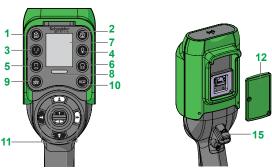
Product certification:

- For the base station: UL/CSA, CE, EAC
- For the wireless control device: UL/CSA, CE, EAC

(1) MBC: Multi base control (tandem)

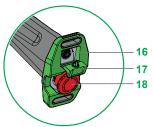
(2) Third-party devices cannot communicate with the remote control system.

Wireless industrial remote control

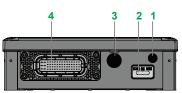


Front view of ZART12D remote device

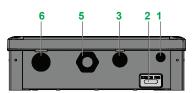
Rear view of remote device



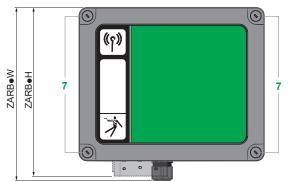
Underside view of remote device handle



Underside view of ZARB. H base station



Underside view of ZARB●W base station



Front view of base station with cover

Description

Remote control device

The remote control device has the following controls:

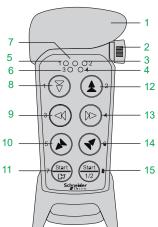
- 1-6 Auxiliary buttons (for ZART8D and ZART8L only buttons 5 and 6 are available)
- 7 Display (for ZART8L LED display only)
- 8 E-stop LED
- 9 OFF/Stop button
- 10 ON/Start/Horn button
- 11 Motion buttons
- 12 Cover
- 13 RJ45 connector
- 14 Reset button
- 15 Trigger button
- 16 Connector for charging remote device
- 17 Connector cover
- 18 E-stop button

Base station

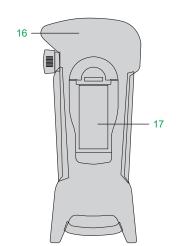
The base station has the following controls:

- 1 M12 for external antenna (1)
- 2 Status LEDs
- 3 M20 for the Safeguarding function input wires (1)
- 4 62-pin connector (1)
- 5 M25 for output wires (2)
- 6 M25 for detected application alarm input wires (1)
- 7 4 holes for standard mounting on support (1)
- (1) Covered by an end cap (2) Covered by a cable gland

Wireless industrial remote control



Front view of ZART8LS remote device



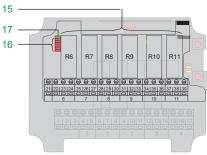
Rear view of remote device

3

8 5 R2 R4 R3 R1 13

Front view of base station

Internal board view of base station



Expansion board view of base station

Description

Remote control device

The remote control device has the following controls:

Front view

- 1 Rubber cover
- 2 Stop button
- 3 LED 2 (red)
- LED 4 (red)
- LED 1 (red)
- LED 3 (red)
- Top LED (red, green) Button 1
- 9 Button 3
- 10 Button 5
- 11 Button 7 left start button
- 12 Button 2
- 13 Button 4
- 14 Button 6
- 15 Button 8 right start button

Rear view

- 16 Rubber protection cover
- 17 Battery pack

Base station

The base station has the following controls:

Front view

- 4 x Ø5 mm/0.20 in. holes for standard mounting on a support
- 2 4 x screws to maintain the cover of the receiver
- 3 2 x cable glands for cables Ø 6...13 mm/0.25...0.50 in.

Internal board view

- Stop relays
- Relays R1 ...R4
- 6 Relay LEDs (red)
- Stop relay LED (red)
- Power LED (yellow)
- 9 Radio module
- 10 Function button (cancel)
- 11 Select button (OK)
- 12 Function LEDs
 - (8 = red, 9 = yellow, 10 = green, 11 = orange)
- 13 Terminal block for input power
- 14 PLd (Performance Level d) status LED

Expansion board view

- 15 Relays R6...R11
- 16 Relay LEDs (red)
- 17 Communication LED (green)

Wireless industrial remote control Remote control device, base station, and wireless remote control system













ZARB12H ZARB18W









Remote	Remote control device							
Description	Characterist	ics	Reference		Weight			
	Motion pushbuttons	Auxiliary pushbuttons	Standard	ndard MBC (1)				
With LEDs	6	2	ZART8L	ZART8LM (slave)	0.650/1.433			
With display	6	2	ZART8D	ZART8DM (master or slave)	0.650/1.433			
With display	6	6	ZART12D	ZART12DM (master or slave)	0.650/1.433			
With	6	1	ZART8LS	-	0.300/0.661			

Base sta	tion					
Description	Characterist	ics		Reference		Weight
	Outputs	Inputs	Power supply V	Standard	MBC (1)	kg/ <i>lb</i>
Wired connection cable gland	12 relays + 2 safety relays	-	24240 $\overline{\sim}$	ZARB12W	-	1.450/3.197
Industrial plug connection	12 relays + 2 safety relays	-	2448 ≂	ZARB12H	-	1.450/3.197
Wired connection cable gland	18 relays + 2 safety relays	18 digital (12 limiters + 6 alarms)	24240 ≂	ZARB18W	ZARB18WM	1.450/3.197
Industrial plug connection	18 relays + 2 safety relays	18 digital (12 limiters + 6 alarms)	2448 ≂	ZARB18H	ZARB18HM	1.450/3.197
Wired connection cable gland	10 relays + 2 safety relays	-	48240 ∼	ZARB10WS	-	0.430/0.947
Wired connection (pre-wired with 1.5 m/ 4.92 ft cable)	10 relays + 2 safety relays	-	48240 ∼	ZARB10WSP	-	0.880/1.940
Wired connection (pre-wired with 1.5 m/ 4.92 ft cable)	10 relays + 2 safety relays	-	1224 ≂	ZARB10WSPDC	-	0.880/1.940

Wireless	remote o	control system		
Description	Characteris	tics	Reference	Weight
	Special functions	Connection		kg/ <i>lb</i>
Complete unit (without	-	Wiring	XARS8L12W (ZART8L + ZARB12W)	2.100/4.640
charger device)	-	Industrial plug	XARS8L12H (ZART8L + ZARB12H)	2.100/4.640
	Limiter protection Movement monitoring	Wiring	XARS8D18W (ZART8D + ZARB18W)	2.100/4.640
	monitoring	Industrial plug	XARS8D18H (ZART8D + ZARB18H)	2.100/4.640
		Wiring	XARS12D18W (ZART12D + ZARB18W)	2.100/4.640
		Industrial plug	XARS12D18H (ZART12D + ZARB18H)	2.100/4.640

⁽¹⁾ MBC: Multi base control (tandem)

Wireless industrial remote control Starting Kits and accessories



XARSK8D18W



ZARC01



ZARC02







TCSMCNAM3M002P

Starting kit			
Description	Characteristics	Reference	Weight
	Components		kg/ <i>lb</i>
Starting kit comprising remote control system + accessories + USB/RJ45 cable + configuration software	ZART8L + ZARB12W + ZARC01 + ZARC02 + TCSMCNAM3M002P	XARSK8L12W	2.800/6.173
· comgaration software	ZART8L + ZARB12H + ZARC01 + ZARC02 + TCSMCNAM3M002P	XARSK8L12H	2.800/6.173
	ZART8D + ZARB18W + ZARC01 + ZARC02 + TCSMCNAM3M002P	XARSK8D18W	2.800/6.173
	ZART8D + ZARB18H + ZARC01 + ZARC02 + TCSMCNAM3M002P	XARSK8D18H	2.800/6.173
	ZART12D + ZARB18W + ZARC01 + ZARC02 + TCSMCNAM3M002P	XARSK12D18W	2.800/6.173
	ZART12D + ZARB18H + ZARC01 + ZARC02 + TCSMCNAM3M002P	XARSK12D18H	2.800/6.173

Accessories	Ohana staniatias	Defenses	\A/a i a la f
Description	Characteristics	Reference	Weight kg/ <i>lb</i>
Charger for remote device	100240 V ∼ power supply	ZARC01	0.350/0.772
Shoulder belt for remote device	2 m/6.56 ft long	ZARC02	0.100/0.220
External antenna for base station (1)	With 2 m/6.56 ft cable and bracket included	ZARC03	0.200/0.441
Holder for remote device	104 x 239 mm/ 4.09 x 9.41 in.	ZARC04	0.250/0.551
Female plug connector	With 1.5 m/ 4.92 ft cable	ZARC05	2.000/4.409
Cable gland kit with wire grommets	1 x M25 + 1 x M20	ZARC06	0.050/0.110
Adhesive label kit for remote device	Black and white	ZARC07	0.150/0.331
Adhesive label kit for remote device and crane equipment	Multicolored	ZARC08	0.250/0.551
Installation kit	Silent block (anti-vibration) support	ZARC09	0.825/1.815
	Magnet support	ZARC091	0.625/1.375
Female plug connector	With 3 m/ 9.84 ft cable	ZARC12	4.000/8.818
Female plug connector	With 5 m/ 16.40 ft cable	ZARC18	7.000/15.432
Connector cable	USB to RJ45	TCSMCNAM3M002P	0.100/0.220

⁽¹⁾ This accessory can be used to increase the radio range in severe environment conditions.

Wireless industrial remote control Accessories



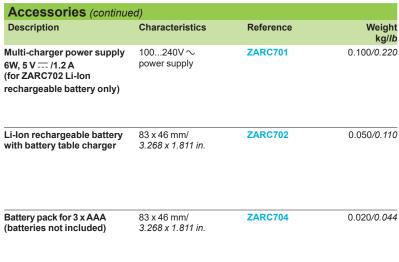






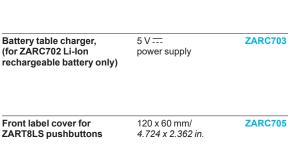














ZARC706



Rubber protection cover for ZART8LS	Rubber material, black	ZARC706	0.107/0.24



Shoulder belt to support	Nylon material, black	ZARC707	0.130/0.29
ZADTOLO			



ZARCFBA01



ZARCFBA01 0.144/0.317 Added features card (1) Analog input modbus serial line card (Field bus communication analog card) **Network communication** Sigfox connectivity ZARCIOT01 0.05/0.110 card (1) (Preventive maintenance data gateway)

0.120/0.265

0.005/0.011

⁽¹⁾ Compatible with XARS12D18W, XARSK8D18W, ZARB12W, ZARB18W, ZARB18WM, ZARB12WR, ZARB18WR, ZARB18WRM base stations and are not compatible with ZART8L remote control device.

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