

ZERO EMISSIONS POWERTRAINS Product catalogue 2020/2021 >





Technical specifications

Urbino 8,9 LE electric	03
Urbino 12 electric	04
Urbino 15 LE electric	05
Urbino 18 electric	06
Urbino 12 hydrogen	07
Trollino 12	08
Trollino 18	09
Trollino 24	10
Trollino 24 MetroStyle	11

Technical drawings

Urbino 8,9 LE electric	12
Urbino 12 electric	12
Urbino 15 LE electric	12
Urbino 18 electric	12
Urbino 12 hydrogen	14
Trollino 12	13
Trollino 18	13
Trollino 24	13
Trollino 24 MetroStyle	14

Photos

More: www.solar

	15 - 20
arisbus.com	

Motor

Driveline

Chassis

asynchronous motor 160 kW	٠
Traction batteries	
lithium-ion (capacity depending on specification)	٠
operation up to 24h (depending on batteries capacity and charging system)	٠
Charging system	
plug-in	٠
pantograph	0

Front axle

ZF independent suspension	٠
Drive axle	
DANA rigid axle	٠
Central lubrication	
central lubrication point - solid lubricating grease	٠
central lubrication system with self-diagnostic - semi-fluid lubrication grease	0
Steering system	
RB Servocom	٠
Hema	0
Braking system	
EBS (Electronic Braking System), ABS (Anti-Lock Braking System),	٠
ASR (Acceleration Slip Regulation)	
Suspension levelling system	
ECAS air suspension with leveling and kneeling function	٠

IITNING & UIF GLOCTTI	
Urbino 8,9 LE electric	

Body structure

stainless steel	٠
Side panels	
removable side panels	٠
Door arrangement	1-2
Entrance height	
entrance height for all doors and 275x70R22.5 wheels	320 mm
Wheelchair ramp	
wheelchair ramp at the 2nd entrance, manually operated	٠
wheelchair ramp at the 2nd entrance, electrically operated	Ο
Number of passenger seats (depending on door arrangement and batteries)	max. 27

Air-conditioning in the driver's cabin air-conditioning powered by passenger compartment unit

10.0		
ventilation onditioning	air-conditioning powered by passenger compartment unit	0
tilat itio	air-conditioning with electric drive	0
ven	Air-conditioning in the passenger compartment	
Heating, Ind air-c	air-conditioning with electrical drive	Ο
	Ventilation system	
- m	dual-function fans	•

Electrical installation

Bodywork

Electrical installation

electrical installation based on CAN-Bus system



Motor

asynchronous motor 160 kW	0
asynchronous motor 300 kW (*)	۲
electric portal axle ZF AVE130 2x125 kW (*)	0
Traction batteries	
lithium-ion (capacity depending on specification)	۲
operation up to 24h (depending on batteries capacity and charging system)	۲
Charging system	
plug-in	٠
pantograph	0

Front axle

ZF independent suspension	٠
ZF rigid axle	0
Drive axle	
ZF portal axle	0
ZF portal axle with integrated electric motors	٠
Central lubrication	
central lubrication point - solid lubricating grease	•
central lubrication system with self-diagnostic - semi-fluid lubrication grease	0
Steering system	
RB Servocom	•
Hema	0
Braking system	
EBS (Electronic Braking System), ABS (Anti-Lock Braking System),	٠
ASR (Acceleration Slip Regulation)	
ESC (Electronic Stability Control)	0
Suspension levelling system	
ECAS air suspension with leveling and kneeling function	٠

Electrical

•—

Chassis

Driveline

Ilrh	ino '	12 0	oct	
Urb		12 E	ιειι	

Body structure stainless steel Side panels removable side panels Door arrangement 1-2-0 Bodywork 2-2-0 1-2-2 2-2-2 Entrance height entrance height for all doors and 275x70R22.5 wheels 320 mm Wheelchair ramp wheelchair ramp at the 2nd entrance, manually operated wheelchair ramp at the 2nd entrance, electrically operated 0 Number of passenger seats (depending on door arrangement and batteries) max. 39 + 4

Air-conditioning in the driver's cabin

Heating, ventilation and air-conditioning	air-conditioning powered by passenger compartment unit	0
	air-conditioning with electric drive	0
vent ondi	Air-conditioning in the passenger compartment	
ng, / ir-co	air-conditioning with electrical drive	0
eati Id ai	air-conditioning with CO2 heat pump	0
ar H	Ventilation system	
	dual-function fans	•

Electrical installation

electrical installation based on CAN-Bus system



0

Motor	
asynchro	nous motor 300 kW (*)
Traction ba	tteries
lithium-io	on (capacity depending on specification)
operatior	up to 24h (depending on batteries capacity and charging system)
Charging sy	/stem
plug-in	
pantogra	ph

Front axle

Driveline

Chassis

ZF independent suspension	٠
Drive axle	
ZF portal axle	٠
Tag axle	
ZF tag axle	٠
ZF tag axle with active steering	0
Central lubrication	
central lubrication point - solid lubricating grease	٠
central lubrication system with self-diagnostic - semi-fluid lubrication grease	0
Steering system	
RB Servocom	٠
Hema	0
Braking system	
EBS (Electronic Braking System), ABS (Anti-Lock Braking System),	٠
ASR (Acceleration Slip Regulation)	
ESC (Electronic Stability Control)	0
Suspension levelling system	
ECAS air suspension with leveling and kneeling function	٠

		_
Ilrhing) 15 LE e	octric

Body structure stainless steel Side panels removable side panels Door arrangement 1-2-0 2-2-0 1-2-1 2-2-1 Entrance height entrance height for all doors and 275x70R22.5 wheels 320 mm entrance height for all doors and 295x80R22.5 wheels 360 mm Wheelchair ramp wheelchair ramp at the 2nd entrance, manually operated wheelchair ramp at the 2nd entrance, electrically operated 0 Number of passenger seats (depending on door arrangement and batteries) max. 65

Air-conditioning in the driver's cabin

lation ioning	air-conditioning powered by passenger compartment unit	0
	air-conditioning with electric drive	0
enti ndit	Air-conditioning in the passenger compartment	
າ <u></u> g, ∨ r-co	air-conditioning with electrical drive	0
Heating, ventilation and air-conditioning	air-conditioning with CO2 heat pump	0
	Ventilation system	
	dual-function fans	•

Electrical installation lectrical stallation

electrical installation based on CAN-Bus system

Bodywork

El



Motor

Driveline

Chassis

Motor	
asynchronous motor 240 kW	•
electric portal axle ZF AVE130 2x125 kW (*)	0
Traction batteries	
lithium-ion (capacity depending on specification)	•
operation up to 24h (depending on batteries capacity and charging system)	•
Charging system	
plug-in	٠
pantograph	0

Front axle

ZF independent suspension	٠
ZF rigid axle	0
Drive axle	
ZF portal axle	٠
ZF portal axle with integrated electric motors	0
Central axle	
ZF neutral axle	•
Central lubrication	
central lubrication point - solid lubricating grease	•
central lubrication system with self-diagnostic - semi-fluid lubrication grease	0
Steering system	
RB Servocom	•
Braking system	
EBS (Electronic Braking System), ABS (Anti-Lock Braking System),	٠
ASR (Acceleration Slip Regulation)	
Suspension levelling system	
ECAS air suspension with leveling and kneeling function	•

Electrical

Ele ins

	lectric
hipo	OCTUC

Body structure stainless steel Side panels removable side panels Door arrangement 1-2-2-0 Bodywork 2-2-2-0 1-2-2-2 2-2-2-2 Entrance height entrance height for all doors and 275x70R22.5 wheels 320 mm Wheelchair ramp wheelchair ramp at the 2nd entrance, manually operated wheelchair ramp at the 2nd entrance, electrically operated 0 Number of passenger seats (depending on door arrangement and batteries) max. 49 + 8

Air-conditioning in the driver's cabin

ation ning	air-conditioning powered by passenger compartment unit	0
	air-conditioning with electric drive	0
ditio	Air-conditioning in the passenger compartment	
o, ve con	air-conditioning with electrical drive	0
Heating, ventilation and air-conditioning	air-conditioning with CO2 heat pump	0
	Ventilation system	
	dual-function fans	•

Electrical installation

electrical installation based on CAN-Bus system



Driveline system

Chassis

Motor	•
electric portal axle ZF AVE130 2x125 kW (*)	
Hydrogen fuel cell	
70kW	•
Traction batteries	
lithium-ion	٠
Hydrogen tanks	
composite tanks 5 x 312 l	٠
Charging system	
plug-in	٠
Front axle	
ZF independent suspension	٠
ZF rigid axle	0
Drive axle	
ZF portal axle with integrated electric motors	٠
Central lubrication	
central lubrication point - solid lubricating grease	٠
central lubrication system with self-diagnostic - semi-fluid lubrication grease	0
Steering system	
RB Servocom	٠
Hema	0
Braking system	
EBS (Electronic Braking System), ABS (Anti-Lock Braking System),	٠
ASR (Acceleration Slip Regulation)	
ESC (Electronic Stability Control)	0

Suspension levelling system

ECAS air suspension with leveling and kneeling function

Urbino 12 hydrog	en

Body structure

stainless steel	•
Side panels	
removable side panels	•
Door arrangement	1-2-0 2-2-0 1-2-2 2-2-2 2-2-0
Entrance height	
entrance height for all doors	320 mm
Wheelchair ramp	
wheelchair ramp at the 2nd entrance, manually operated	٠
wheelchair ramp at the 2nd entrance, electrically operated	0
Number of passenger seats (depending on door arrangement and batteries)	max. 37 + 4

Air-conditioning in the driver's cabin

air-conditioning powered by passenger compartment unit	0
air-conditioning with electric drive	0
Air-conditioning in the passenger compartment	
air-conditioning with electrical drive	0
air-conditioning with CO2 heat pump	0
Ventilation system	
dual-function fans	0

Electrical installation

electrical installation based on CAN-Bus system

Bodywork

Heating, ventilation and air-conditioning

Electrical installation



Driveline

Chassis

MEDCOM ANT 175-600 (IGBT) asynchronous 175 kW 6-pole motor	0
Škoda BlueDrive (IGBT) asynchronous 160 kW 4-pole motor	0
Kiepe IMC 500 (IGBT) asynchronous 160 kW 4-pole motor	0
Traction batteries	
lithium-ion batteries (capacity depending on specification)	0
Pantographs	
manual pantograph	•
semiautomatic or automatic pantograph	0

Front axle

ZF independent suspension	•
ZF rigid axle	0
Drive axle	
ZF portal axle	•
Central lubrication	
central lubrication point - solid lubricating grease	•
central lubrication system with self-diagnostic - semi-fluid	0
lubrication grease	
Steering system	
RB Servocom	٠
Hema	0
Braking system	
EBS (Electronic Braking System), ABS (Anti-Lock Braking System),	•
ASR (Acceleration Slip Regulation)	
Suspension levelling system	
ECAS air suspension with leveling and kneeling function	٠

Tro	llino	12

Body structure

stainless steel	٠
Side panels	
removable side panels	٠
Door arrangement	1-2-0 2-2-0 1-2-2 2-2-2
Entrance height	
entrance height for all doors	320 mm
Wheelchair ramp	
wheelchair ramp at the 2nd entrance, manually operated	٠
wheelchair ramp at the 2nd entrance, electrically operated	0
Number of passenger seats (depending on door arrangement and batteries)	max. 39 + 4

	Air-conditioning in the driver's cabin
	air-conditioning powered by passenger compartment unit
ິ	air-conditioning with electric drive
	Air-conditioning in the passenger compartment

air-conditioning with electrical drive Ventilation system

dual-function fans Passenger compartment heating system

electric 1-stage blowers water heating, electric water heater TJ40.3 (40 kW), convector-type heaters, 2-stage blowers

Electric installation electrical installatio

electrical installation based on Can-Bus system

0

0

0

0

Bodywork



Driveline

Chassis

MEDCOM ANT 250-600 (IGBT) asynchronous 250 kW 6-pole motor	0
Škoda BlueDrive (IGBT) asynchronous 250 kW 6-pole motor	0
Kiepe IMC 500 (IGBT) 2-axle drive: 2 asynchronous 160 kW 4-pole motors	0
Traction batteries	
lithium-ion batteries (capacity depending on specification)	0
Pantographs	
manual pantograph	٠
semiautomatic or automatic pantograph	Ο

Front axle

ZF independent suspension	•
ZF rigid axle	0
Drive axle	
ZF portal axle	•
Central axle	
ZF neutral axle	•
Central lubrication	
central lubrication point - solid lubricating grease	•
central lubrication system with self-diagnostic - semi-fluid	0
lubrication grease	
Steering system	
RB Servocom	•
Braking system	
EBS (Electronic Braking System), ABS (Anti-Lock Braking System),	•
ASR (Acceleration Slip Regulation)	
Suspension levelling system	
ECAS air suspension with leveling and kneeling function	•

ECAS air suspension with leveling and kneeling function

_		
Tro	llino	18

stainless steel	•
Side panels	
removable side panels	٠
Door arrangement	1-2-2-0 2-2-2-0 1-2-2-2 2-2-2-2
Entrance height	
entrance height for all doors	320 mm
Wheelchair ramp	
wheelchair ramp at the 2nd entrance, manually operated	٠
wheelchair ramp at the 2nd entrance, electrically operated	0
Number of passenger seats (depending on door arrangement and batteries)	max. 45 + 8

Air-conditioning in the driver's cabin	
air-conditioning powered by passenger compartment unit	0
air-conditioning with electric drive	0
Air-conditioning in the passenger compartment	
air-conditioning with electrical drive	0
Ventilation system	
dual-function fans	•
dual-function fans Passenger compartment heating system	•
	•

Electric installation electrical installatio

electrical installation based on Can-Bus system



Driveline

Chassis

Kiepe IMC 500 (IGBT) 2-axle drive: 2 asynchronous 160 kW 4-pole motors	0
Traction batteries	
lithium-ion batteries (capacity depending on specification)	0
Pantographs	
manual pantograph	0
semiautomatic or automatic pantograph	٠

Front axle	
ZF independent suspension	•
ZF rigid axle	0
Drive axle	
ZF portal axle	•
Fourth axle	
ZF tag axle	0
ZF tag axle with active steering	•
Central lubrication	
central lubrication point - solid lubricating grease	•
central lubrication system with self-diagnostic - semi-fluid	0
lubrication grease	
Steering system	
RB Servocom	•
Hema	0
Braking system	
EBS (Electronic Braking System), ABS (Anti-Lock Braking System),	٠
ASR (Acceleration Slip Regulation)	
Suspension levelling system	
ECAS air suspension with leveling and kneeling function	•

ro	lin	o 24

stainless steel	•
Side panels	
removable side panels	٠
Door arrangement	1-2-2-2-0 2-2-2-2-0 1-2-2-2-2 2-2-2-2-2
Entrance height	
entrance height for all doors	320 mm
Wheelchair ramp	
wheelchair ramp at the 2nd entrance, manually operated	٠
wheelchair ramp at the 2nd entrance, electrically operated	0
Number of passenger seats (depending on door arrangement and batteries)	max. 68

Heating, ventilation and air-conditioning	Air-conditioning in the driver's cabin	
	air-conditioning powered by passenger compartment unit	0
	air-conditioning with electric drive	0
	Air-conditioning in the passenger compartment	
	air-conditioning with electrical drive	0
	Ventilation system	
	dual-function fans	•
	Passenger compartment heating system	
	electric 1-stage blowers	0
	water heating, electric water heater TJ40.3 (40 kW), convector-type heaters, 2-stage blowers	•

Electric installation electrical installatio

electrical installation based on Can-Bus system



Driveline

Chassis

Kiepe IMC 500 (IGBT) 2-axle drive: 2 asynchronous 160 kW 4-pole motors	0
Traction batteries	
lithium-ion batteries (capacity depending on specification)	0
Pantographs	
manual pantograph	0
semiautomatic or automatic pantograph	•

Front axle	
ZF independent suspension	٠
ZF rigid axle	0
Drive axle	
ZF portal axle	٠
Central axle	
ZF neutral axle	٠
Fourth axle	
ZF tag axle	0
ZF tag axle with active steering	٠
Central lubrication	
central lubrication point - solid lubricating grease	٠
central lubrication system with self-diagnostic - semi-fluid lubrication grease	0
Steering system	
RB Servocom	٠
Hema	0
Braking system	
EBS (Electronic Braking System), ABS (Anti-Lock Braking System), ASR (Acceleration Slip Regulation)	٠
Suspension levelling system	
ECAS air suspension with leveling and kneeling function	•
בכאס מון סטספרוסוטון שונון נפיפנוווצ מווע גוופפנוווצ ועווכנוטוו	-

ECAS air suspension with leveling and kneeling function

	Body structure	
	stainless steel	
	Side panels	
	removable side panels	
Bodywork	Door arrangement	
	Entrance height	
-	entrance height for all doors	
ш	Wheelchair ramp	
	wheelchair ramp at the 2nd entrance, manually operated	
	wheelchair ramp at the 2nd entrance, electrically operated	
	Number of passenger seats (depending on door arrangement and batteries)	
	Air-conditioning in the driver's cabin	
	air-conditioning powered by passenger compartment unit	
	air-conditioning with electric drive	
b 0	Air-conditioning in the passenger compartment	

lectrical stallation

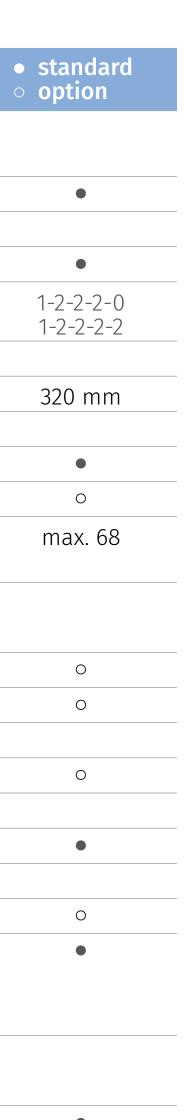
El

and air-conditioning	Air-conditioning in the driver's cabin	
	air-conditioning powered by passenger compartment unit	0
	air-conditioning with electric drive	0
	Air-conditioning in the passenger compartment	
	air-conditioning with electrical drive	0
	Ventilation system	
	dual-function fans	٠
	Passenger compartment heating system	
	electric 1-stage blowers	0
	water heating, electric water heater TJ40.3 (40 kW), convector-type heaters, 2-stage blowers	•

Electric installation

Trollino 24 MetroStyle

electrical installation based on Can-Bus system



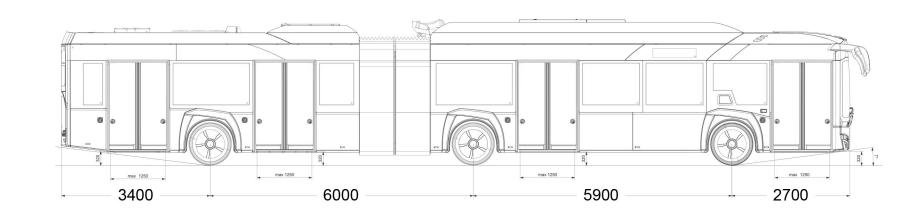
320 mm

0

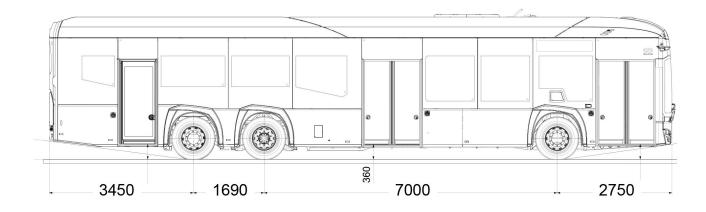
max. 68

Technical drawings

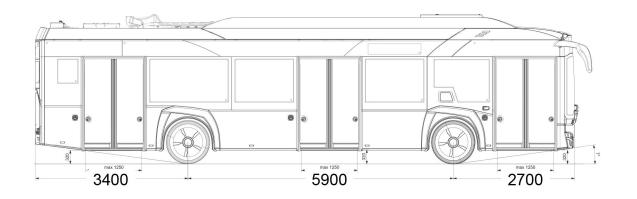
> Urbino 18 electric



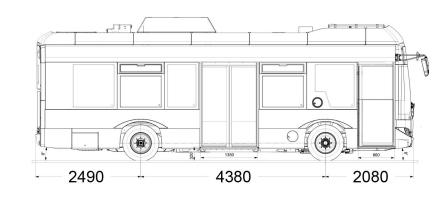
> Urbino 15 LE electric



> Urbino 12 electric



> Urbino 8,9 LE electric

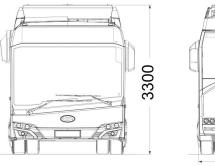




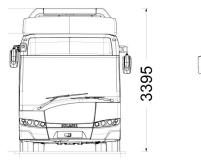










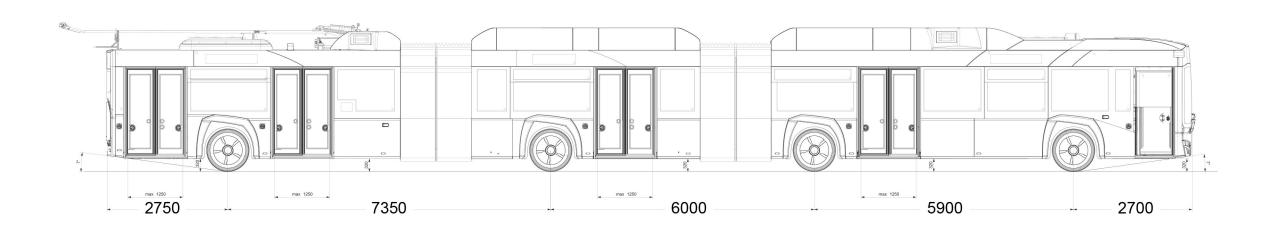




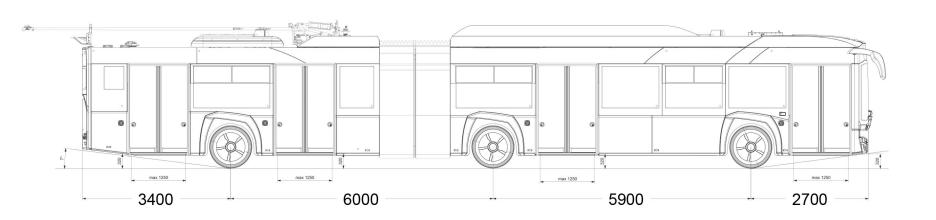
Zero emissions powertrains | Technical drawings | 12



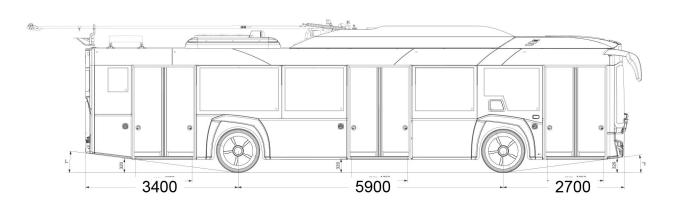
> Trollino 24

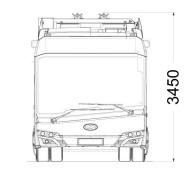


> Trollino 18

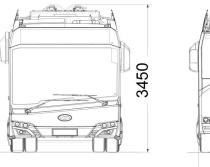


> Trollino 12

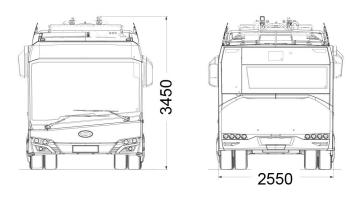






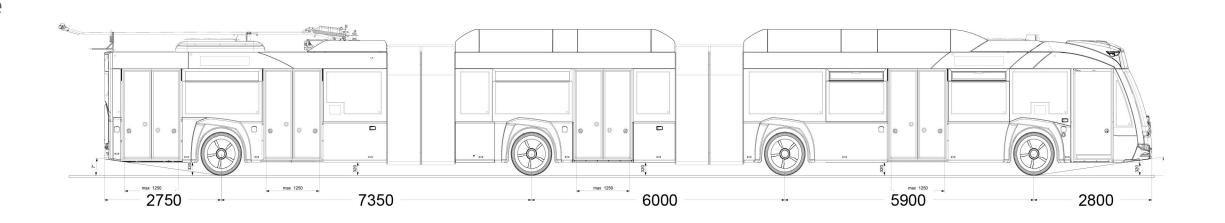




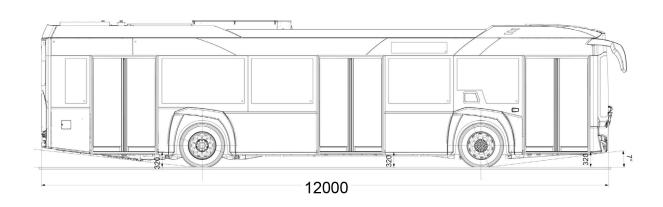


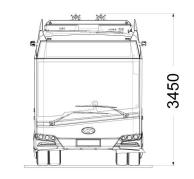


> Trollino 24 MetroStyle

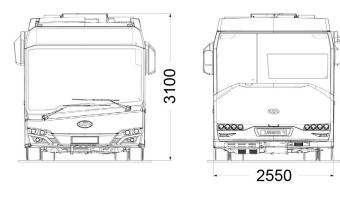


> Urbino 12 hydrogen





















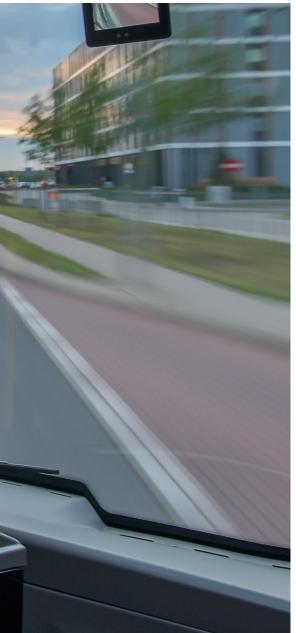


Solaris Urbino 12 hydrogen | demonstration vehicle







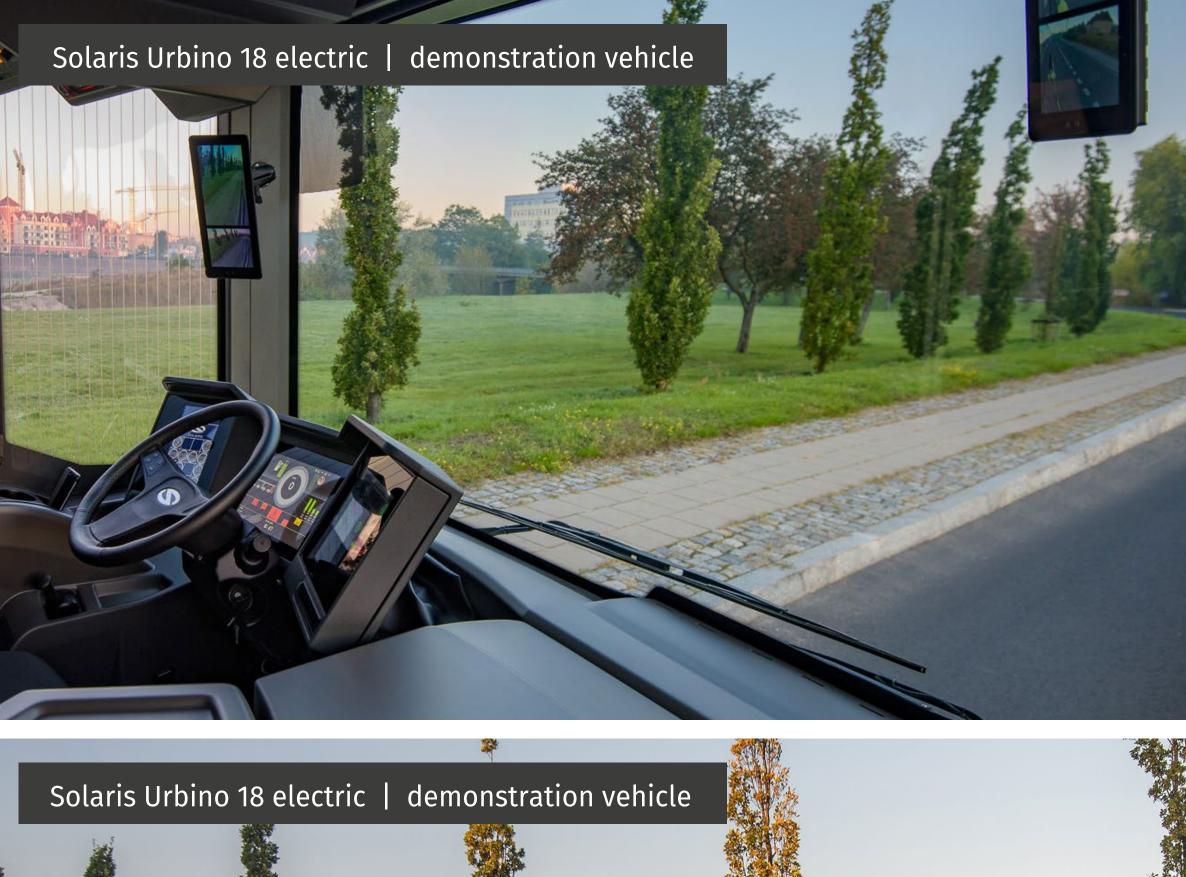


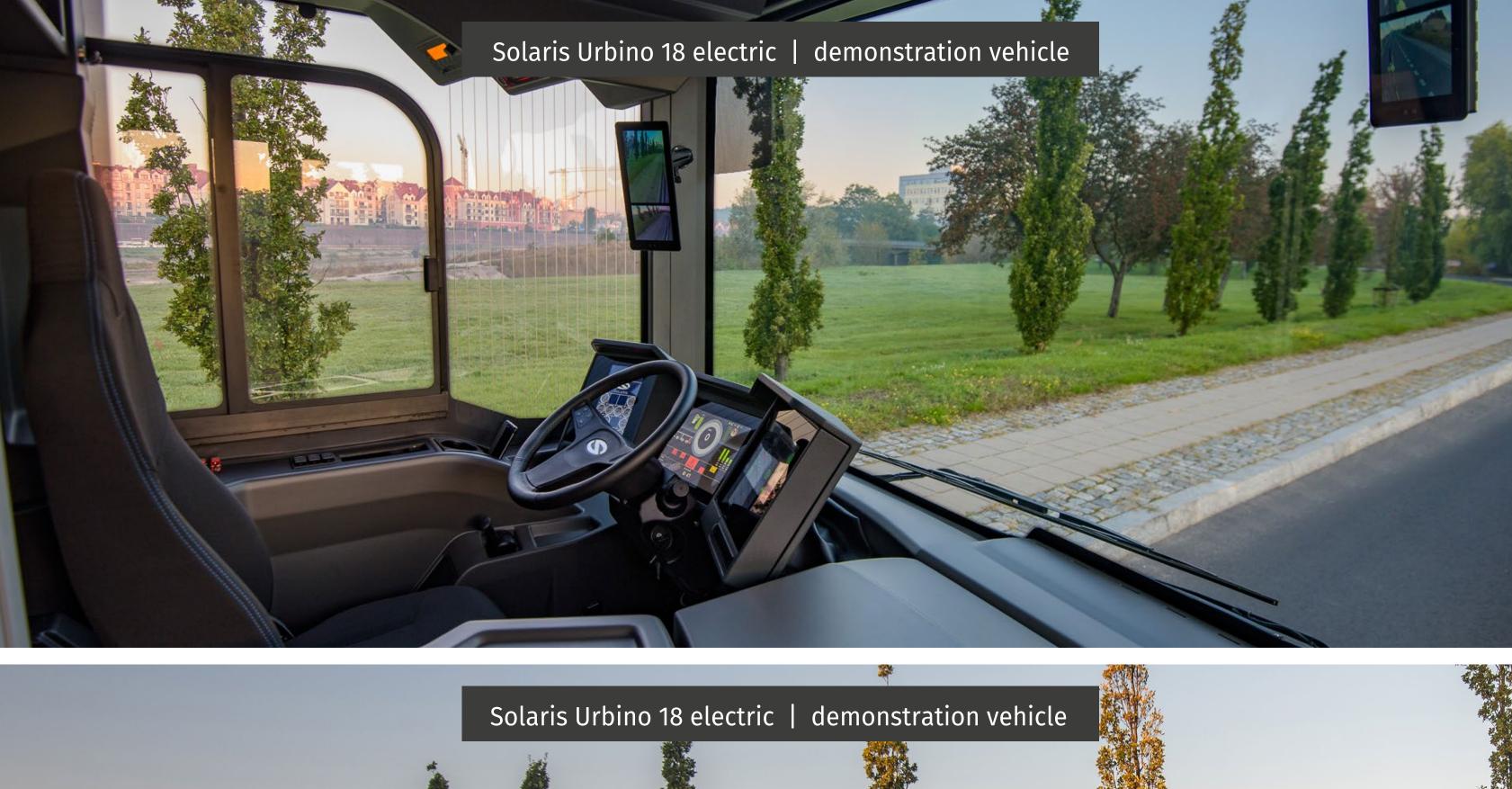
Solaris Urbino 15 LE electric | demonstration vehicle

Urbino 15 LE electric

P27 00P14









Solaris Urbino 18 electric | demonstration vehicle















Trollino 24 MetroStyle | demonstration vehicle





Solaris Bus & Coach sp. z o.o. ul. Obornicka 46, 62-005 Owińska, Poland Tel. +48 61 667 2333, Fax +48 61 667 2310 solarisbus@solarisbus.com, www.solarisbus.com 2020.10