



HEULIEZBUS

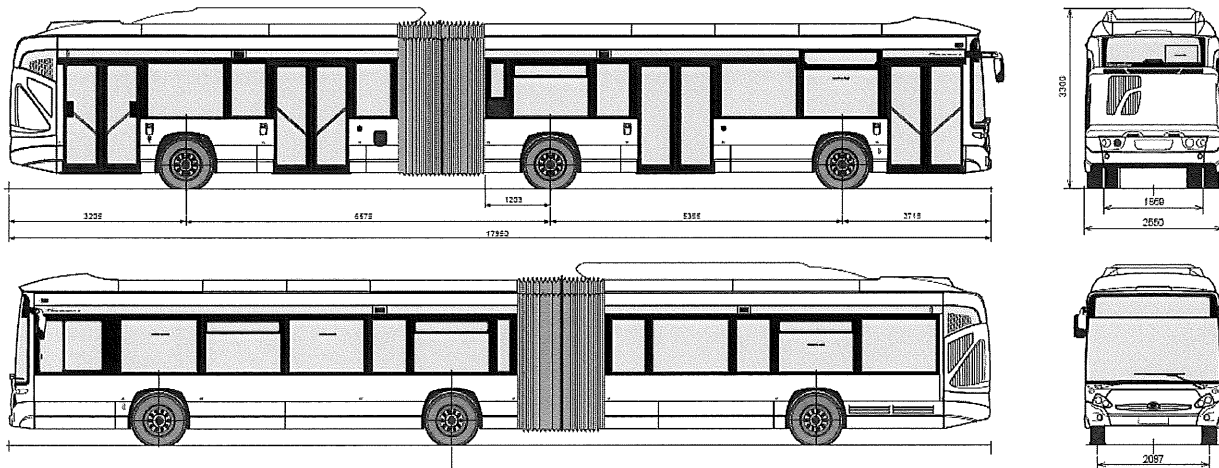
France – typical vehicle  
Technical data sheet

June 2010  
WEIGHTS

Gross kerb weight.....	according to equipments
G.V.W.....	30 000 kg
on front axle.....	7 245 kg
on middle axle.....	12 500 kg
on rear axle.....	13 000 kg

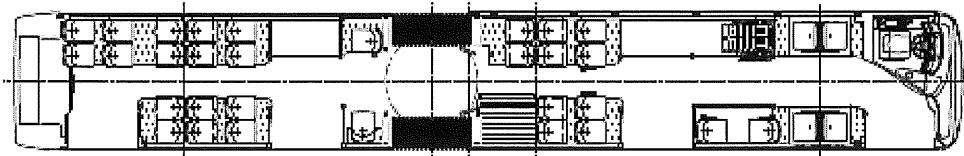
**DIMENSIONS**

Overall length.....	17.950 m
Front/Rear overhang.....	2.710/3.205 m
Front/Rear Wheelbase.....	6.120/6.675 m
Overall width.....	2.550 m
Total height, full load.....	3 300 m
Inside headroom	
front part.....	2.384 m
rear part.....	2.262 m
step-height	
front door.....	0.320 m
door2, 3 & 4.....	0.330 m
Width of front/centre/rear doors.....	1.200 m
Floor height in the middle.....	0.340 m
Ground clearance, under skirt.....	0.300 m
Front/rear tracking.....	2.087/1.870 m
Curbe to curbe turning radius.....	10.182 m
Wall to wall turning radius.....	11.650 m
Angle of	
attack/escape.....	7,4°/7,4°

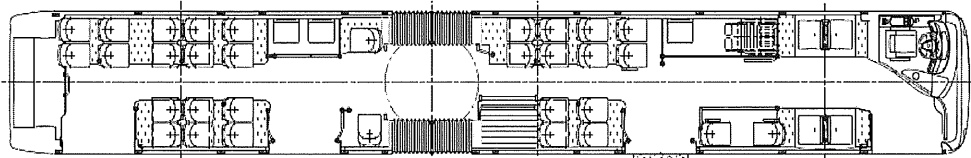


*Access*  
**BUS GX 427 HYB**

4 door-version



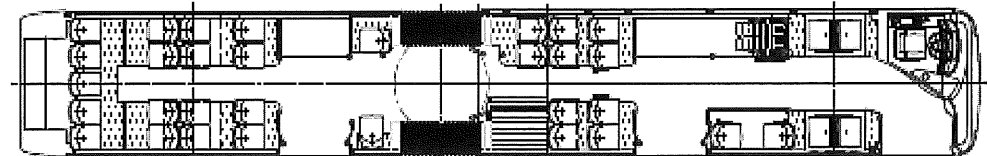
34 seats + driver + 120 standees + 1 Wheelchair



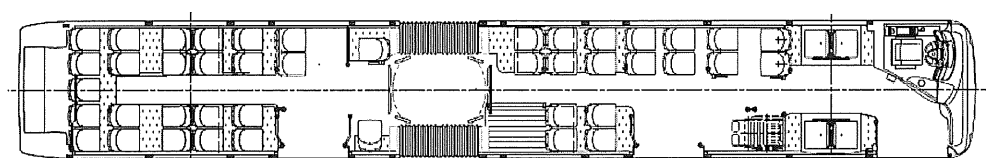
36 seats + driver + 99 standees + 1 Wheelchair



3 door-version



35 seats + driver + 110 standees + 1 Wheelchair



47 seats + driver + 113 standees + Wheelchair

For alternative layouts, please contact us.

## CHASSIS AND STRUCTURE

Self-supporting integral structure. Irisbus CS.S type steel chassis protected by electro-cataphoresis. Body structure consisting in 8 panels made of welded stainless steel sections and sheet panels. Assembling of the 8 panels to the chassis by bolting. 12mm thick plywood floor, protected by phenolic resin on both sides and wax-based resin on ground side.

### OPTIONS :

. Fire detector in engine compartment.	. Fire detector and extinguisher in engine compartment.
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## PAINT & DECORATION

Exterior paint : polyurethane lacquer finish (white, RAL 9010), without customising.

### OPTIONS :

. Custom finish	. Lettering and adhesives
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## EXTERIOR EQUIPMENT

Left and right rear-view mirrors. Integrated flag holders. Wheel nut guards on front wheels.

### OPTIONS :

. Self de-frosting rear-view mirrors . Side and rear advertising frames . Fender skirt	. Motor driven and self de-frosting rear-view mirrors controlled from driving position . Front and rear wheel caps . Wheels faired
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## EXTERIOR TRIM

Composite front and rear ends, roof and side panels. Bonded assembly. Gravel resistant wheel arches. Composite front and rear bumpers in 3 parts. Faired roof.

## GLAZING

TSA tinted panoramic laminated glass windscreen bonded on front face. Tinted curved rear window. Bonded side windows : right-hand side : 8 fixed single-panel windows and 1 tilting window / left-hand side : 8 fixed single panel windows, 3 tilting windows. Driver's window : sliding type in front part. TSA tinted glass all around.

### OPTIONS :

. Heat-reflecting windscreen . Sliding type side windows . Lower windows on platform . Glazed roof Lumi'Bus® on front car	. Heat-reflecting side windows . Right-hand side : 2 tilting window, left-hand side : 6 tilting windows.
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## ACCESS AND DOORS

3 inward swing doors. 2-leaf doors are air-driven. Both leaves of front door are double glazed. Parallelogram opening of the engine compartment cowl. Brakes applied by opening of the 2<sup>nd</sup>

& 3<sup>th</sup> door. Manual access ramp on the central door. Buzzer on doors.

### OPTIONS :

. 4 door version Floor mounted BIRCHER step-on sensors doors 1, 3 & 4 . Safety by photo-cells on doors . Passenger counting system on LCD screen Motor-driven access doors	. Brakes applied by opening of the front door . Electrical access ramp . 2 <sup>nd</sup> &/or 3rd sliding doors . Door opening by passenger . Self service . Front door 2 leaves independent opening
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## INTERIOR TRIM

High wear resistant floor covering up to plinths top. Laminated roof and side panels. Thermo-formed wheel arches. Polyester ceiling arches.

## DRIVER'S COMPARTMENT

Adjustable steering wheel (height and angle). Air-suspended driver's seat with adjustment control on right-hand side. VDV instrument panel with warning lamps and control display panel. Pivoting door, wall behind the driver with a glazed upper part. Interior rear-view mirrors. Left side and front sunvisor. Driver's individual light, luggage box and coat hanger hook.

## INTERIOR FINISHES

Front destination indicator with full opening door. TSA tinted glazed partitions on doors. 8 loudspeakers. « Emergency exit » hammers. Fire extinguisher location close to the driving position. 8 « stop requested » push buttons with acoustic warning. « wheelchair » space with padding and sensitive « stop requested » push button with acoustic warning.

### OPTIONS :

. Padding on platform . Additional « stop requested » push buttons . Video surveillance	. Fire extinguisher . Interior information frames . First-aid box (empty). . Driver loudspeaker
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## HEATING - COOLING

Front heating/de-frosting unit used for driver's compartment, air from outside or re-circulated air. 4-speed control (power : 17 500 W). 4 passenger heaters (forced air, 8 140 W) with 2 speeds controlled from the dashboard. 4 air extracting fans t. Insulated roof.

### OPTIONS :

. Passenger and driver's compartment air conditioning . Driver's compartment air conditioning	. Roof hatches (hand-actuated or motor-driven) Additional heater in passenger compartment
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## SEATS LAYOUTS

Seat layouts according to the number of doors. 4 seats dedicated to people with reduced mobility. Epoxy stanchions and handrails. Grey epoxy-painted seat legs.

### OPTIONS :

. Multi-branch stanchion on central platform. . Stainless steel stanchions and handrails.	. For passenger seats options (anti-vandalism upholstered, or other seat models etc) please contact us
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## DESTINATION AND INFORMATION EQUIPMENT

Preparation for front, rear or lateral destination indicator. 1-off illuminated « stop requested » sign box at the front. Preparation for illuminated strip display behind the driver. Preparation for acoustic and visual information.

### OPTIONS :

. Line stops map (single or double sided) near the ceiling . Lateral destination indicators. . Line number display	. Additional illuminated « stop requested » sign boxes . Front destination indicator . Acoustic and visual information of destination
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## ELECTRICAL EQUIPMENT

24 V nominal voltage. 2-off 12 V 225 Ah maintenance-free batteries mounted on a sliding tray located in an outside compartment at the left-hand side behind the articulation. Battery loading and engine start FENWICK socket. One 28.5 V 300 Ah static converter. Thermal circuit-breakers. Front lights : parking lights, dipped headlights, driving lights hinge fitted and turning lights. Rear lights : parking lights, stop lights, fog lights, reverse lights and turning lights. Marker lights visible from the driver's compartment thanks to exterior rear-view mirrors. 3-speed electrical windscreen wipers with intermittent speed. Windscreen washer with wiper mounted nozzles. Passenger compartment lighted by fluorescent overhead lights (staggered lighting possible). Door step lighting at door opening. Lighting of driver's compartment, paying position. Engine compartment lighting. Electrical cabinet located in the lower section of the wall behind the driver's seat and front left roof panel in trailer. Multi-function warning buzzer. Diagnosis system on board (1<sup>st</sup> level).

### OPTIONS :

. Front fog lights . flashing/stop indicators on the top of rear end. . Inside atmosphere lightings.	. Complete radio equipment . Monoring gong for pedestrian zone . 3 <sup>rd</sup> stop light
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## DRIVE LINE ENGINE

Engine position.....transversal, at the rear  
Mark.....IVECO TECTOR  
Emission level.....EEV  
Cycle.....4-stroke  
Bore.....102 mm  
Stroke.....120 mm  
Number of cylinders.....6 in line  
Cylinders lay-out.....upright  
Compression volumetric ratio.....17/1  
In feed .. common rail injection  
Overfeed.....exhaust turbocharger  
with intercooler  
Cooling system coolant circuit with thermostat, radiator  
located at the rear, silicon radiator hoses,  
Air filter.....dry  
Fuel.....compressed natural gas  
Lubrication.....oil circulation under  
pressure  
dual-cartridge oil filter  
Max. output..... 220 kW (300 HPDIN) at 2 500 rpm  
Max. torque.....1 050 Nm at 1250 rpm  
Electrical accelerator  
Sound proofing.....noise shield and  
encapsulation  
of engine  
compartment  
Emergency stop / sound alarm.....engine running  
Air + gearbox  
+engine water/oil  
+alternator failure  
+probe on coolant tank

### OPTIONS :

. Diesel pre-heater.

## SERIAL HYBRID STRUCTURE

- Integrated starter Generator (200 kW) produces electricity to charge the batteries and power the electric motor. Restart the Diesel engine for the « Stop & Start » function.
- Energy storage lithium-ion batteries (11 kWh), to recover kinetic energy when braking. Recharged by the electricity produced by the electric motor when decelerating. Power the electric motor when accelerating.
- Electric engine of 160 kW continuous and 200 kW drives the rear axle.
- Stop & Start function: Engine switch off when the vehicle is stopped.
- Braking energy recovery.

## FRONT AXLE

Independent front wheels.

## MIDDLE AND REAR AXLE

ZF reverse portal axle. Reducers in hubs. Base axle torque : 20 x 36.

## SUSPENSION

Constant height air suspension. 2 air bellows at the front, 4 air bellows in middle and at the rear. Constant floor height controlled by electrical levelling valves. Suspension high-position for driving over obstacles. . Kneeling system (72 mm stroke) on vehicle right-hand side, controlled from the driving position.

### OPTIONS :

. Anti-roll bar.

## STEERING

Hydraulic power assisted steering. ZF power steering box.

## COMPRESSED AIR

Pressure : 12 bars. 630 cm<sup>3</sup> twin-cylinder air compressor. Driven by sprockets and cooled by the engine circuit. Polyamide and copper piping, quick fittings. Single tower air dryer. Manual bleeding on air tanks. Cyclone air cleaner.

## BRAKES

Service brakes : air-controlled disc brakes. ABS braking system. Electric retarder realized by power engine with batteries recharge and coupled to the service brakes.  
Pneumatic parking brake actuated by lack of air, spring chamber on middle and rear wheels. Door brake : manually controlled temporary stop operating on the rear braking circuit. Parking brake and door brake controlled via separate circuits. Emergency braking operated by parking brake.

### OPTION :

. ASR.

## FUEL TANK

Capacity : 350 litres. Tank filling spouts on vehicle right hand side, in front of articulation and 25 litres of additive. Tank filling spouts on vehicle right hand side, behind the articulation.

## WHEELS AND TYRES

275/70 R 22.5 tyres at the front. Twin tyres on axle 2 and 3.

### OPTIONS :

. Rear towing eye bolts.

. Lose spare wheel or rim.