efficient driving technology

Specification and Functional Choice

Max User Weight	120 kg (100 kg for Proton wheels and clip style seat upholstery)
Seat Widths cm	32–46 cm (in 2 cm increments)
Seat Depths cm	34–48 cm (in 2 cm increments)
Front Seat Height	43–55 cm (in 1 cm increments)
Rear Seat Height	37–50 cm (in 1 cm increments)
Forward Centre of Gravity	Full 7.2 cm sliding adjustment from 3.2 to 10.4 cm
Seat Width Inset	0 cm, 3 cm (each side)
Lower Leg Length	Sliding adjustment: 22 cm to 52 cm depending on configuration
Knee Angle	100 or 92 degrees
Back Height	25 to 45 cm in 2.5 cm increments (3 × 5 cm adjustable backrests)
Back Angle	-31° to +15° in 3.5° increments
Wheel Camber	0, 3 and 6 degrees

Complete wheelchair weighs from just under 6.5 kg in 40 cm seat width and 40 cm seat depth, including wheels, footrest, brakes and side-guards and excluding cushion.

Complete wheelchair without Quick Release wheels weighs from 4.15 kg

Style and Technology Choice

Over 20 metal colours in any combination on frame, handrim and wheels.

6 upholstery choices including Electron ultra-light, silver/black vented and brown and grey 'Alcantara' vented.

Broad range of functional and style options and accessories.

Special configuration and design requests accepted through Built 4 Me programme

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HELIUM'

efficient driving technology i de r in v



reddot design award winner 2010



Helium encompasses the latest in cycle and automotive racing technologies for the 2010 decade. Designed and engineered from the latest ultra-light 'formed aluminium technology', custom moulding and high-tech options. Quickie gives you the lightest, most manoeuvrable 'mobility device' ever conceived.*

"lightviæight-rigidly e ti gwh te - i i gg for handling and performance



^{*} for a complete 'volume production' wheelchair in 40 cm seat width \times 40 cm seat depth including wheels, footrest, skirt guard and brakes and excluding cushion.

Helium is the lightest inert gas and also the lightest adult active wheelchair from just under 6.5 kg*!









"lightweight-lifting" et i gw h e ergonomic lifting and transfer

Lifting and transferring is a question of technique and weight. The Helium is ultra-light and can weigh under 4.2 kg without its Quick Release wheels. And the key is the technique. Helium possesses two ergonomic grab bars complete with rubber grip pads. These are positioned on the backrest bar for lifting and on the cross tube for vehicle transfers. Either way the balanced lift minimises the strain on the wrist and ensures repetitive lifting remains ergonomic.



We would like to thank our two models for their participation in this brochure:

Petra Sax-Scharl and Tarek Rasouli





"lightweight-handling" ti gw h te for confined spaces

The ultra-light Helium's rigidity, high tolerances and detailed ergonomic adjustments ensure it is the easiest to turn in confined spaces. The Helium offers you excellent size efficiencies between your dimensions and those of the chair. Just 17 cm additional width with Proton wheels.* Combine this with the 92 degree leg rest angle, and you can have a tight turning circle from 74.5 cms!**



- * with Proton wheels Helium is 8.5 cm (each side) wider than you are. So, if you have a 40 cm seat width you can squeeze through a 57 cm doorway.
- **for a 32 cm seat width with a forward (10.6 cm) centre of gravity adjustment.







"Choose your model"

In tailoring your Helium to your needs you can either upgrade the Neutron version with the options you desire, or if weight is your driving issue, opt for the Proton or Electron packs. See the Helium order form for more information.

	total weight from*	transfer weight from**
Pack Neutron***	9.0 kg	5.6 kg
Excellent lightweight choice containing all the special features for adjustment, rigidity and driving capability. Package contains adjustable backrest upholstery, aluminium sideguard and angle adjustable platform footrest.		
Pack Proton***	7.6 kg	5.3 kg
Save 1.4 kg in weight versus the Neutron pack with:		
Proton Quick Release Wheels	–1,150 grams	
Proton Quick Release Wheel Locks	-300 grams	
Pack Electron***	6.49 kg	4.15 kg
Save a further 1.1 kg versus the Proton pack with:		
Electron 'oval tube' backrest with hand grip	-220 grams	
Electron Back Upholstery	-300 grams	
Electron Seat Upholstery	-400 grams	
Carbon Fibre 'Slim-Style' skirt gaurds	–230 grams	

- * complete chair in 40 cm seat width \times 40 cm seat length including wheels, footrest, brakes, skirt-guards and handrims without cushion or additional options. Slight weight variations may occur with tyres, inner tubes and carbon skirt-guards.
- ** complete chair as above *without the Quick Release wheels for easy transfer.
- Please note: Helium total chair weights are cautiously rounded up as there are small variations in the weight of tyres, inner tubes, and carbon fibre.

Quickie Helium - Pack Proton



Proton Quick Release Wheels

Combined wheel, handrim, axle and Schwalbe Speedrun tyre combination that weighs just 2,250 grams (the pair) saving over a kilogram on traditional wheels.



Proton Compact Wheel Locks - Lightweight

Weighing only 132 grams a pair versus traditional wheel locks at 470 grams! Ergonomic, adjustable, minimalist and suitable for 'quad' use.

Quickie Helium - Pack Electron



Electron 'Oval' Backrest with Hand Grip and Back Upholstery

'Oval' formed backrest tubing complete with ergonomic hand grip and extremely lightweight materials and adjustment straps saving over half a kilogram. (Patents pending)



Carbon Fibre 'Slim-style' Skirt-guards

The lightest aluminium skirt-guards weigh in at around half a kilo a pair. The 'Slim-style' carbon fibre skirt-guards weigh just 330 grams a pair!



Electron Seat Upholstery

The Electron seat and back upholstery together weighs only 350 grams! It saves 708 grams compared to the Neutron upholstery.

Helium 'efficient driving technology' is legally protected to ensure it remains unique for you ...

1080006

EU Community Design Registrations	Official file No.
Oval frame and backrest cross tubes (aesthetics)	1080618
Castor Strut Assembly	1080733

Patent Registrations Pending

Rear Axle Assembly

Castor Strut Assembly PCT/EP2008/011015
Rear Height Adjustment Assembly EP09151773
Oval frame and backrest cross tubes (function) PCT/EP2008/011016
Formed aluminium tubing for strength & functionality PCT/EP2008/011017
Functional back angle adjustment EP09151779

Trademark Registrations

Helium® 6755185
Proton – note a pending application 7513765
Sopur® 4884755
Quickie® 192963

In addition there is a range of other patents in force on castor adjustments, upholstery and other features.



Helium driving innovations



Flow moulded oval aluminium tubing as used in the racing bike industry. Ensures all lightweight parts are stronger, fit without play and do not turn under load. Modern styling, extremely rigid and ultra-lightweight.



An oval ergonomic hand grip ensures balanced lifting of the chair from the cross bar for easy car transfers. An additional oval hand grip is available on the back rest as an option (see Electron pack).



Invisible castor fork adjustment. A patented mechanism that hides the fork angle adjustment inside the castor tube. Easy adjustment, less materials and smooth styling!



Lightweight back angle adjustment. Helium offers fixed, folding and folding/double locking backrests. Easy to adjust from –31 to +15 degrees to the frame. Less materials, less weight.



High Rigidity. As well as all regulatory tests the Helium has been tested against competitor products to ensure it is not just the lightest but also very rigid. Cross frame, front frame and wheel axle rigidity is best in class for lightweight wheelchairs.*



Light, infinitely height adjustable foot-plates: Platform, performance, tubular and hi mount foot-plate options are infinitely adjustable by two hidden screws for low weight and style. No clamps needed.

^{*}compared to Sunrise and competitor products available at time of launch.



Rigid axle assembly with height adjustment. Oval shapes, forged parts, wider clamps and 'cathodic coating' ensure extreme rigidity, silence and allows +/-1 cm fine tuning of rear seat height.



Quick, simple, rigid, light centre of gravity adjustment. Loosen two screws each side and slide the COG along the frame. No need to remove skirt-guards. 7.2 cms of infinite adjustment for fine balance.



Wheel camber options with optimal wheel alignment. Visual guide ensuring optimal wheel alignment (toe in/toe out) when you fit the 3 and 6 degree camber options. Zero degree camber available as standard.



Innovative clip upholstery, combined with lighter seating and back materials. This option provides the minimal solution for adjustable seating, is elasticated for profiling and still allows easy centre of gravity adjustment.



Innovative back upholstery Range. Choose Electron upholstery to save 300 g or opt for the 'three piece' vented or 'Alcantara' comfort upholsteries. These can be velcro – width adjusted for more 'curve' whilst ensuring the backposts remain well covered. Patented insert sections for positioning foam or Jay Spine Align inserts. Breathable, adjustable, comfortable and very stylish!



Ergonomic compact wheel locks. Minimalist, easy to lock. Can be screwed direct to the frame (on 0 and 3 degree wheel camber only). Also suitable for 'quads'. (Option)

