



Quality Tools for Smart Cleaning

# nLITE<sup>®</sup> HYDRO POWER

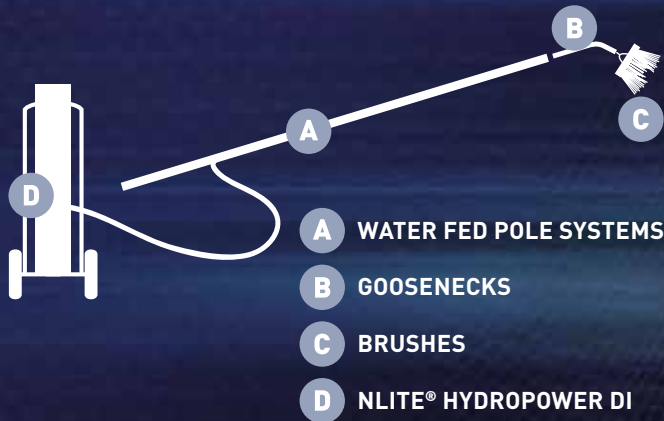
The Most Efficient Pure  
Water System Ever!





# nLite® Water Fed Pole System

## The perfect 4-Step-System



**nLite®** is a modular professional cleaning system. The individual components can be selected and put together to create a unique system to suit personal requirements.

- **nLite®** meets the highest standards in terms of comfort, value and cleaning results
- **nLite®** is the ultimate system for professional and No. 1 in Europe

Light, modular and easy to use. Our **nLite®** System sets a new benchmark in professional cleaning technology. The use of modern materials delivers perfect balance between weight and rigidity.



### BRUSHES

Superlight **UNGER** Brushes are designed to get into the smallest corners and lift dirt from surfaces with a highly effective scrubbing action. The **nLite®** Brush stock features cutting edge engineering and design, with a porous core and smooth solid exterior skin it offers enhanced structural stability and lighter weight than solid brush block manufacturing.



### GOOSENECKS

Strong carbon angle adapters enable you to achieve any working angle, keeping weight to a minimum.

### WATER FED POLE SYSTEMS

With 6 grades of material materials, the **nLite®** range is the perfect choice for every cleaning challenge and budget. It provides the perfect balance between weight and rigidity. "Made in Germany", of course.



# nLITE® HYDRO POWER

## As perfect as you can be: the nLite® HydroPower DI Filter

Inspired by our customers and packed with the latest design innovations, **nLite® HydroPower DI** Filters offer a wealth of benefits for professional window cleaners (and everyone who works or cleans with pure water).

### nLite® HydroPower DI

**nLite® HydroPower DI** Filters offer you a bundle of great benefits, delivered through innovative design features:

- **FloWater™ Technology**
  - **QuickChange™ Resin Bags**
  - **FastLock™ Opening**
- 
- **nLite® HydroPower DI** Filters exceed the highest requirements to efficiency, workflow organisation and comfort.
  - They are part of the **nLite® Cleaning System** that offers practical solutions to professionals.

### THE UNGER QUICK CHANGE™ RESIN BAGS

Replace the resin in seconds with our latest innovation - pre-packed, ready to use resin bags, designed to enhance filter productivity. See overleaf for details.



# nLITE® HYDRO POWER



Video:



Cleaning with  
Pure Water

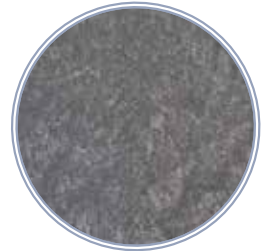
## The nLite® HydroPower DI System!

Advanced design of **nLite® HydroPower DI** Filters will help you to reduce operational costs and increase the profitability of your business.

Simple to operate and offering a hassle-free way of changing the resin, **nLite® HydroPower DI** Filters set a new benchmark in user-friendly DI filter design.



**FastLock™ Opening**  
Easy & quick opening of the vessel. Features pressure release valve



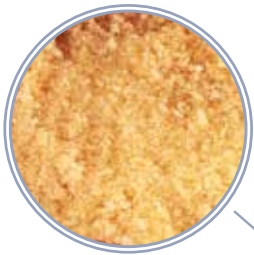
**PP NXT Material**  
Enhanced material by 50% glass fibre. Stronger, lighter and safer.



**QuickChange™ Resin Bags**  
Change the resin in seconds - anytime and anywhere! No more wasted resin.



**FloWater™ Technology**  
Ensures more efficient water flow through the entire vessel, improving resin efficiency and increasing its lifetime.





# Unrivalled Performance: Designed for Efficiency

Time is money. The innovative ideas that underpin the design the **nLite® HydroPower DI Filters** are inspired by this old business rule. Here's a rundown on how **nLite® HydroPower DI Filters** can help you and your team to achieve more in less time and at lower cost.

## EXCEPTIONAL VALUE FOR YOUR MONEY

Innovative flow distribution design with the **FloWater™ Technology** means that you can produce more pure water from a single resin refill compared to previous generation of DI filters.

- Reduced operational cost through less frequent resin replacement.
- Less waste, less time spent on changing resin.

## SAVING TIME

Time efficiency is another great benefit, offered by **nLite® HydroPower DI Filters**.

- The new **QuickChange™ Resin Bags** speed up the filter refill process by **up to 10 times\*** in comparison to standard DI systems.
- **FastLock™ Opening** enables you to open and close the filter quickly, with minimum effort.

\*Compared to standard DI systems (as UNGER DI400, DI140, etc.),  
Source: UNGER R&D

## COMPLETE FLEXIBILITY

- Monitor resin performance, using integrated TDS meter, and replace the resin only when it fully expires. No more wasted resin!
- Easy transportation of new and used resin.

The new **QuickChange™ Resin Bags** are an example how effective simple ideas can be. Pre-packed resin bags save time and simplify resin change process - no more time-consuming, inconvenient filling up of narrow vessels and no more spilled, wasted resin. Put simply, we have set a new benchmark for user-friendly design of DI filters.

## QUICK CHANGE™ RESIN BAGS



The new **QuickChange™ Resin Bags** facilitate fast and easy the resin on the spot - anytime and anywhere!

- Resin change process as simple as coffee pad change in a coffee machine - simple removed the used bag and insert a new one!
- Each bag is made from a water-permeable material and contains a pre-proportioned amount of Unger High Capacity Premium Grade Virgin Mixed Bed resin.

# nLite® HydroPower DI:

## A multitude of innovative features

### SIMPLE AND EFFECTIVE



#### FastLock™ Opening

- Easy and quick opening and locking of the filter.
- Safe, self locking mechanism.
- Features pressure release valve.



#### Removable cover

- Including resin mechanism to prevent loose resin from leaking with outgoing water flow.



#### TDS (Total Dissolved Solids)

- For instant measuring of the outgoing water hardness.



#### Standard hose fittings

- Reliable quick release connectors, suitable for most hoseslock type fittings commonly used on most water fed poles.

### COMPATIBLE WITH EXCHANGE RESIN

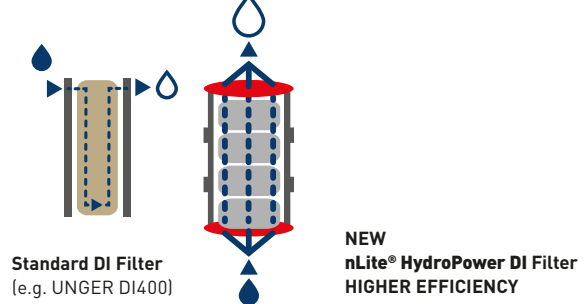
The performance of **nLite® HydroPower DI** is optimized for the usage with **QuickChange™ Resin Bags**, but it can also be filled with loose resin.

Whilst fully compatible with most ion exchange resins available on the market, for maximum efficiency we recommend **UNGER High Capacity Premium Grade Virgin Mixed Bed resin** due to its optimal density and moisture content.

Please refer to user manual for further details and instruction.

### FLOWATER™ TECHNOLOGY

The innovative water distribution system ensures more efficient flow through the entire vessel improving resin efficiency and increasing its lifetime.



### HYDRO POWER ECOFLO – THE WATER FLOW OPTIMIZER

**NEW**

Exclusively for nLite® HydroPower

| Pressure Bar | with EcoFlo* |
|--------------|--------------|
| 6            | 180 l/hour   |
| 5            | 150 l/hour   |
| 4            | 120 l/hour   |
| 3            | Do not use   |

\*with 25 m nLite Hose to pole

Depending on the incoming water pressure, using the **HydroPower EcoFlo** insert enables you to restrict the water flow to ideal for regular glass cleaning 120 - 150 L per hour.

Optimising the water flow allows you to use less pure water and extends the lifetime of a single resin refill in the **nLite® HydroPower DI Filter** by at least **20%** without compromising the quality of your work.

- Can be fitted, removed or replaced inside the water flow valves in seconds.
- EcoFlo fits any industry standard valves.
- Compatible with all **nLite® HydroPower DI Filters**, regardless of size.

# Customized in every size: The nLite® HydroPower DI Range

Choose from 3 filter sizes depending on the volume of pure water required and frequency of use to maximise your return on investment.

All filters are supplied complete with **QuickChange™ Resin Bags** and integrated **TDS metre** to monitor the incoming and outgoing water hardness.

## CUSTOMISED IN EVERY SIZE



**DI12x**  
Contains 1 **QuickChange™ ResinBag** (6l)



**DI24x**  
Contains 2 **QuickChange™ ResinBags** (12l)



**DI48x**  
Contains 4 **QuickChange™ ResinBags** (24l)

## FILTER PERFORMANCE

### Water Hardness

Filter productivity depends on several factors, such as filter size, water pressure, temperature and most importantly the level of water hardness. Water hardness is measured in ppm (parts per million) and varies by geographical area. The table below provides guidance on the expected nLite® HydroPower DI Filter performance, before the resin is spent and has to be replaced.

#### Small (nLite® HydroPower DI12...)



| Water Hardness* | Output in l | Working hours** |
|-----------------|-------------|-----------------|
| Soft            | > 1.570     | > 10            |
| Medium          | 470 – 1.570 | 4 – 10          |
| Hard            | 260 – 470   | 2 – 4           |
| Very Hard       | < 260       | < 2             |

#### Medium (nLite® HydroPower DI24...)



| Water Hardness* | Output in l   | Working hours** |
|-----------------|---------------|-----------------|
| Soft            | > 3.140       | > 20            |
| Medium          | 1.130 – 3.140 | 8 – 20          |
| Hard            | 670 – 1.130   | 5 – 8           |
| Very Hard       | < 670         | < 5             |

#### Large (nLite® HydroPower DI48...)



| Water Hardness* | Output in l   | Working hours** |
|-----------------|---------------|-----------------|
| Soft            | > 6.360       | > 42            |
| Medium          | 2.450 – 6.360 | 18 – 42         |
| Hard            | 1.490 – 2.450 | 10 – 18         |
| Very Hard       | < 1.490       | < 10            |

\* **Water Hardness:** Soft (< 100 ppm), Medium (100 – 250 ppm), Hard (250 – 400 ppm), Very Hard (< 400 ppm)

\*\* **Working hours:** based on 5 bar and usage of ECOFlo. All values based on 10 ppm as maximum for Pure Water quality.



Regional variances in water composition and mineral content may affect resin performance and pure water output. All values provided in the table above are for guidance only.

# nLite®

## The Evolutionary Pole Technology for Professionals

### THE POLE SYSTEM

The highest professional cleaning standards are even easier to achieve with an **nLite®** Pole System thanks to its perfect balance between weight and rigidity.

Depending on the type of material, the four section **nLite®** Master Pole has an extended length of up to 6.63 m (22 ft)\*, but greater heights can be easily reached and cleaned by adding two-section Extension Poles to the base of the Master Pole.

Each extension adds a further 3.41 m (11 ft) of extended length or 3 m (10 ft) on selected materials and you can add up to 4 Extension Poles to a Master Pole to reach the required height.

The number of Extension Poles that can be added depends on the pole material - pole sets on the opposite page are recommended for comfortable and efficient work at specific maximum heights, based on the ultimate pole material strength, rigidity and weight.

### CLAMPS

Easy and fast handed operation. Convenient Unger Logo shaped screw for adjusting the tension of the clamp without tools. Yellow clamps identify the next modular component to prevent unintentional separation. Every clamp features removable Hose Clips for securing the Hose along the length of the Pole to avoid tangling and improve safety.



### MASTER POLE – 4 SECTION TELESCOPIC POLE. (DIAMETER: 26 MM/29 MM/32 MM/35 MM)



The diameter of the Pole section you are holding will never exceed 35 mm, irrespective of the number of Extension Poles you add. The diameter of the first section of the Master Pole (holding the Gooseneck and Brush) is 26 mm. Wider than

industry average, it increases the rigidity of the Master Pole overall, reducing flex usually associated with smaller diameter, thinner tubes. This results in greater stability and control of the Brush, facilitating more efficient cleaning with less effort.

### EXTENSION POLE – 2 SECTION TELESCOPIC POLE. (DIAMETER: 32 MM/35 MM)



Greater heights can be easily reached and cleaned by adding two-section telescopic Extension Poles to the base of the Master Pole. Crucially, the Extension Poles don't add anything to the width, grip and feel of the Pole which always measures

35 mm in diameter – an optimum size that fits easily into the hands of the professional for quick and comfortable cleaning. Yellow visual warning area at the top of the extension pole helps to avoid unintentional separation from the master pole.



## WATER FED POLE SYSTEM

### MASTER POLE

|               |   |
|---------------|---|
| <b>Length</b> | 4 sections (Ø 26 / 29 / 32 / 35 mm) 6,63 m/22 ft – or 6,00 m/20 ft or 4,50 m/15 ft.   |
| <b>Clamps</b> | Easy one handed operation to change pole length. Yellow clamps identify the next modular component to prevent unintentional separation. |
| <b>Hose</b>   | The water hose can be fitted inside or outside the pole, using Hose Clips.  |
| <b>Endcap</b> | Made of durable plastic with rubber insert. Prevents accidental damage to the end of the pole. Features side aperture for hose.         |
| <b>Print</b>  | Complete specifications, including Length Deflection Ratio for measuring Pole rigidity.   |

### EXTENSION POLE

|                    |   |
|--------------------|---|
| <b>Length</b>      | 2 sections (Ø 32 / 35 mm) 3,41 m/11 ft – or 3,00 m/10 ft.   |
| <b>Application</b> | Add on up to 4 Extension Poles to Master Pole to reach the required height Number of Extension Poles depends on pole material.          |
| <b>Clamps</b>      | Easy one handed operation to change pole length. Yellow clamps identify the next modular component to prevent unintentional separation. |
| <b>Colour</b>      | Yellow visual warning area at the top of Extension Pole helps to avoid unintentional separation from the Master Pole.                   |
| <b>Print</b>       | Complete specifications, including Length Deflection Ratio for measuring Pole rigidity.   |

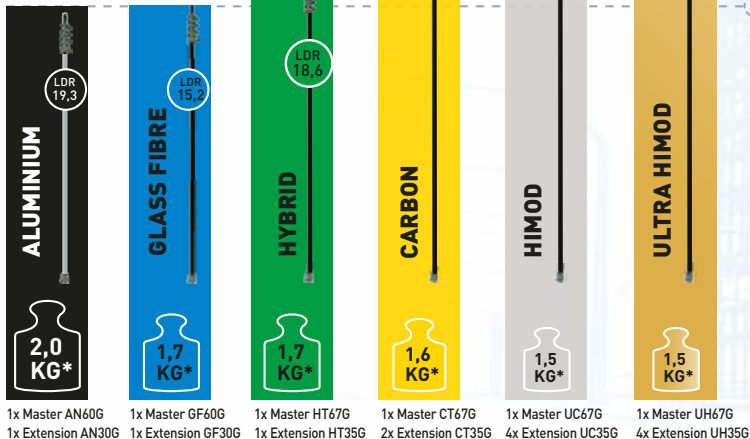
## POLE SELECTION GUIDE

MAX. 20 m / 6<sup>th</sup> floor

MAX. 13,50 m / 5<sup>th</sup> floor

MAX. 10 m / 4<sup>th</sup> floor

MAX. 9 m / 3<sup>rd</sup> floor



**i** Pole sets below provide the perfect balance between weight and rigidity for working at specific heights. All heights shown in this guide are maximum working heights for specific pole material.

**INFO:**

- Please consider local safety regulations on maximum working height permitted, as well as any restrictions on working at height due to adverse weather conditions.
- Your Approved **UNGER** Dealer can provide further advice on selecting the poles with optimal rigidity for your chosen length.

**i** **PURCHASING GUIDE**  
When selecting the pole, the following point have to be considered:

- required pole height – greater heights require poles with greater rigidity
- duration of the job – the longer you work, the lighter pole you need to reduce fatigue

**GREATER LDR VALUE = GREATER RIGIDITY!**

$$LDR = \frac{\text{overall length}^3}{\text{deflection} \times 7^2}$$

The LDR (Length Deflection Ratio) has been developed to provide a quantifiable way of measuring the perfect balance between length and rigidity of water fed poles.

# The nLite® Brushes and Goosenecks – Perfection in Every Detail

**Simply professional:** The nLite® Brushes and Goosenecks allow you to tackle any cleaning challenge with confidence. Choose between various sizes and models, depending on

the size, type and angle of the surfaces you're working on. There is also an innovative Solar Brush for efficient yet gentle cleaning of solar panels.

## BRUSHES

nLite® brushes are available in different shapes (rectangular, radius), with different bristles (nylon or boars hair) and in three sizes (27 cm, 40 cm, 60 cm). Plastic porous core with smooth solid skin on the outside – cutting edge engineering ensures structural stability and lighter weight than solid block manufacturing.

Lightweight, solvent resistant synthetic bristles are hard wearing and effective in removing even the most stubborn dirt.



### Brush Rotation

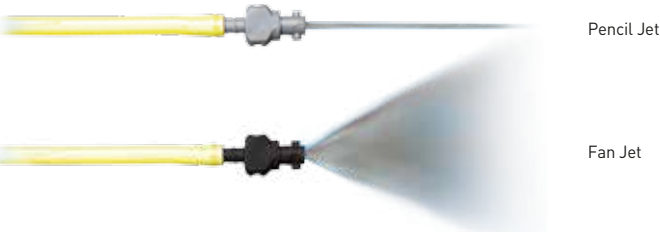
The brush can be rotated by 180°, using the built-in adapter. Changing the position provides greater flexibility and control over cleaning and rinsing different surfaces, angles and structures.



### Pencil and Fan Jets

Adding more jets allows you to clean larger areas quicker and better. The number of jets you can use depends on the level of water pressure – the higher the water pressure, the higher number of jets you can use at one time.

Use pencil jets for hydrophilic glass and fan jets for hydrophobic glass.



Pencil Jet

Fan Jet

## GOOSENECKS

**NEW**

The new nLite® Carbon Goosenecks made from one strong carbon tube: **25% less weight, 5 times stronger!**

Strong carbon fibre gooseneck attachments enable you to achieve any working angle, keeping weight to a minimum. Modern carbon material ensures long life and high rigidity. The angle adapters are available in sizes of 20 cm, 30 cm and 150 cm. Choose between the different versions depending on the size, type and angle of the surface on which you want to work.





# The nLite® HydroPower DI Kits



These three kits provide a complete, ready-to-go equipment for your professional cleaning job. Take a choice depending on the frequency of cleaning jobs, the size of glass area or

the working height. Each kit contains a **nLite®** Telescopic pole (different lengths and materials), a gooseneck, a brush, a hose and a **HydroPower DI** Filter with different capacity.



## STARTER KIT

### nLite® HydroPower DI STARTER KIT

**Content:**  
 DI12T **nLite® HydroPower DI** 6 l (incl. TDS Meter + Resin)  
 AN60G **nLite®** Alu Master Pole 6 m  
 FTG0S **HiFlo™ MultiLink** Angle Adapter  
 NLR27\* **nLite®** Radius Brush 27 cm  
 NL20G **nLite®** Hose 20 m

**Part No.**  
 DIK12

\*Colour might be subject to change



## ADVANCED KIT

### nLite® HydroPower DI ADVANCED KIT

**Content:**  
 DI24W **nLite® HydroPower DI** 12l (incl. TDS Meter + Resin + Wheels)  
 GF60G **nLite®** Glass Fibre Master Pole 6 m  
 FTG0S **HiFlo™ MultiLink** Angle Adapter  
 NLR27\* **nLite®** Radius Brush 27 cm  
 NL20G **nLite®** Hose 20 m

**Part No.**  
 DIK24

\*Colour might be subject to change



## PROFESSIONAL KIT

### nLite® HydroPower DI PROFESSIONAL KIT

**Content:**  
 DI48C **nLite® HydroPower DI** 24l (incl. TDS Meter + Resin + Cart)  
 CT67G **nLite®** Carbon Fibre Master Pole 6.63 m  
 CT35G **nLite®** Carbon Fibre Extension Pole 3.41 m  
 NLG20 **nLite® MultiLink** Angle Adapter 20 cm  
 NLR27\* **nLite®** Radius Brush 27 cm  
 NL25G **nLite®** Hose 25 m

**Part No.**  
 DIK48

\*Colour might be subject to change

# Product Overview



| Part No. | Base     | Height | Resin Bags | Wheels | Cart |
|----------|----------|--------|------------|--------|------|
| DI48T    | 30x31 cm | 116 cm | 4<br>(24l) | -      | -    |
| DI48C    |          |        |            | -      | ✓    |
| DI24T    | 30x31 cm | 59 cm  | 2<br>(12l) | -      | -    |
| DI24W    |          |        |            | ✓      | -    |
| DI24C    |          |        |            | -      | ✓    |
| DI12T    | 30x31 cm | 35 cm  | 1<br>(6l)  | -      | -    |
| DI12W    |          |        |            | ✓      | -    |

**QUICK CHANGE™ RESIN BAGS**

| Part No. | Info                             |
|----------|----------------------------------|
| DIB61    | 1 bag (6l) in air tight bucket   |
| DIB64    | 4 bags (24l) in air tight bucket |



**nLITE® BRUSHES**

| Part No. | Shape/Colour | Length | Weight Brush | Weight cpl. | Jets |
|----------|--------------|--------|--------------|-------------|------|
| NLR27    | angeled      | 27 cm  | 364 g        | 408 g       | 4    |
| NLR40    | angeled      | 40 cm  | 535 g        | 579 g       | 8    |
| NL27Y    | angeled      | 27 cm  | 364 g        | 408 g       | 4    |
| NL40Y    | angeled      | 40 cm  | 535 g        | 579 g       | 8    |
| NL60Y    | angelednkel  | 60 cm  | 872 g        | 916 g       | 12   |
| NL27A    | rectangular  | 27 cm  | 270 g        | 314 g       | 4    |
| NL40A    | rectangular  | 40 cm  | 408 g        | 452 g       | 8    |
| NL60A    | rectangular  | 60 cm  | 806 g        | 850 g       | 12   |



**nLITE® MASTER POLES**

| Part No. | Material    | Size ext. | Size short | Elements | Weight |
|----------|-------------|-----------|------------|----------|--------|
| UH67G    | Ultra HiMod | 6,63 m    | 1,87 m     | 4        | 1,5 kg |
| UC67G    | Hi Mod      | 6,63 m    | 1,87 m     | 4        | 1,5 kg |
| CT67G    | Carbon      | 6,63 m    | 1,87 m     | 4        | 1,6 kg |
| HT67G    | Hybrid      | 6,63 m    | 1,87 m     | 4        | 1,7 kg |
| GF60G    | Glass Fibre | 6,00 m    | 1,71 m     | 4        | 1,7 kg |
| GF45G    | Glass Fibre | 4,50 m    | 1,34 m     | 4        | 1,4 kg |
| AN60G    | Aluminium   | 6,00 m    | 1,71 m     | 4        | 2,0 kg |
| AN45G    | Aluminium   | 4,50 m    | 1,34 m     | 4        | 1,6 kg |



**nLITE® EXTENSION POLES**

| Part No. | Material    | Size ext. | Size short | Elements | Weight |
|----------|-------------|-----------|------------|----------|--------|
| UH35G    | Ultra HiMod | 3,41 m    | 1,91 m     | 2        | 0,7 kg |
| UC35G    | Hi Mod      | 3,41 m    | 1,91 m     | 2        | 0,7 kg |
| CT35G    | Carbon      | 3,41 m    | 1,91 m     | 2        | 0,8 kg |
| HT35G    | Hybrid      | 3,41 m    | 1,91 m     | 2        | 0,9 kg |
| AK081    | Hybrid      | 1,10 m    | 0,81 m     | 2        | 0,5 kg |
| GF30G    | Glass Fibre | 3,00 m    | 1,69 m     | 2        | 0,9 kg |
| AN30G    | Aluminium   | 3,00 m    | 1,69 m     | 2        | 1,1 kg |



**nLITE® GOOSENECKS**

| Part No. | Length | Weight | Material     |
|----------|--------|--------|--------------|
| NLG20    | 20 cm  | 96 g   | Carbon Fibre |
| NLG30    | 30 cm  | 102 g  | Carbon Fibre |
| NLG15    | 150 cm | 390 g  | Hybrid       |

**nLite® ONLINE CONFIGURATOR**

Build your personal nLite® System at [www.ungerglobal.com!](http://www.ungerglobal.com!)



For more information about pure water:  
[www.ungerglobal.com/...](http://www.ungerglobal.com/...)

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