

SOLA-TECS C

PHOTOVOLTAIC CLEANING SYSTEMS SINCE 2010



THE SOLA-TECS FOR FLEXIBLE USE

AN INVESTMENT THAT PAYS OFF.

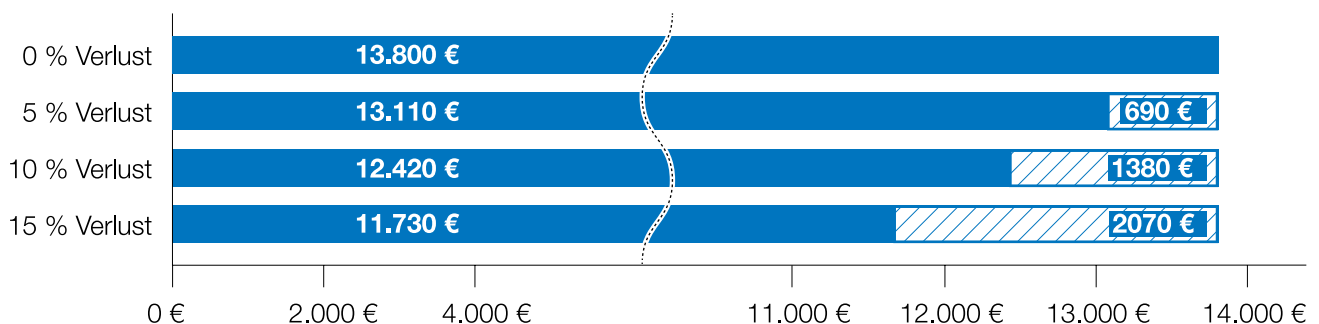
It is no longer a secret that solar and photovoltaic systems need regular cleaning. Almost every system needs to be cleaned regularly. After cleaning, the additional yield of your photovoltaic system amounts to between 3% and 30% (depending on the degree of soiling).

Particularly in the case of agricultural and industrial areas, and roads which carry a lot of traffic, heavy soiling is not uncommon. This means that the system produces less electricity and thus generates fewer feed-in tariffs. Only a clean system brings you full returns and reduces follow-up costs.



COST-BENEFIT CALCULATION OF A 30 KWP SYSTEM.

The basis of our example calculation is a system with 30,000 kWh and a payment rate of 0.46 cents/kWh (approx. €13,800 annually).



**TAKE ADVANTAGE
OF OVER 30 YEARS
OF EXPERIENCE
ON THE TOPIC OF
HIGH-PRESSURE WATER
TECHNOLOGY.**

WHAT DOES THE SYSTEM HAVE TO OFFER?

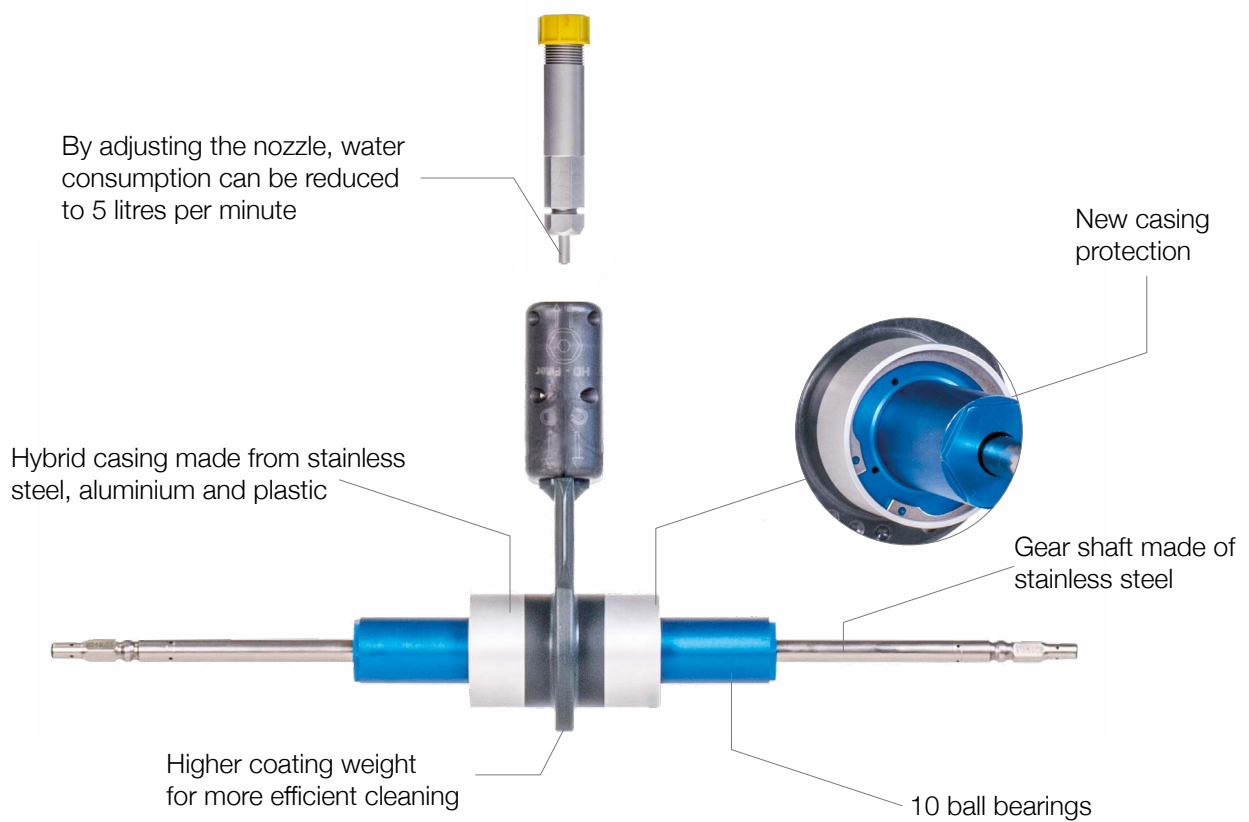
With SOLA-TECS C, Cleantecs offers a professional solution for cleaning and maintaining solar and photovoltaic systems. Motorless technology is used here, with brush rollers spun by a high-pressure cleaner. With their compact design, support weight and guidance via a telescopic lance, the mobile devices guarantee quick and easy cleaning of all photovoltaic systems. But the solar cleaners also achieve brilliant results in other areas, whether it's in glass and building cleaning or in winter garden cleaning.



EVEN MORE ROBUST

UNBRIDLED INNOVATION.

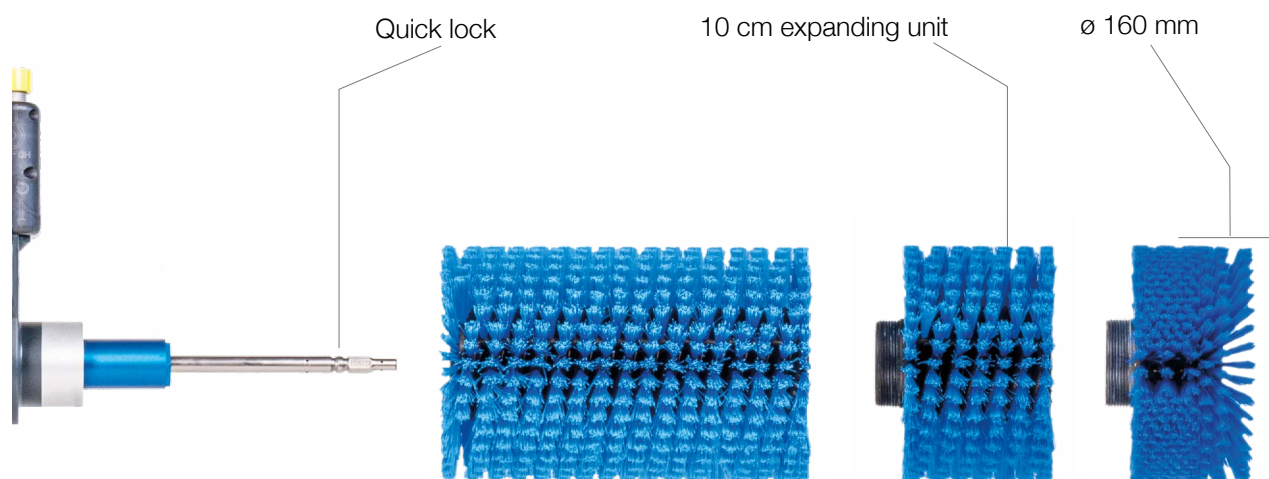
At the core of further development is the base unit, the SOLA-TECS C, which has been completely redesigned. During development, the focus was on improved quality and stability. The base unit now has robust hybrid casing made from a combination of stainless steel, aluminium and plastic. Water consumption can be cut from 7–10 litres per minute to up to 5 litres per minute by adjusting the nozzle. This is not only an ecologically valuable aspect, but also opens up new possibilities when it comes to the use of water filters such as osmosis- or DI resin filters.



**FIT FOR ANY
SITUATION**

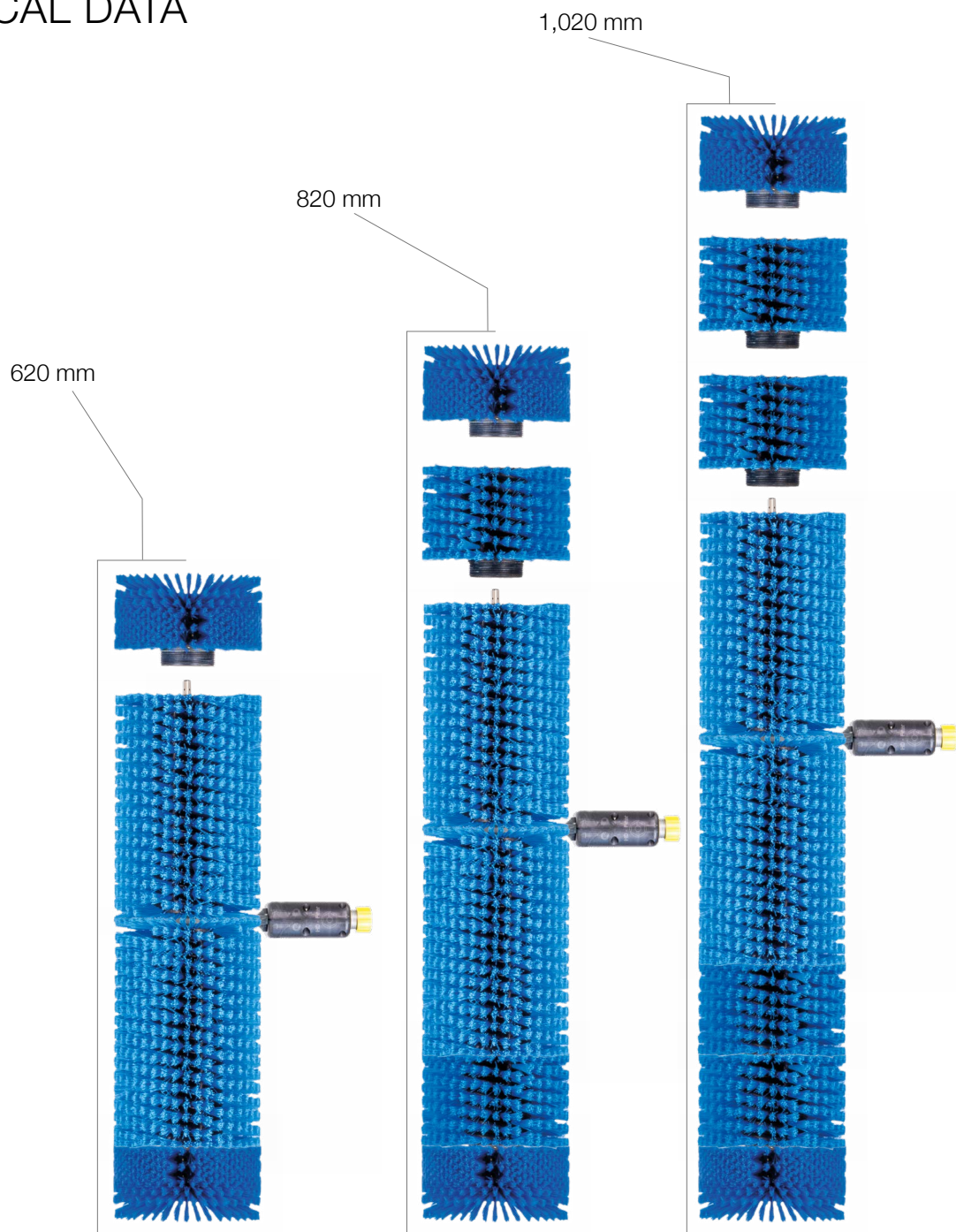
THE NEW SOLA-TECS C IS NOW EVEN MORE EFFICIENT.

A new bristle arrangement and a larger brush diameter of 160 millimetres bring significantly greater performance. The brush roller consists of individual units that are 10 centimetres wide. These allow the SOLA-TECS C to be made bigger or smaller as required. The user can adjust the brush roller to widths of 620–1,020 millimetres, based on local conditions.



SOLA-TECS C

TECHNICAL DATA



SOLA-TECS

C600

C800

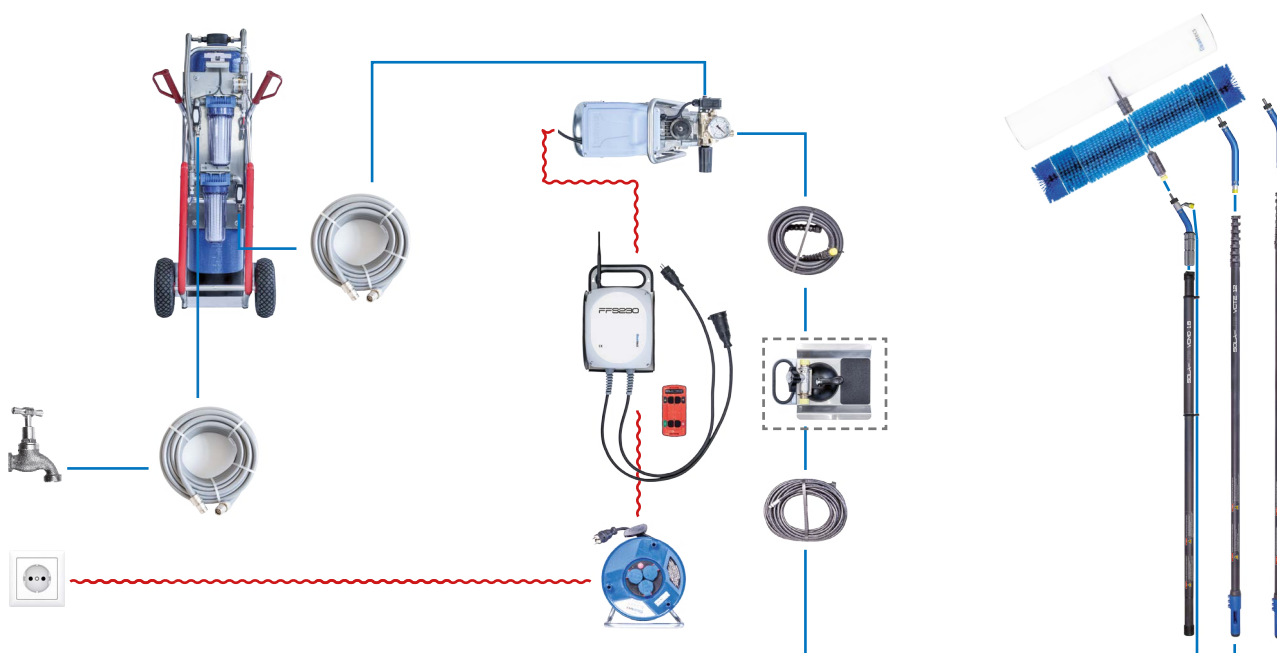
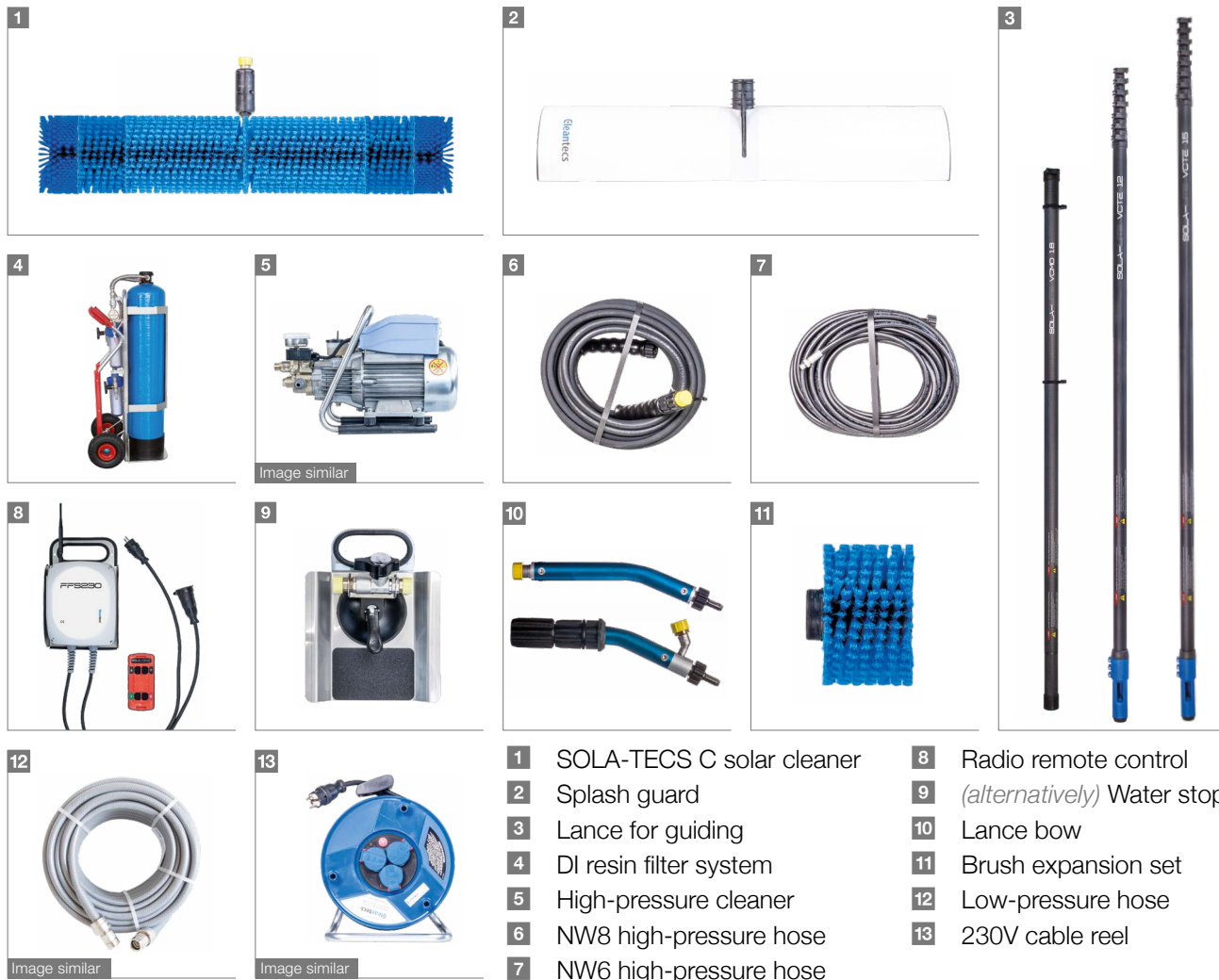
C1000

Cleaning rate	250 m ² /h	300 m ² /h	350 m ² /h
Working pressure	100 – 120 bar	100 – 120 bar	100 – 120 bar
Weight	3,960 g	4,778 g	5,600 g
Temperature max.	40 °C	40 °C	40 °C
water consumption	5 –10 l/min	5 –10 l/min	5 –10 l/min
Diameter	160 mm	160 mm	160 mm
Cleaning width	620 mm	820 mm	1,020 mm
Art. no.	0200953	0200955	0200956

THE SYSTEM

ALL COMPONENTS FOR OPERATION.

The SOLA-TECS system is a modular system and complete solution. This means that existing high pressure cleaners or water filter systems can be used for operation. Naturally, we offer all the necessary products. Depending on the requirements, we can put together any appropriate solution required. For example:



SOLA-LITE POLE SYSTEMS FOR YOUR PV AND SOLAR CLEANING.

Our huge range of SOLA-LITE pole systems up to 15 meters ensures that you can safely reach every part of your PV system. We use only carbon fibre poles, as they are significantly lighter than other materials and bend the least. Maximum stability for your safety.

TELESCOPIC LANCE

Our telescopic lances have an internal high pressure hose 25 meters in length. A rubber foot at the end of the lance protects the hose and lance from damage. The telescopic lance is available in two sizes.

To increase the contact pressure of the SOLA-TECS C, we offer a lance bow. The experienced user can increase their productivity even more with our swivel joint, which can be used to control the SOLA-TECS C horizontally during cleaning.



Lance bow to increase contact pressure



Isolator between the SOLA-TECS C and the lance



Rubber foot to protect the lance

Protected side feed for the high-pressure hose



MODULAR POLE

Fans of plug-in systems appreciate their advantages: great stability and low weight. The modular pole fully meets both these conditions. Together with the conical lock and the protective caps on each element, the MODULAR system represents the latest stage in the development of plug-in poles and clearly stands out from other systems on the market.

If you want to carry out all work professionally using a pole system and prefer plug-in systems, this is the best choice. Modular poles made from carbon are extremely light, stable and modular and weigh in at 520 grams. To use the SOLA-TECS C with the modular pole, you need a lance bow with a flow of water on the outside and the NW 6 high-pressure hose.

Experienced users can use the swivel joint here too.

Attachment for the
high-pressure hose



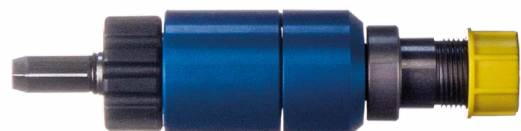
Lance bow to increase
contact pressure



SWIVEL JOINT

The SOLA-TECS C is easy to control using a swivel joint. It is a flexible connection between the brush and the lance bow. When you turn the rod, the brush angle changes. The advantage is that the final module row is not cleaned laterally but at an angle of up to 12°.

When cleaning the edge of the roof, there is always the risk of the brush going over the edge of the roof. Due to the long rod and the leverage forces which occur, it is then difficult to get the brush up again. This is exactly what the swivel joint prevents. You use it to slant the brush slightly and then clean the last module row.



In addition, the swivel movements allow sideways movement from module to module without any great physical exertion. This allows maintenance walkways to be bridged seamlessly. The swivel joint can be set to three swivel areas of 0°, 30° and 60°. This corresponds to an angle of 0°, 7° and 12° on the brush.

MATCHING DEVICES.

Our recommendation for the SOLA-TECS accessory system:

RADIO REMOTE CONTROL. FOR MORE SECURITY AT THE TOUCH OF A BUTTON

Our radio remote controls FFS230 and FFS400 have a radio module from ELCA at their core. ELCA has over 25 years of experience in the manufacture of safety radio remote controls. The entire concept of the radio remote control is adapted to meet the requirements of PV cleaning.

The rotating brush can be stopped at the touch of the button that interrupts the power supply to your high-pressure cleaner. The brush is restarted just as easily. The radio remote control offers you a long range, protection class IP69, and an additional shock protection.

Maximum operational safety, reliability and shock resistance make a radio remote control indispensable. The complete set consists of: Transmitter (AT), receiver (AR) and charging adapter. With an optionally available antenna, the range of the radio remote control can be increased many times over.



WATER STOP. THE INEXPENSIVE ALTERNATIVE

Ball valve for high pressure, mounted on a suction cup including a metal slide. As an alternative to radio remote control systems, the water stop enables the cleaning brush to be operated by interrupting the water supply. The suction cup with ball valve can be mounted directly on a PV panel or pulled behind it on a metal slide. Thus the water stop always and safely stays close by!



RESIDUE-FREE CLEANING WITH ULTRAPURE WATER

For residue-free cleaning you need “pure water”. Our resin filter instantly produces 100% “pure water”, making it ideal for the residue-free cleaning of photovoltaic modules.

The scope of delivery includes a transport cart with large rubber rollers and two 1 µm fine filters. These hold large contaminant parts in the inflow and resin components in the outflow. This ensures that the photovoltaic modules are cleaned without leaving any residue.

A TDS meter is installed to determine the water quality and is capable of measuring the conductivity value of the water at the water inlet and outlet with precision. A water meter is fitted for monitoring the flow rate.

If your mixed-bed resin is worn out, you can replace it yourself. For this purpose, we offer you a starter set with an auxiliary device, transport containers and reusable mixed-bed resin. You can, of course, also have the mixed-bed resin replaced by a service provider on site.



CLEANTECS IN USE WORLDWIDE



