

SolarMax Globe

The Customer Magazine of Sputnik Engineering AG



Green carbon footprints

The tyre manufacturer Michelin is building PV carports using SolarMax inverters

More flexible investment protection

New warranty options offer more flexible protection for SolarMax inverters

New low voltage guidelines in Germany

New requirements have been set in terms of inverters following the new low voltage guidelines. In the future, they must help to safeguard power supply operation.

SolarMax in the Middle Kingdom

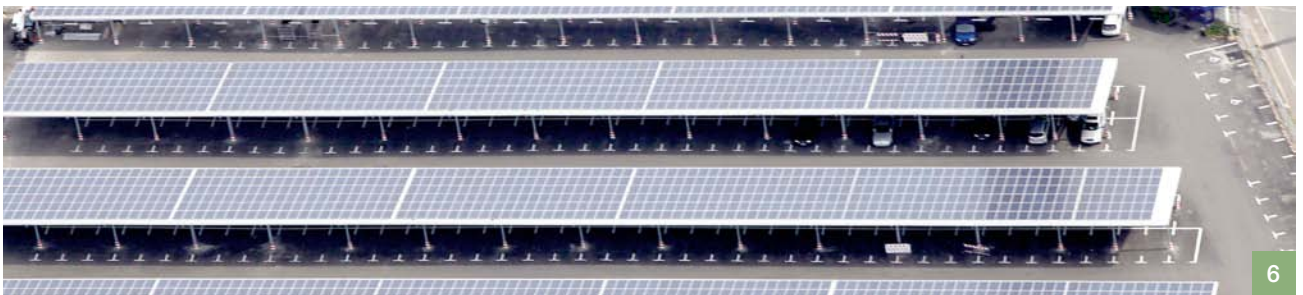
Sputnik Engineering expands in China with a new subsidiary in Shanghai

20 years and still going strong

Sputnik Engineering celebrates 20 years of existence



Contents



4 technology

New low voltage guidelines in Germany

New requirements have been set in terms of inverters following the new low voltage guidelines. In the future, they must help to safeguard power supply operation

6 solutions

Green carbon footprints on the road

Tyre manufacturer Michelin is building a PV carport using SolarMax inverters

8 solutions

Flexible investment protection

New warranty options offer more flexible protection for SolarMax inverters

9 market & trends

SolarMax in the Middle Kingdom

Sputnik Engineering expands in China with a new subsidiary in Shanghai

12 internal

20 years and still going strong

Sputnik Engineering celebrates 20 years of existence

Editorial



This year we are celebrating our 20th birthday. Since we started out, much has changed. Right at the start we only had a small team in a small office. Now, as one of the largest inverter manufacturers in the world, we employ more than 330 people at our Swiss headquarters in Biel/Bienne and at our subsidiaries and branch offices in Belgium, the Czech Republic, Germany, France, Italy, Spain and the UK. This year, another location is being added. We are entering the Chinese market.

The indications are positive that the promotion of renewable energy is once again gaining momentum. This is the only way in which energy that is safe, sustainable and low in carbon emissions all at the same time can be produced. As a pioneer in the solar industry, we will also be making a contribution for the protection and preservation of the environment in the future. In terms of volume, our sector is still in the initial phases with the goal of making an important contribution to the energy mix of the future.

In this magazine, you will find out all you need to know about our new markets, our new employees and new projects. In addition, we will also take a look back at 20 years of Sputnik Engineering.

We hope you enjoy reading this magazine.

Christoph von Bergen
Managing Director of Sputnik Engineering AG

The old concepts of enemies have disappeared. The Federal Environment Ministry has reformed the EEG (renewable energy laws) with the support of the solar power sector. Tyre manufactures are investing in solar power technology. Energy providers are sitting down with inverter manufacturers to develop new guidelines for improved grid integration. At this year's solar power symposium in Bad Staffelstein, Rhenish carnival music was heard in the bar for the first time instead of Frankish dixieland music.

Read how the new guidelines are driving on the development of solar power and why Michelin's green carbon footprint stands out.

Iris Krampitz
Press Relations Officer
Sputnik Engineering AG

New low voltage guidelines in Germany

New requirements have been set in terms of inverters following the new low voltage guidelines. In the future, they must help to safeguard power supply operation.

Germans are still going for solar power, despite the drop in feed-in compensation. The growing number of decentralised generation units which feed into the low voltage grid is, however, creating new challenges for the distribution grid and means that the technical guidelines and standards which had been in place have to be amended.

In July 2010, the Forum network technology / network operation (FNN) in the VDE drew up a draft code of practice: DE AR-N 4105 "Generating Plants Connected to the low-voltage network". This describes the minimum technical requirements for the connection and parallel operation of generating plants with the low-voltage network. The main points of the new guidelines are as follows: Generating plants should be involved in static voltage stability in the low-voltage network. They should stabilise the network, avoid voltage asymmetry and improve grid and plant protection.

Regulate active power and provide reactive power

In contrast to the previous requirements, the plants may not switch themselves off as soon as the grid reaches or exceeds a frequency of 50.2 Hz. Instead, inverters must reduce their active power in the event of overfrequency with the help of a characteristic curve in order to avoid short-term network overloads. There is an urgent need for action with regard to this as PV systems in Germany currently (spring 2011) feed in to the grid with a peak performance of 15 gigawatt. Disconnecting such a large amount of

power at one time can pose a risk to the stability of the grid and this therefore must be avoided.

In order to improve the capacity of the existing distribution network, plants with apparent power upwards of 3.68 kVA make a contribution to static voltage stability through the provision of reactive power. This way, unauthorized voltage increases at the feed-in point can be counteracted through the absorption of inductive reactive power by the inverter.

Measures which aim to rule out voltage asymmetries are also among some of the most important new developments. For example, PV systems which generate more than 13.8 kW are to be designed as three-phase alternating current converter systems which feed power into the outer conductor in a symmetrical fashion. This measure initially only has to be taken into account during planning. Obligations concerning technical implementation during operation will only apply as of 2012. SolarMax MT string inverters and all SolarMax central inverters already permit a symmetrical, three-phase solar power plant design.

No need for a switching device which is accessible at any time

Instead of a switching device with a disconnection function which is accessible at any time, the guidelines now state that generating plants must be equipped with type-tested protection equipment (grid and plant protection, network analyser (NA)). NA protection monitors main voltage and frequency and, in plants with apparent power

greater than 30 kVA, must be implemented centrally on the meter panel. With smaller plants that generate less than 30 kVA of power, the NA protection can be integrated into the inverter, as was the case before.

This is merely a brief look at the planned new requirements. The implementation of the individual requirements is due to be carried out in three phases. The definitive deadlines for each of these phases are still being discussed. The final version of the guidelines is planned for release by May and shall come into force in July 2011. The plan is to have a transitional period which shall run until the end of 2011. Within this period, both the new low-voltage guidelines and the old ones from 2001 shall apply.

"The new requirements will allow further development of PV power generation in the German low-voltage grid and will demonstrate that the development of renewable energy generation is possible, even with existing distribution networks," explains Michel Ryser, Product Management Engineer at Sputnik. "We will adapt our product range in accordance with the deadlines as soon as the requirements for the new low-voltage guidelines are defined. I am delighted that the cooperation between manufacturers and network operators in the FNN is so constructive and goal-oriented. The Forum network technology / network operation provides the opportunity for future-proof solutions to be found together and the new guidelines are the first results of this." ■



1 | No problems: SolarMax inverters work in perfect harmony with the First Solar FS Series 2 and FS Series 3 thin-layer modules. Now this has also been confirmed by the world's largest thin-layer module manufacturer.

First Solar and SolarMax are compatible

First Solar officially approves its modules for systems with SolarMax inverters

While crystalline modules can normally be combined with all inverters, this is not necessarily applicable to thin-layer modules – particularly when you combine these with inverters without transformers. The world's largest manufacturer of thin-layer modules, First Solar, officially certifies that the SolarMax inverters made by Sputnik Engineering are compatible with the cadmium-telluride modules of its FS 2 and FS 3 series.

In order to guarantee its modules, First Solar subjects all PV systems used in combination with its modules to its

specially-developed system design and application (SDA) process. Along with the location, the company also controls the technically correct installation, the proper design, and the operating conditions. With this process, the interaction with electrical components such as inverters plays an important role. The results of this quality control are high system efficiencies and economically working, ideally designed solar systems.

Inverters from Sputnik have been installed successfully with First Solar modules for years. With the official ap-

proval of all SolarMax inverter types, the SDA inspection has now been accelerated and this guarantees that the warranty is provided even during the planning stage. "We are very happy that First Solar, one of the world's most important solar module manufacturers, has now officially certified the smooth interaction with our SolarMax devices," says Hans-Georg Schweikardt, Head of Product Management with Sputnik Engineering "Just like us, the American module manufacturer also attaches great importance to high quality standards." ■



Green carbon footprints on the road

Tyre manufacturer Michelin builds PV carport using SolarMax inverters – it protects against wind and weather, provides shade and provides solar power. The new carport at tyre manufacturer Michelin, German headquarters in Karlsruhe is equipped with 3,500 solar modules. Since March they feed environmentally-friendly power with a total of 800 kW into the national grid.

Alongside four SolarMax 13MT string inverters and one SolarMax 30C central inverter, there are also five different SolarMax TS central inverters which together serve to convert the solar power that is generated into power compatible with the grid. SolarMax MT devices were used because of their multi-tracking capabilities. They are connected to the parts of the system which have different directions. The three MPP trackers of the

MT inverters allow systems which have different inclinations and orientations to also run at the optimum operating point.

The solar power carport was built by Solar-Energiedach GmbH based in Sembach, Rhineland Palatinate. A 998.2 kW solar power system was installed on the roof of the Michelin factory in Karlsruhe as early as the summer of 2010. On the 35,400 m² roof area, 4,340

solar modules generate power for 250 households. Two each of the SolarMax 50C, 100C and 300C central inverters convert the power for use in the national grid.

Solar-Energiedach GmbH, founded in 2005, plans, builds and operates grid-connected PV systems. With over 150 employees, the company focuses on high-class workmanship and quality



Michelin Carport, Karlsruhe system data

Power	807.09 kWp
Modules	732 polycrystalline modules from ET Solar, 2,793 polycrystalline modules from GE Solar
Inverters	SolarMax 13MT (4x), SolarMax 30C (1x), SolarMax 50TS (1x), SolarMax 80TS (1x), SolarMax 100TS (2x), SolarMax 300TS (1x)
Inclination and orientation	10° south, some south-east
Expected annual yield	900 kWh/kWp
Commissioning	22 December 2010

Michelin factory roof, Karlsruhe system data

Power	998.2 kWp
Modules	4,340 polycrystalline modules from LiteON
Inverters	SolarMax 50C (2x), SolarMax 100C (2x), SolarMax 300C (2x)
Inclination and orientation	20° south
Expected annual yield	940 kWh/kWp
Commissioning	30 June 2010

1 |

1 | Michelin is making efficient use of their roof areas and other existing facilities in order to conserve the environment with solar power.

components from renowned manufacturers. Solar-Energiedach has already constructed a large number of roof systems, including the PV system at the Fritz Walter Stadion, home of 1. FC Kaiserslautern.

“We have had great experiences with SolarMax inverters,” says Morten Stefan Lanzestiel, Managing Director of Solar-Energiedach based in Sembach. “The good quality and efficient price/performance ratio is what stands out for us.”

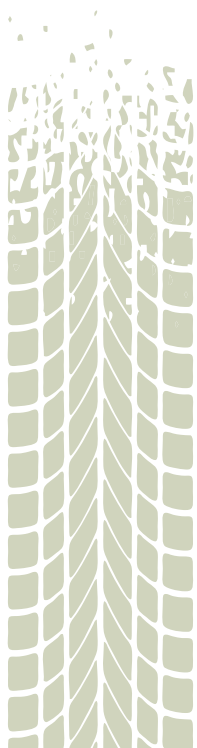
Michelin’s green carbon footprint

The tyre manufacturer Michelin is committed to the conservation of the environment on a large scale. Since 1992, vehicles have been saving energy with Michelin’s roll resistance optimised tyres. In 2005, Michelin created a collective indicator for environmental performance for sustainable environmental management: the Michelin Sites Environmental Footprint (MEF). Above all, the main pillars of the MEF are the reduction of pollutants, lowering energy consumption and cutting carbon emissions, all on a consistent basis. PV sys-

tems at the Michelin site help to save around 1,500 tonnes of CO₂ per year.

“We have made it an obligation of ours to keep the environmental effects of our sites as low as possible,” says Sven Windhausen, Head of Central Construction Management at Michelin’s German headquarters in Karlsruhe. “This means setting ourselves higher standards than those set by the law. Making use of existing areas such as the car park and the roof area is helping us to actively improve our CO₂ balance and preserve the environment.”

As a result, the company combined plans to renovate the employee car park with the idea of building a solar carport. But they didn’t just stop at the solar system. For additional sustainability of the project, energy-saving LED car park lighting makes for high visibility in the car park. The next planned step is the installation of an electric vehicle charging station. ■



Flexible investment protection

New warranty options for SolarMax inverters

Sputnik customers will in the future be able to extend their warranties for string inverters and central inverters to up to 25 years. With this step, Sputnik is highlighting the fact that the SolarMax brand stands as much for Swiss precision and quality as it does for high levels of efficiency and an excellent price/performance ratio. Each individual SolarMax inverter is subjected to comprehensive quality assurance procedures and tests. This means that Sputnik can guarantee that the devices stand up to the high Swiss quality requirements.

The five-year standard warranty for SolarMax string inverters can now be extended to a maximum of 25 years. This warranty includes technical support in searching for defects and the replacement of defective devices. SolarMax central inverter customers can also agree on extended warranties and choose between the “Full” and “Limited” options.

All customers who purchase SolarMax central inverters and do not wish to take advantage of any of the new warranty options are also given a one-year warranty extension under

the conditions of the Basic standard warranty when registering the devices.

Decide for yourself which one is best for you!

Maximum security

For maximum security, Sputnik is offering the “All-Round Carefree” MaxControl package which guarantees 97 % technical availability of the SolarMax central inverter per year. If availability unexpectedly falls below this, Sputnik provides compensation for the loss of yield. For the TS and TS-SV inverter series, Sputnik has increased the maximum lifetime of the package to 25 years.

Thanks to Swiss quality, Sputnik customers can be sure that they are purchasing high-quality products. Now, the perfect warranty package is available for any security requirements. ■

	String inverters			
	Basic	Full		
Duration for S and MT series	5 years	Overall warranty period of 10, 15, 20 or 25 years (including standard warranty Basic)		
Conclusion	–	can be concluded within the 5 years standard warranty Basic		
Extent of the warranty	Replacement service ⁽¹⁾			

	Central inverters			
	Basic	Limited	Full	MaxControl full-service package
Duration for S and C series	2 years (when registering, cost-free extension by 1 year)	Overall warranty period of 5, 10 or 12 years (including standard warranty Basic)		97% technical availability up to an overall duration of 20 years
Duration for TS and TS-SV series	2 years (when registering, cost-free extension by 1 year)	Overall warranty period of 5, 10, 15, 20 or 25 years (including standard warranty Basic)		97% technical availability up to an overall duration of 25 years
Conclusion	–	within 3 months upon installation		before installation
Extent of the warranty	Material, travel, and labour expenses	Material expenses	Material, travel, and labour expenses	System monitoring, material, travel and labour expenses
Loss-of-revenue compensation per day	–	–	–	€ 0.80/kW (winter) or € 1.80/kW (summer) Nominal AC power ⁽²⁾

⁽¹⁾ Replacement service
 – cost-free technical support
 – cost-free replacement with equivalent device in the case of device-related malfunctions or defects
 – delivery of a replacement device (normally within a period of 2 working days)
 – compensation of a replacement lump-sum during the warranty period

⁽²⁾ when falling below the annual availability

SolarMax in the Middle Kingdom

Sputnik Engineering expands into China with a new subsidiary in Shanghai



1 | The “Queen of the Orient” or the “Paris of the East”: Shanghai

From July 2011, Sputnik Engineering will also be marketing its SolarMax inverters in China. The newly-founded subsidiary is based in the most important port and industrial city in China: Shanghai. From here, Sputnik will cater for the ambitious Chinese PV market and continue unabated with its expansion strategy.

The Chinese government is planning to invest strongly in the development of renewable energy in its own country over the coming years. This shows China’s willingness to catch up with the rest of the world when it comes to renewable power generation, not least because the energy supply is not guaranteed for all of the population. For example, since 2009 the “Golden Sun” programme has been supporting the construction of solar

power plants which can generate over 300 kW. Up to 50 % of the costs of grid-connected systems are being covered by the state.

SolarMax inverters for any application

The Sputnik product range includes inverters which can be used with any size of system. Solutions are offered for any application, from SolarMax string inverters for small household systems and medium-sized system (from 1.8 to 15 kW) to central inverters (20 kW to 1.3 mW) for large-scale solar power plants.

“The Chinese market is gathering pace, and there is also a great deal of unex-

ploited potential in terms of inverters,” says Daniel Freudiger, General Manager of Sputnik Engineering International AG. “Our new Chinese subsidiary is therefore bringing our SolarMax inverter to China from this summer. We will position our products on the Chinese market with characteristic Swiss quality, reliability and efficiency.”

We will report in detail on the new subsidiary and the entry into the Chinese market in the next edition of SolarMax Globe. In addition, we will also introduce the Sputnik team working on location in Shanghai. ■

Sustainable energy concept

Elpo GmbH installs four large agricultural PV systems with SolarMax inverters in Italy

The view is impressive both from the air and from the ground. The surfaces of the PV systems shine the light back at you from two industrial systems and a total of four buildings at the Cereal Docks farm. Solar power is produced from a surface area of 22,217 m².

For the past 25 years, the northern Italian company has been going to great lengths when it comes to sustainable conservation and consumer protection in the harvesting, drying and processing of crops and oilseed. For example, in order to reduce their own greenhouse gas emissions and to minimise energy losses, the company already has a cogeneration system providing 5.2 mW of power at its production location in Camisano Vicentino between Vicenza and Padova. This is powered by vegetable oil and also produces waste heat alongside power which is used for industrial processes and by the absorption refrigerators to cool feeding stuffs.

Last year, Cereal Docks assigned South Tyrol energy technology specialist Elpo GmbH with the task of constructing four PV systems at its production locations of Portogruaro, Venice and Camisano Vicentino. With these systems, Cereal Docks are in keeping with the latest trends: the PV market in Italy is experiencing more of a boom than any other European country. The market researchers at IHS Emerging Energy Research (EER) consider Italy to be the strongest southern European market in the short term. “The strong feed-in tariffs in Italy has kick-started the Italian photovoltaic market and has aroused a great deal of interest from major players throughout the supply

chain,” says Reese Tisdale, Solar Research Director at EER.

8,000 solar modules produce 1.5 MWh of power per year in Portogruaro alone. Altogether, the three systems in Camisano Vicentino feed a further 1.5 MWh of PV power into the national grid. Elpo have put their faith in tried and tested SolarMax C central inverters from Sputnik in all of their systems in order to convert the direct current into grid-compliant alternating current. ■

- 1 | SolarMax central inverters convert the power generated on the roofs of the Italian agricultural company Cereal Docks.
- 2 | Cereal Docks specialises in the processing of crops and oil seed.
- 3 | Everything under control: MaxConnect plus generator junction boxes bring together the PV system wires.



1 |



2 |



System data Portogruaro

Output / surface area	1,605.615 kW / 11,685 m ²
Modules	7,975 polycrystalline modules from Heckert Solar
Inverters	SolarMax 300C (3x), SolarMax 100C (1x), SolarMax 50C (3x)
Inclination and orientation	5° south and 5° north
Expected annual yield	1,538,000 kWh
Commissioning	August 2010

System data Camisano Vicentino building D

Output / surface area	299.88 KW / 2,029 m ²
Modules	1,428 polycrystalline modules from Heckert Solar
Inverters	SolarMax 300C (1x)
Inclination and orientation	20° south
Expected annual yield	321,000 kWh
Commissioning	August 2010

Camisano Vicentino building E

Output / surface area	696,795kW / 4,980 m ²
Modules	3,399 polycrystalline modules from Heckert Solar
Inverters	SolarMax 300C (2x), SolarMax 30C (1x)
Inclination and orientation	5° south and 5° north
Expected annual yield	667,000 kWh
Commissioning	August 2010

Camisano Vicentino building F

Output / surface area	484.005 kW / 3,460 m ²
Modules	2,361 polycrystalline modules from Heckert Solar
Inverters	SolarMax 300C (1x), SolarMax 80C (1x), SolarMax 30C (1x)
Inclination and orientation	5° south and 5° north
Expected annual yield	474,000 kWh
Commissioning	August 2010



**20 years Swiss Quality
and Experience**

20 years and still going strong

Sputnik Engineering celebrates 20 years of existence

Sputnik Engineering has been developing, producing and marketing SolarMax solar inverters for two decades. These years of experience in the photovoltaic sector have made the company a byword for high levels of reliability and efficiency.

In 1991, Christoph von Bergen and Philipp Müller founded the owner-managed Sputnik Engineering AG. As a “spin-off” of the engineering academy in Biel/Bienne, they introduced the world’s first three-phase central inverter with fully-digital control and regulation. Today, Sputnik employs 330 employees at its headquarters in Switzerland and its offices in Germany, France, Italy, Spain, Czech Republic, Belgium and the UK. The company’s entry into the Chinese market is just around the corner too. With the foundation of the first subsidiary outside of Europe, Sputnik is continuing its expansion strategy at pace.

“Over the period of 20 years, Sputnik has developed extremely well and has come from being a small Swiss company to being an international company with 330 employees,” says Christoph von Bergen, Managing Director and owner of Sputnik Engineering. “The years of experience that we have is

not just reflected in the quality of our products, but also in the skills of our employees, the comprehensive and competent service, the great proximity we have to our customers and the brilliant customer relationships we maintain. I am very proud of what we have achieved.”

This year, the Spanish subsidiary has a reason to celebrate. At the Genera energy and environment exhibition in May, Managing Director Fernando Sanchez Garcia’s team held a party to celebrate the subsidiary’s 5th birthday. At the Intersolar 2011 trade fair in Munich, Sputnik invites its customers to a big birthday party.

After 20 years, it’s a good time to take a step back and look at what’s been achieved from a different perspective. Three Swiss artists will be displaying their pictures and interpretations of Swiss quality and solar energy on the housing of SolarMax MT string inverters.

So, all that’s left to say is
Happy Birthday! ■



Sputnik Engineering milestones

- 1991** Foundation of Sputnik Engineering AG in Biel/Bienne
Introduction of the first ever three-phase central inverter with full digital control and regulation onto the market
- 1994** Development of the world's first inverter without transformers
- 1995** Development of an intelligent load share technique to increase the efficiency of central inverters
- 1998** Introduction of the All-Round Carefree MaxControl service package with remote monitoring and reaction guarantee onto the market in Switzerland
- 2001** Foundation of the Sputnik Engineering GmbH subsidiary in Stockach (Baden Württemberg) for sales in Germany and customer service. (2008 German subsidiary moves to Neuhausen auf den Fildern)
- 2003** Development of the first modular device concept for string inverters
- 2004** Company moves into the former home of the watch manufacturer Rolex in Biel/Bienne. Expansion to 50 employees
- 2005** The 1500th central inverter is installed on the basis of quantity, Sputnik is a world leader in this area
- 2006** Introduction of the SolarMax web portal for internet-supported monitoring and the presentation of solar power systems
- 2006** Foundation of the subsidiary Sputnik Engineering Ibérica S.L.U.
- 2007** Foundation of the subsidiary Sputnik Engineering Italia
- 2008** Sputnik found a subsidiary in Saint Lazare, Paris (2010 French subsidiary moves to Saint-Priest, near Lyon)
- 2008/2009** Opening of production locations in Port and Bözingen (near Biel/Bienne, Switzerland)
- 2010** Foundation of Sputnik Engineering International AG in Biel/Bienne for development of marketing in countries where no subsidiary is present, in order to improve flexibility and customer proximity in these markets too. Opening of branch offices in Brussels and Prague
- 2011** Opening of an affiliate in London and the foundation of a subsidiary in Shanghai, China

The new SolarMax website



Modern, clear and informative

Be it the SolarMax string inverters or central inverters or the MaxComm data communications solutions; everything has its place on the new Sputnik Engineering website. The new, clearly laid-out navigation system provides you with the desired information about each product without needing time-consuming searches. Technical data, product presentations or warranty conditions can all be found with just one click.

The modernised downloads area clearly lists all product brochures, operating instructions, device documentation and certificates. The current editions of the SolarMax Globe customer magazine can also be downloaded from here in .pdf format. Through the drop-down menu, the desired documents can be downloaded in a variety of languages with one click of the mouse.

The online portal is, as before, in a variety of languages. The intuitive page navigation system means that you can change to another language at any time. Using the new full text search function MaxSearch, visitors can also find the information they require directly and without any complications.

The new website with its modern and fresh layout also tells visitors about Sputnik's history, the company philosophy and

the international distribution network. As Sputnik Engineering is always looking for new employees, a Jobs section is essential. www.solarmax.com is definitely worth a visit. ■



Help with any questions

Sputnik offers its customers a comprehensive range of services

Whether it's training courses, maintenance or trade fair dummy models, Sputnik customer services does not just support its customers before or whilst you purchase a SolarMax inverter, but also for a long time afterwards. Its services comprise training courses, after-sales customer services, technical sales support and marketing services.

Training courses

For installers and traders, end customers and journalists: Sputnik holds courses on a regular basis in which you are able to learn more about inverters and data communications. For example, you can learn how to construct a solar power system with SolarMax devices in an optimal way or what needs to be observed when communicating data. The courses take place either in the trainings centre at the company headquarters in Biel/Bienne, at a subsidiary or on site with the customer

directly. Individual training courses are guaranteed.

Technical sales support

Sales support provides customers with support as early as the planning phase of a PV system. Sputnik makes its wealth of technical experience available, consults system planners and installers, develops solutions and helps during implementation.

After-sales

If a SolarMax inverter has been installed, after-sales caters for perfect operations. Sputnik has the right warranty package ready for any kind of security requirements in order to protect the investment of the customer. There is a replacement service for string inverters and if necessary skilled SolarMax technicians take care of central inverters on site. An international, quick and simple call centre can respond to customer enquiries by telephone. Comprehensive information,



support and downloads concerning the entire product portfolio are also available on the newly-designed website (www.solarmax.com).

Marketing services

Sputnik has a range of marketing services available for their customers; from exhibitions and open days to involvement in exhibitions. Presentation materials, posters, documentation and displays round off the service offer to make for a professional appearance. ■

New employees in Neuhausen and Lyon

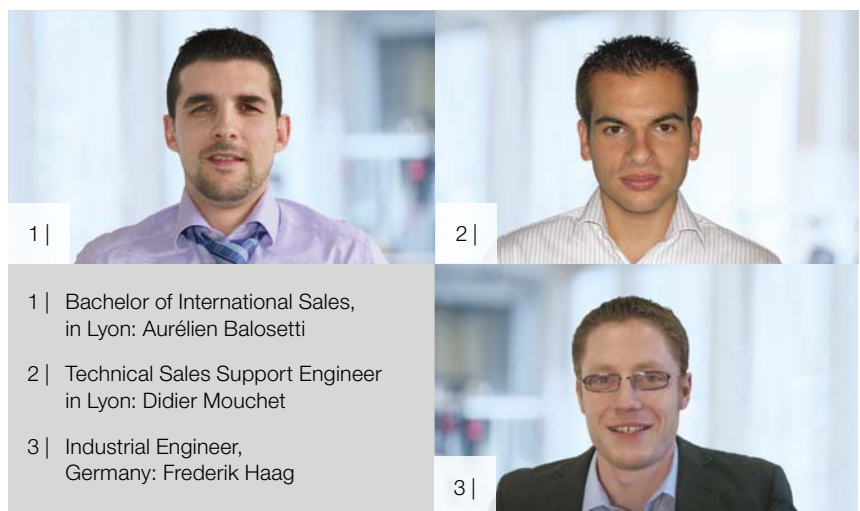
Sputnik Engineering expands the marketing and support sections

In the French subsidiary Sputnik Engineering France S.A.R.L. in Lyon, Aurélien Balosetti has recently been developing the sales & marketing section. "I have a strong belief in the bright future of solar power," says the Bachelor of International Sales, giving the reason for his change of employment.

Didier Mouchet responds to customer enquiries by telephone as a Technical Sales Support Engineer. In addition, he supports French customers in on-site support and organises customer training courses.

Frederik Haag has been working in Neuhausen for a couple of months. The

Industrial Engineer has strengthened the marketing team at the German subsidiary of Sputnik Engineering GmbH. ■



1 |

2 |

1 | Bachelor of International Sales, in Lyon: Aurélien Balosetti

2 | Technical Sales Support Engineer in Lyon: Didier Mouchet

3 | Industrial Engineer, Germany: Frederik Haag

3 |

Subscription

- I would like to receive "SolarMax Globe" regularly. Please send me the next issues free of charge. I can cancel at any time.

Family name _____ Country _____
First name _____ Phone _____
Company _____ Fax _____
Street _____ Email _____
Postcode / City _____ Date, signature _____

by fax to: + 41 32 346 56 09 or by surface mail to: Sputnik Engineering AG, Höheweg 85, CH-2502 Biel/Bienne



Headquarters

Sputnik Engineering AG
Höheweg 85
CH-2502 Biel/Bienne, Switzerland
Tel. + 41 32 346 56 00
Fax + 41 32 346 56 09
info@solarmax.com

Sputnik Engineering Italia S.r.l.
Giussano (MB), Italy
Tel. +39 0362 311 625
info-it@solarmax.com

Sputnik Engineering International AG
Branch Office Benelux, Brussels, Belgium
Tel. +32 2 535 77 29
info-benelux@solarmax.com

Subsidiaries

Sputnik Engineering GmbH
Neuhausen, Germany
Tel. +49 7158 986 19 0
info-de@solarmax.com

Sputnik Engineering LTD
Shanghai, People's Republic of China
Tel. +86 21 6182 6798
info-cn@solarmax.com

Sputnik Engineering International AG
Branch Office United Kingdom, London
Tel. +44 208 973 2680
info-uk@solarmax.com

Sputnik Engineering Ibérica S.L.U.
Madrid, Spain
Tel. +34 91 710 04 27
info-es@solarmax.com

Sputnik Engineering International AG
Biel/Bienne, Switzerland
Tel. +41 32 346 58 00
info-international@solarmax.com

Imprint

SolarMax Globe is published three times a year and is available free-of-charge from Sputnik Engineering AG.

Publisher:

Sputnik Engineering AG, www.solarmax.com

Editor:

Press office Krampitz, www.pr-krampitz.com

Layout:

weiss communication + design ag, www.wcd.ch

Photo credits:

All photos by Sputnik Engineering AG except: Solar Energiedach GmbH PV (main picture, p. 2, p. 6), First Solar, Inc. (p. 5), Elpo GmbH (p. 10, p. 11)

All trademarks are recognised even without expressed identification. Subject to technical modifications. We assume no liability for incorrect information.

Copyright 2011 for all contributions rests with Sputnik Engineering AG. All rights reserved. Reprints only with the written approval of the publisher.