

Energy Monitoring & Digitalization for a Smarter Grid

Smilics Product Overview

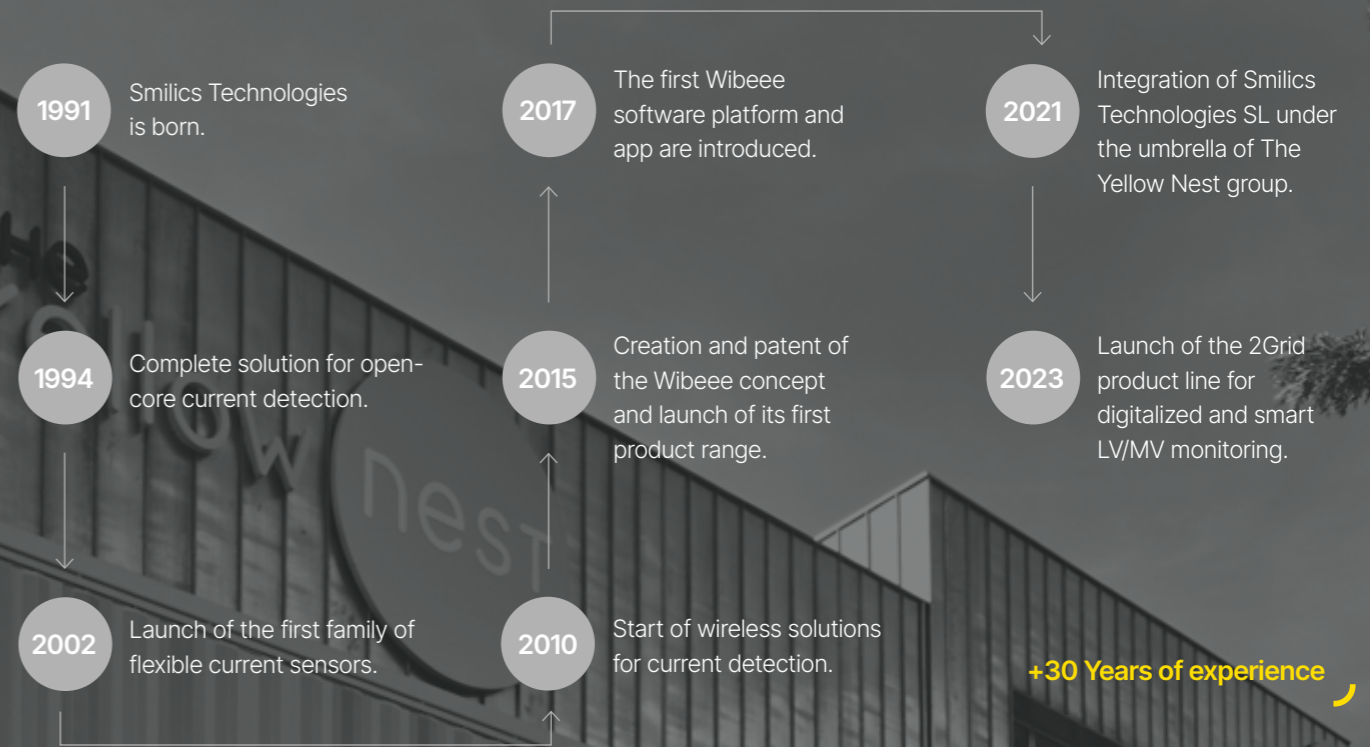


About Smilics Technologies

Smilics Technologies, part of the global Yellow Nest group, specializes in advanced measurement and monitoring solutions for low- and medium-voltage secondary substations, supporting DSOs and utilities in more than 80 countries.

With over 30 years' of experience, we design and manufacture high-performance hardware and software that enable precise control, fault detection, and optimization of electrical distribution networks.

Based in Terrassa (Barcelona), our in-house R&D and manufacturing teams ensure the highest quality and reliability, accelerating the digitalization of the electrical grid through robust, field-ready solutions.



+30 Years of experience

+600K

devices installed worldwide

+150K







substations monitored

+95%

of our solutions are manufactured in Europe



Our portfolio includes advanced hardware and software solutions designed to make energy digitalization simple, smart, and accessible.

Software	 Wibeee Nest	 Ready2Grid
Meters	 Solutions for monitoring management of industrial, tertiary and domestic facilities	 Solutions for monitoring LV substations
Current Sensors	 Split Core Current Transformers	 Rogowski Coils

What We Do

At Smilics Technologies, our mission is to lead energy digitalization for a more sustainable future. To achieve this, we design and manufacture advanced solutions that enable the transition from sensing and metering to cloud-based asset management.

Our technologies serve sectors such as residential, commercial, industrial, and electricity distribution, helping energy retailers, industries, and utilities digitalize their networks from medium to low voltage. Our portfolio is built around the following three product lines that address different stages of the energy ecosystem.

For every energy need, there's a **Smilics solution.**

wibeee

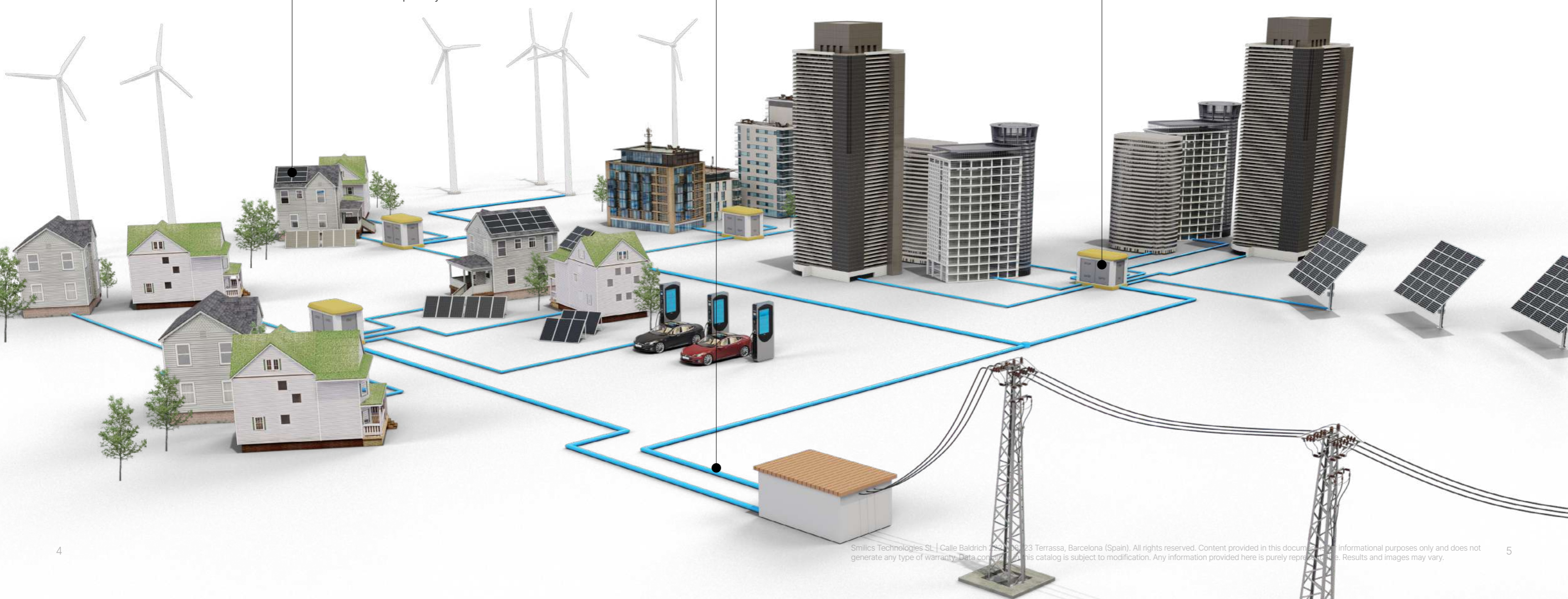
Energy monitoring devices that allow customers to manage their consumption and visualize real-time data from a centralized repository.

sensors

Rogowski coils and current transformers designed to meet diverse needs, featuring a split-core design that allows installation without supply interruptions.

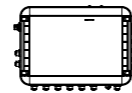
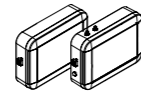
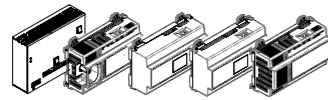
2grid

Real-time monitoring solutions that deliver accurate insights to digitalizing and optimize low-voltage grids.



Devices Portfolio

2grid



1. 2Grid Solution

Modular

CommPack

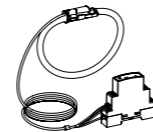
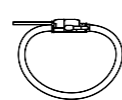
CommPack+

Description	Five different devices each designed to meet specific needs in secondary substation	Compact, all-in-one devices for complete monitoring and data collection in any type of transformer substation.	An advanced solution that converts measurement data into actionable intelligence, enabling smarter and more efficient grid management.
Devices	Gate, Feeder, Bulker, Green, BCPS	PM1, PM4, GM4, GMX	PQS6
Installation Type	Electrical cabinet	Indoor ground secondary substations & outdoor pole-mounted substations	
IP Rating	IP40	IP65 & IP67	
Installation	Suitable for electrical cabinets	Ideal for compact spaces and outdoor setups, such as pole-mounted substations.	
Supply Voltage	Requires 24V external power supply	Self-powered from phases	
Power Quality (IEC 61000-4-30)	○	○	● Class S
N° Feeders monitored	Up to four	Up to eighteen	Up to twenty-two
Ethernet 10/100 Base Tx	●	●	●
LTE/PLTE 4G Connectivity	○	●	●

General Information

Communication

sensors



2. Rogowski Sensors

Magnetic Flex

C Flex / C Flex Pro

AM Flex

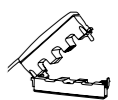
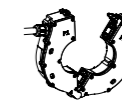
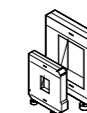
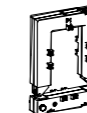
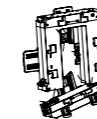
DIN Flex

Primary nominal current	N/A	N/A	N/A	100A / 1kA / 10kA	100A / 1kA / 10kA
Secondary output	100 mV	76 mV	300 mV	1,28 V f.s.	1A
Accuracy class	0,5-A1	1-A1	0,5S-A1	1-A1	1-A1
Window dimensions:	Ø70 mm Ø120 mm Ø200 mm	Ø150 mm Ø170 mm Ø260 mm Ø350 mm Ø380 mm	Ø90 mm Ø240 mm	Ø170 mm Ø350 mm	Ø170 mm Ø350 mm

Electrical Features

Measurements

sensors



3. Trafo Sensors

Push

TP

WG

Loop

STP

SC3

Primary nominal current	50 - 5000 A	50 - 5000 A	30 A	100 - 2500 A	100 - 1000 A	125 A
Secondary nominal current	1 A / 5 A	1 A / 5 A / 1.5 V	60 mA	1 A / 5 A	1 A / 5 A	0,25 A
Accuracy class	0.5 - 1 - 3*	0.5 - 1 - 3*	3	0.2s - 0.2 - 0.5s - 0.5 - 1 - 3	0,5 / 1 / 3	3
Window dimensions:	30 × 20 mm 60 × 80 mm 80 × 120 mm 80 × 160 mm	20 × 30 mm 50 × 80 mm 80 × 80 mm 80 × 120 mm 80 × 160 mm	20 × 30 mm 50 × 80 mm 80 × 80 mm 80 × 120 mm 80 × 160 mm	Ø55 mm Ø80 mm Ø105 mm	Ø24 mm Ø40 mm Ø80×40 mm	Ø14 mm

*Other accuracy classes available upon request, subject to evaluation

Electrical features

Measurements

wibeee



4. Wibeee Solution

One

Box

Max Pro

Connect

Plug Lite

Plug

Installation	Single / Three	Single / Three	Three-phase	Single-phase	Single-phase	Single-phase
Power supply	2-4W 85 - 265 V 3W 105 - 440 V	85 - 265 V	100 - 400 V	110 -265 V AC	230 V AC	100 - 240 V
Measurement range	2-4W 85 - 265 V 3W 105 - 440 V	100 - 460 V	85 - 750 V	110 -265 V	100 - 240 V	100 - 240 V
Max. current	63 A	60 / 100 / 300 A	100 / 4kA	60 A	16 A	10 A
Power consumption	2-4W 1.5 - 4.5 V 3W 3.5 - 5.5 V	1.5 - 4.5 VA	4.5 - 9 VA	1.5 - 4.5 VA	1.5 - 4.5 VA	1.5 - 4.5 VA
Accuracy	2 %	1%	1%	0.5 %	< 5%	1%
Wi-Fi	●	●	●	●	●	●
NB-IoT	○	●	●	○	○	○
Remote update	●	●	●	●	●	●

Electrical Features

Communication

Firm ware

Best in Class Solutions

CommPack

Digitize the LV/MV grid

2grid



2Grid CommPack is a compact, all-in-one system that brings real-time monitoring and digitalization to transformer substations. It has been specifically designed with two installation options:

PM version: a rugged solution ready to be installed directly on the pole without any additional device required.

GM version: tailored to cover the needs of secondary substations and distribution cabinets.

With 4G LTE/PLTE and Ethernet communications, CommPack seamlessly transfers data to ADMS platforms or any analytics and visualization software, ensuring fast, secure and flexible integration.

It provides utilities with clear and actionable insights into:

- Feeder capacity and load management.
- Transformer condition and asset monitoring.
- Detection of non-technical losses.
- Improved operation and fault identification.

By combining metering, communication and asset monitoring in one compact device, 2Grid CommPack helps distribution companies improve network reliability, reduce losses and extend asset lifetime, making low-voltage grid digitalization simple and cost-effective.

Magnetic Flex

Flexible RC sensors for easy installation in all environments

sensors



Magnetic Flex delivers accurate current measurement with easy installation across LV metering applications. It features IP67 protection and patented magnetic closure for fast, tool-free installation. An additional positioner element is available to optimize setup and ensure maximum measurement accuracy.

In three-phase setups, our Magnetic Flex Kit combines three or four Rogowski sensors, depending on whether neutral measurement, into a single output cable for simplified wiring. This solution makes integration easier, reduces cable clutter, and ensures reliable measurement performance. It provides a complete, accurate, and efficient current sensing system.

As an OEM manufacturer, we provide custom configurations to fit your project, including connector type and cable length customization to ensure straightforward integration.

Loop

Outdoor ready CT for high-accuracy applications

sensors



Loop is a split-core current transformer designed for accurate current measurement in both indoor and outdoor environments. Its split core circular design allows installation on cables without interrupting the primary circuit, simplifying mounting and saving both time and costs.

The Loop range accommodates various installation needs, offering cable apertures of Ø55, Ø80, and Ø105 mm and supporting primary currents from 100 A to 2500 A. It is available with 1 A or 5 A secondary outputs, ensuring easy integration with standard metering and protection systems. High-accuracy models up to class 0.2s and IP65 protection make Loop a reliable solution in demanding environments.

Smilics Sensors Loop delivers highly accurate current measurement for outdoor applications, suitable for both retrofit and new installations.

Box

Real-time energy consumption and sub-metering

wibeee



Wibeex Box is a compact, versatile solution for real-time energy monitoring and sub-metering across residential, commercial, and industrial networks. It collects and stores energy consumption data, ensuring uninterrupted logging and analysis, even during temporary internet outages.

It supports up to three current sensors, enabling monitoring of both general circuits and specific high-consumption sources such as solar installations, electric vehicles, or HVAC systems. With flexible configuration and seamless integration, Wibeex Box integrates easily into various circuits and installations while delivering precise consumption measurements.

Wibeex Box connects with Wibeex Nest our cloud-based platform for data visualization, analysis, and remote supervision.

Key benefits:

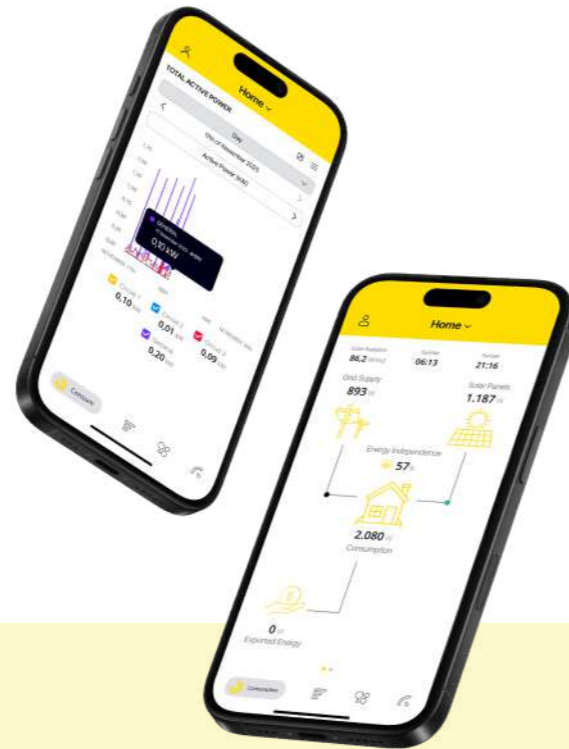
- High-accuracy, real-time data collection
- Easy integration with existing systems and sensors
- Compatible with single-phase and three-phase installations
- Centralized device management and remote control
- Reliable data transmission and actionable insights

Together with Wibeex Nest, Wibeex Box forms a complete hardware–software solution for precise energy monitoring and management.



Wibeee Nest

Advanced Energy Management Platform



Wibeee Nest is a powerful cloud-based platform designed to monitor, analyze, and manage energy consumption across residential, commercial, and industrial environments. It centralizes real-time data from all Wibeee devices into a single, secure repository, accessible via web interface, mobile app, or API.

The platform provides utilities, energy managers, and service providers with advanced tools to gain actionable insights, improve energy efficiency, and support decision-making. With tenant customization, Wibeee Nest adapts to different business needs and offers seamless integration into existing infrastructures.

Wibeee Nest turns complex energy data into clear, actionable intelligence, enabling smarter decision-making, improved efficiency, and optimized energy use.

Key features:

- **Comprehensive monitoring:** Access real-time and historical data from all connected Wibeee devices.
- **Photovoltaic performance analysis:** Track production, self-consumption, and grid independence regardless of inverter type.
- **Bidirectional metering:** Monitor both grid consumption and exported energy.
- **AI-based consumption disaggregation:** Identify and classify consumption by load type for more granular analysis.
- **Flexible access:** Use the platform via app, browser, or API to integrate data into third-party systems.



Ready2Grid

Intelligent configuration and firmware management for the efficient digitalization of transformer substations.



Ready2Grid is a specialized software platform designed to manage the configuration, monitoring, and firmware of the 2Grid product family developed by Smilics. Operating as a centralised control layer, Ready2Grid enables utility operators to access, configure, update, and supervise distributed equipment installed in low-voltage transformer substations.

Its main function is to streamline operations by ensuring that each 2Grid devices such as Gate, Feeder, Bulker, Green and CommPack are correctly configured and running the latest secure firmware and configuration. This management is carried out remotely, reducing the need for physical interventions in the field. Beyond simple device configuration, Ready2Grid plays a critical role in the digitalization of the power grid.

It provides a secure and scalable interface for integrating field devices using standard protocols such as HTTPS. It is a key enabler for the shift from passive infrastructure to intelligent, actively managed distribution networks.

Key features:

- **Real-time visualization** of the status of the installed 2Grid equipment fleet.
- **Retrieval** of basic technical information and status of each device.
- **Custom** tagging and classification of devices.
- **Remote firmware update**, embedded web interface, device configuration including MQTT protocol with certificate configuration, and list of users and permissions.
- **Support** for immediate, scheduled, and recurring tasks.
- **Audit log** of actions executed by each device.
- **Others:** local download of device logs, remote reset command execution.



Contact us for more information

info@smilics.com

Smilics Technologies SL
C/Baldrich 222, 08223 Terrassa
Barcelona (Spain)

smilics.com