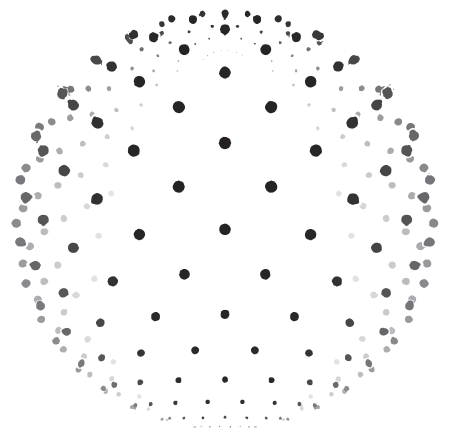




Your Partner for sustainable steam generation

Fasten energy
transition
with carbon-free
steam generating
systems



G-PLUS
TECHNOLOGY SRL

G-Plus Technology: decarbonising industrial heat

G-Plus Technology help customers to drastically reduce their carbon footprint producing sustainable and renewable steam. Starting from a comprehensive analysis of the production process we provide data-driven solutions outlining a solid and consistent path towards Net Zero targets.

Open innovation and strategic partnerships ensures we systematically drive forward the energy and economic performance of our products.



The future of Industrial Heat: Efficient, Electric, Carbon-Free

Accounting for more than 22% of global carbon emission, process heat isn't just an efficiency play: it's a cornerstone of business resilience and brand reputation.

While the world struggles with a mere 12% share of heat generated with renewable sources and up to 10% wasted heat, **G-Plus** is changing the

narrative transforming low-temperature, renewable or waste heat into high-value process steam. As a result, our clients not only reach their environmental goals, but also navigate increasingly stringent regulations and leverage incentives: we turn heat generation into a strategic asset for business resilience.

Enabling technology for producing steam up to 200°C

G-Plus features a specialist **twin-screw steam compressor**, empowering traditional heat pump systems and solar thermal fields to generate high-temperature steam up to **200°C**.

The **GP-SC series steam compressor** is a water-based solution specifically engineered for high-pressure applications.

By utilizing water as a natural heat transfer fluid, we provide an eco-friendly, non-flammable and cost-effective system with **zero GWP (Global Warming Potential)** and **zero ODP (Ozone Depletion Potential)**.

Water Lubricated Twin-Screw Technology: Engineering Excellence

Using water as a rotor lubricant does more than just eliminate wear. This innovative approach significantly boosts compression efficiency and prevents excessive heat buildup through an 'evaporative compression process', ensuring stable performance even under the most demanding industrial conditions.

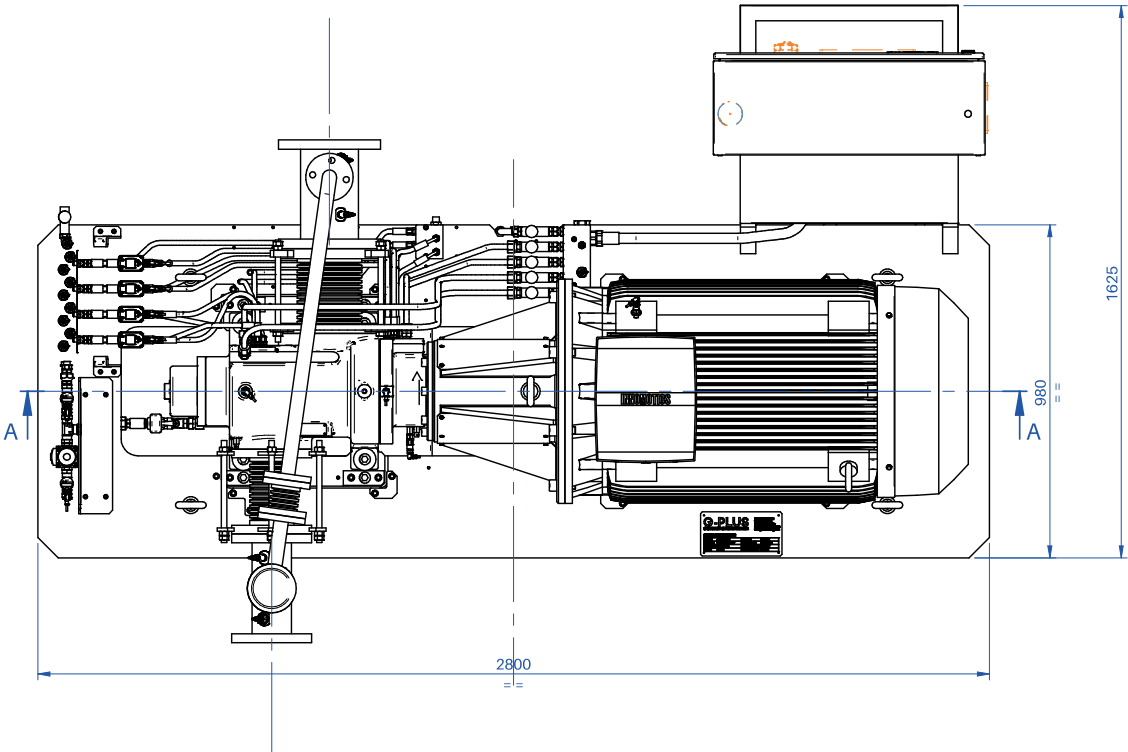
GP-SC.0 Compressor Package

- **Sustainable:** it combines the use of renewable electricity with natural heat sources, like solar and geothermal.
- **Circular:** it recovers and reuses residual heat and vented steam in the process.
- **Efficient:** it reduces CO2 emissions with good economic case and attractive ROI.



Operating data

Model	Working fluid	Power rating (kW)	Volumetric capacity (m³/h)	Rotational speed (rpm)	Suction Pressure (BarA)	Discharge Pressure (BarA)	Suction Temperature (°C)	Discharge Temperature (°C)
GP-SC.01	Wet Steam	70 - 132	250 - 650	2500 - 5500	1 - 7	Up to 16	> 100°C	Up to 200°C
GP-SC.02	Wet Steam	90 - 250	700 - 1700	2500 - 5500	1 - 7	Up to 16	> 100°C	Up to 200°C

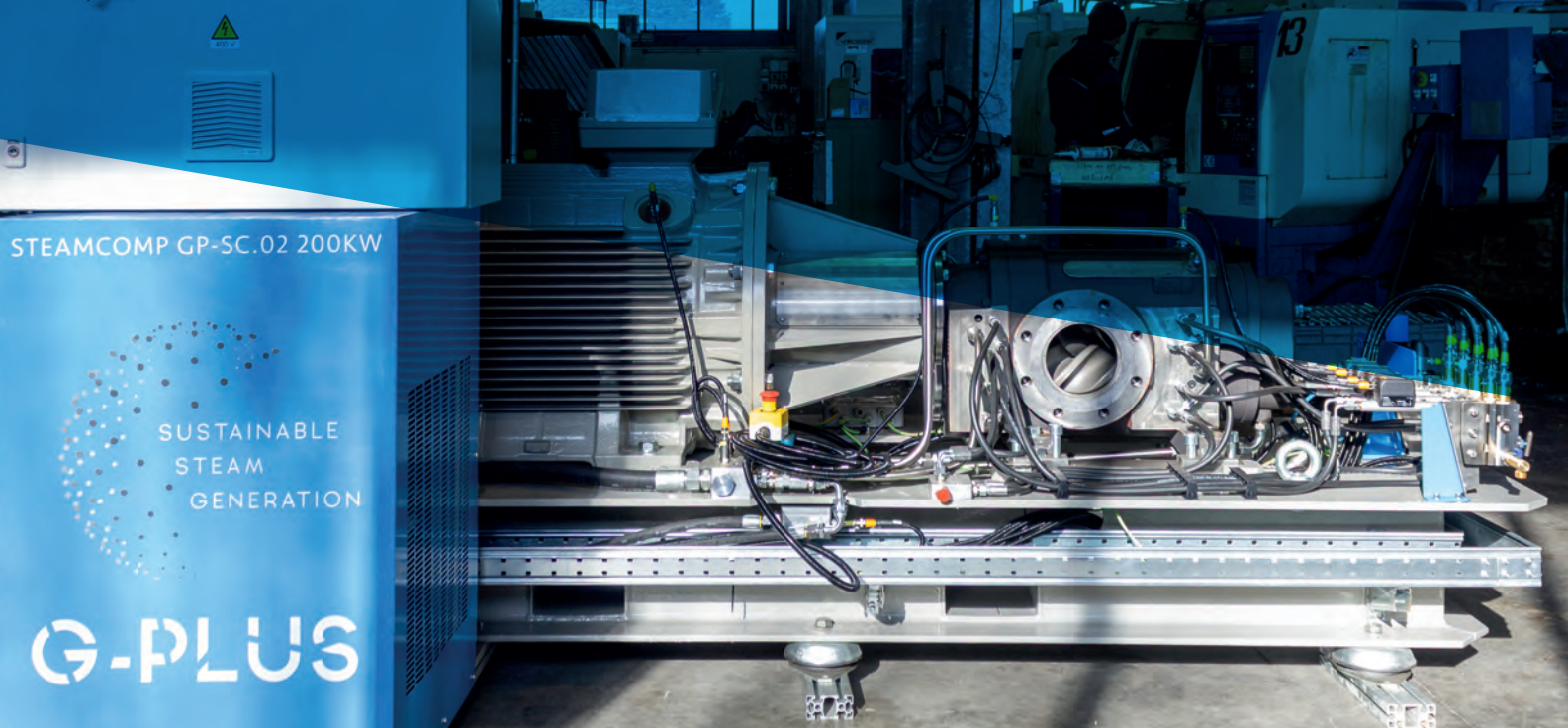


Technical specs

Package Dimensions (LxWxH)	2800 x 980 x 2180mm
Package Mass	2600 - 3000 kg
Connection Flanges	DN150 Inlet DN100 Outlet
Power Rating	90 – 250 kWe
Thermal Power Output	Up to 4 MWth
Steam Flow Capacity	Up to 5 t/h
Variable Speed Drive (VSD)	Up to 5500 rpm
Flow variability	25% - 100%
Installation	Indoor / Outdoor

GP-SC.02



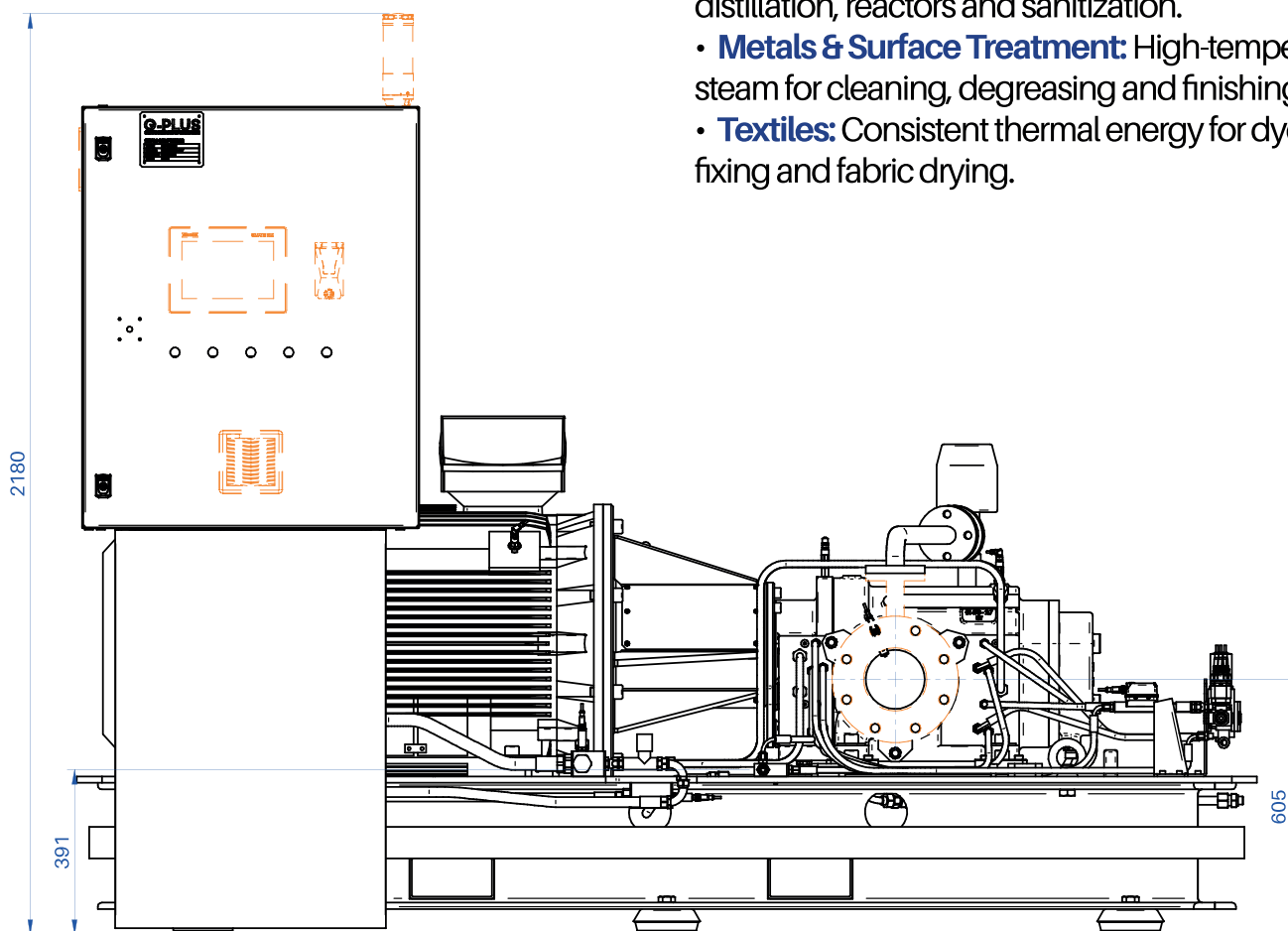


Powering Steam-Dependent Industries

Steam remains the lifeblood of medium temperature industrial processes, yet its generation is often the largest source of carbon emissions and energy costs.

From heavy manufacturing to delicate processing, our technology adapts to different industries with a common goal: reducing CO2 and energy costs by acting on steam, waste heat and integration with renewables and storage.

- **Food & Beverage:** High-efficiency pasteurization, sterilization and boiling.
- **Paper & Wood:** Precision drying, timber conditioning and pulp processing.
- **Chemicals & Pharma:** Reliable heat for distillation, reactors and sanitization.
- **Metals & Surface Treatment:** High-temperature steam for cleaning, degreasing and finishing lines.
- **Textiles:** Consistent thermal energy for dyeing, fixing and fabric drying.



MVR - Mechanical Vapor Recompression

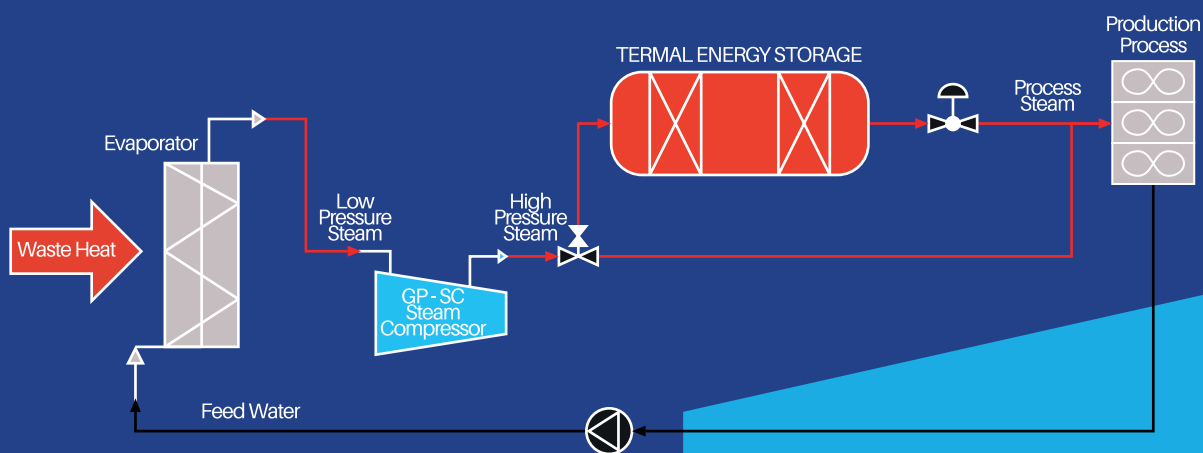
Smart Path to Efficiency

The **GP-SC series** finds direct and effective application in Mechanical Vapor Recompression (MVR) turning low pressure steam generated by a waste source into a valuable primary resource, closing the energy loop of your plant.

- **Circular heat:** boost low grade heat circulating it back into the process as high-quality heating fluid.

- **Energy multiplier:** give 10x thermal output compared to electricity consumed.
- **Rapid ROI:** achieve **payback period of less than 2 years** thanks to streamlined installation and wide eligibility for green incentives.

*In addition to feeding the process, MVR can be used to charge **Thermal Batteries** in case of reduced heat demand.*



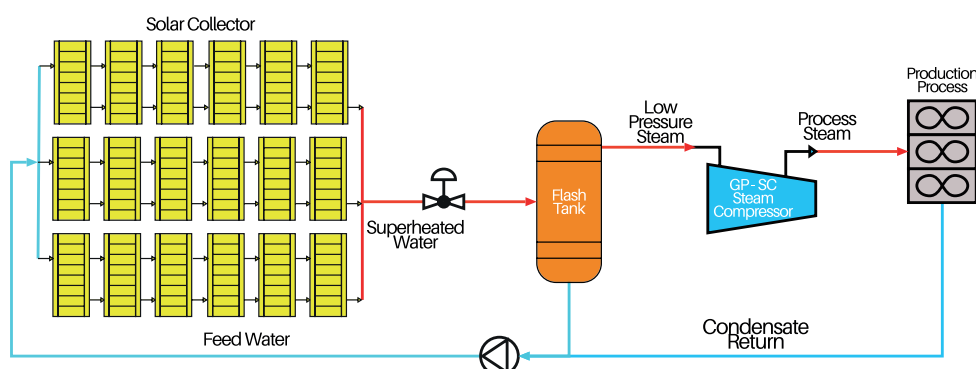
RSG - Renewable Steam Generation Beyond Sustainability

By combining solar thermal energy with our **GP-SC series compressor**, we transform solar-heated water into high-temperature process steam through a controlled flash evaporation process.

- **100% Renewable:** Achieve total decarbonization of your steam supply.

- **Hybrid Synergy:** Ideally suited for integration of Photovoltaic and Solar Thermal systems.
- **Long-Term Impact:** Drastically reduce your carbon footprint while ensuring permanent energy stability.

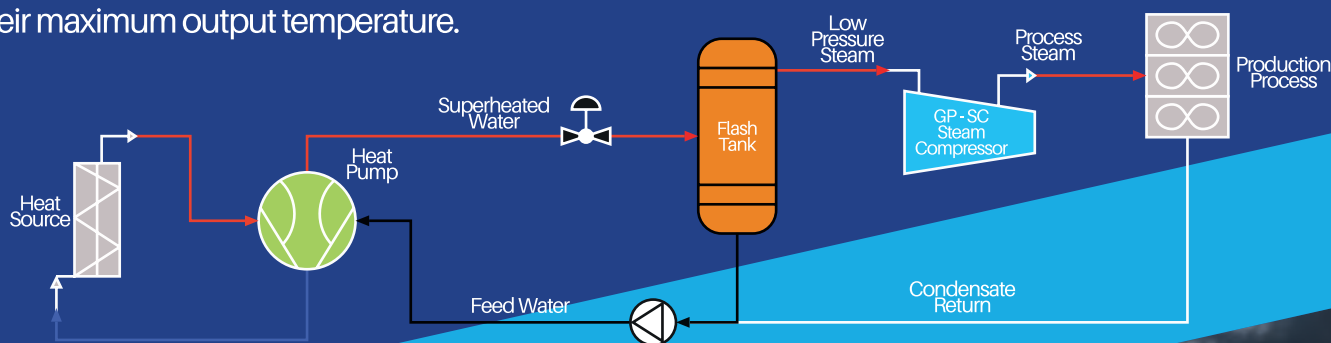
Zero fuel costs and zero emissions - environmental goals meet financial performance!



SGHP - Steam-Generating Heat Pumps **Net Zero** via Electrification

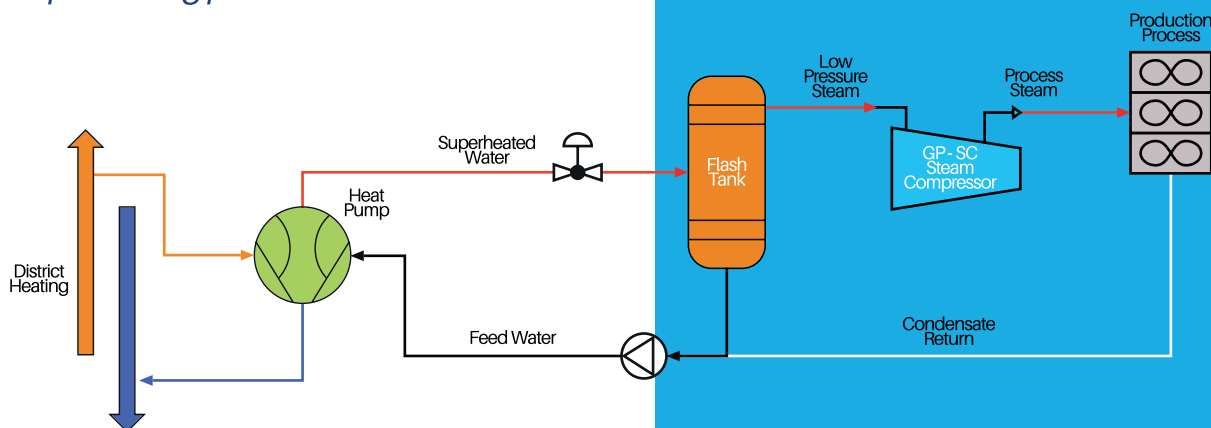
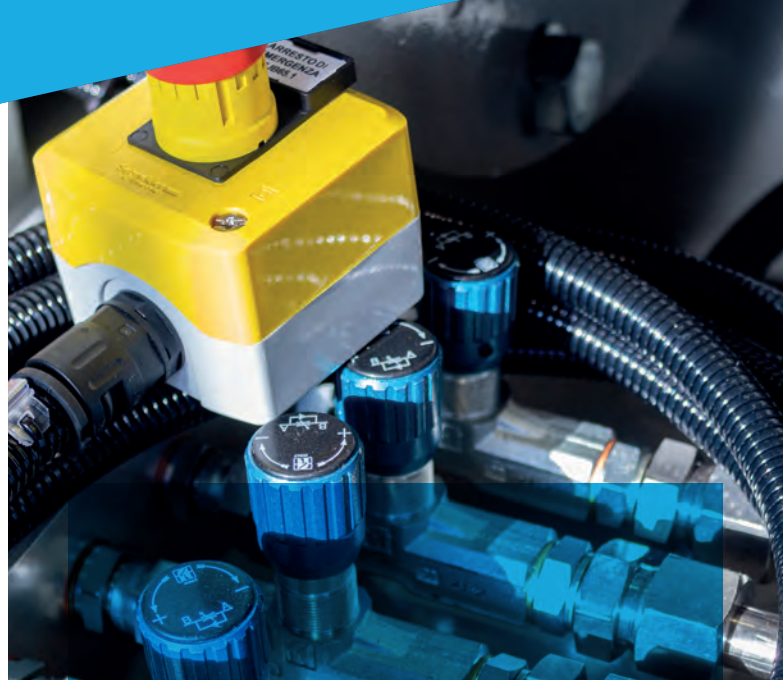
Full electrification is the most effective pathway to decarbonizing industrial steam. Compared to electric boilers, **Steam-Generating Heat Pumps (SGHP)** deliver thermal energy with significantly higher electrical efficiency, but they are limited in their maximum output temperature.

GP-SC compressor overcomes these barrier acting as **performance booster**, increasing steam pressure to meet the high-temperature demands many industrial processes.



Point-of-use steam generation

Integrating **decentralized** steam-generating heat pumps into district heating networks significantly reduces installation costs and technical complexity. This approach eliminates the need for additional carbon emission points, making it the ideal solution for urban environments and sensitive sites such as hospitals, commercial laundries, wellness centers and small food processing plants.



G-Plus: **turn process heat into your more sustainable asset!**

**Innovation, Excellence, Profitability:
Reach out to boost your
energy transition process!**

Contact

G-Plus Technology srl

www.gplustechnology.com

info@gplustechnology.com

Via P. Nenni 142

66020 San Giovanni Teatino (CH) – Italy