



The Leaders in EMC Standards

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**ZUP
Power
Supply**

**1998-
2023**

**Made
in Israel**

**Our first
programmable
product**

**Tens of
thousands
of units**

TDK-Lambda Israel Established an EMC Testing Lab

Electromagnetic compatibility (EMC) is an essential quality feature in almost every electronic device. In the past few years it has become even more crucial because the electromagnetic environment is more challenging as the density of electronic applications increases.

Electromagnetic compatibility can ensure reliable operation, maximum availability without downtime (and, of course, satisfied users).

TDK-Lambda Israel has established an advanced EMC testing lab in Karmiel. The establishment of the new lab involved a large financial investment and training of personnel. The lab currently serves our R&D people and supports new projects.

The professionals in our EMC lab help ensure a trouble-free operation of systems working in an electromagnetic environment. They use advanced measurement systems, and perform evaluations based on international standards.

The ZUP Generation: 25 Years of Global Success Leading to New Developments

When Doron Peled and his team developed ZUP in 1998, just before the new millennium, they did not imagine that the product would serve tens of thousands of users worldwide for 25 years - an entire generation.

The ZUP series was our first programmable power supply, and the first product that integrated software. It allows the user to program both the voltage and the current from zero up, and was therefore called Zero Up.

ZUP is used in a wide variety of industries all over five continents. It serves automatic test lines, semiconductors manufacturers, medical device developers, mass production facilities and various labs.

After 25 years, the time has come for a big jump forward, to software and hardware that fit the requirements of the future. ZUP has opened the door to many new developments by TDK-Lambda Israel. Today, our newest programmable series include Genesys (750w-5kw), GENESYS+™ (1000w-90kw), and Z+ (that replaced the ZUP) with 200w, 400w, 600w and 800w versions.

TDK-Lambda Israel will continue providing technical support and repair services for the ZUP series in the coming years, even after its EOL. We are grateful to all customers who made use of the ZUP series, and will continue working towards more developments using the strong basis of ZUP, from Zero Up!



Developing Semiconductors? You Can Benefit from our Programmable Power Supplies

TDK-Lambda serves the Israeli semiconductor industry with a wide range of advanced power supplies. The products are mainly used for semiconductor processing, "burn-in" practice and other testing tasks. They contribute to the stability and longevity of semiconductors, reduce the risk of failures and enhance their overall performance.

The demand for semiconductors is currently booming due to the fast development of AI. Our power supplies support this revolution, for example in AI hardware testing.

Our solutions for the semiconductor industry include programmable series such as:

- ✓ GENESYS
- ✓ 1U Half rack (GENH)
- ✓ GENESYS+™
- ✓ GSP
- ✓ Z+

We offer excellent lead times; and since our teams are based in Karmiel – we are always close to you.



Our Power Solutions for Medical and Aesthetic Lasers

4 of the 10 key players in the global aesthetic laser market are Israeli companies, according to a 2023 market research*.

Israel is considered one of the world leaders in the field of medical laser technology, with dozens of laser companies currently in operation**. Local companies have brought to the world innovative solutions for anti-aging, treatment of various skin conditions and hair removal technologies - thanks to the combination of great R&D strengths, together with significant entrepreneurial spirit.

TDK-Lambda offers advanced power supply solutions for aesthetic devices, including the CUS-M, MU and QM series that have been certified to medical safety standards - and address a wide range of applications.

*<https://www.marketdataforecast.com/market-reports/cosmetic-laser-market>

**<https://www.jpost.com/business-and-innovation/article-724637>



ChatGPT

E Hi ChatGPT! Can you please explain me how TDK-Lambda can support the semiconductor industry in the AI revolution?

TDK-Lambda can support the semiconductor industry in the AI revolution by providing high-quality and reliable power supply solutions specifically designed for semiconductor manufacturing processes. These power supplies ensure stable and efficient operation.



TDK-Lambda is ready for the AI revolution!

2023 is undoubtedly the breakthrough year of artificial intelligence (AI). The semiconductor industry benefited a lot from this historical development. The technologies behind AI systems require dedicated semiconductors that accelerate AI tasks in data centers. And indeed, the demand for them has soared in recent months*.

Israel is a major player in the semiconductor industry. The local industry employs approximately 38,000 people**, and has gained a global reputation.

TDK-Lambda serves the Israeli semiconductor industry with a wide range of advanced power supplies. By offering reliable products, TDK-Lambda contributes to the stability and longevity of semiconductors used in AI applications, reducing the risk of failures and enhancing the overall performance of AI systems.

Among TDK-Lambda's series that are used by the semiconductor industry: SWS-L, RWS-B, Vega, MU, QM, HWS and DLP DIN Rail.

In the photo: ChatGPT explains the contribution of TDK-Lambda to the semiconductor industry in the AI revolution

*TheMarker: <https://www.themarker.com/technation/2023-03-02/ty-article/premium/00000186-9e6f-df29-af8e-ffe6c470000?ts=1687606328766>

**Globes: <https://en.globes.co.il/en/article-israels-semiconductor-industry-needs-you-1001368799>

Looking for Half Brick DC-DC Converters? TDK-Lambda is your Stable Solution

Many companies depend on the availability of half brick DC-DC converters, which for many years have been a popular component, thanks to features such as stability and reliability. Among these industries is the field of telecommunications as well as harsh environment applications.

TDK-Lambda continues to provide the PAH half brick DC-DC converters that it manufactures. With us, the product is highly available, so that our customers can maintain stability - and avoid major changes in their systems.

TDK-Lambda's PAH300, PAH350 and PAH450 series of half brick DC-DC converters operate from a 24V or 48V nominal DC input and are rated at 300W to 450W.

Output voltages are 12V, 28V or 48V and can be adjusted over a wide range using the trim terminal by up to -40% to +18%. Remote sense and remote on/off are included as standard.

The benefits of the PAH series include:

- ✓ Compact module
- ✓ Operate from batteries or DC power systems
- ✓ Can be conduction or convection cooled
- ✓ Baseplate temperature of -40°C to +100°C
- ✓ Fixed switching frequency



Ground, Air and Space: these are the Applications of Z+

The Z+ programmable power supply has been playing an important role in several different industries, and has become an effective and friendly tool for R&D professionals, engineers, testing specialists and more.

In factories, the Z+ has been useful for testing automation systems, including advanced robotics. The car industry has been using the Z+ to test hardware simulators, electronic assemblies and other equipment. The fast-growing semiconductors industry has also benefited much from the Z+ for testing procedures.

And it doesn't end here. The Z+ has also become useful for air and space applications. It has been used for testing flight cockpit instrumentation, and for simulating solar panels of satellites.

Suitable for bench or 2U rack mounting, the Z+ is a very compact programmable power supply offering power levels from 200 to 800W, voltages of up to 650V and currents of up to 72A. Multiple remote programming methods are available including built-in USB and RS232/RS485, and optional LAN, GPIB and isolated analog interfaces. The units can operate in either constant current or constant voltage mode and has a wide 85-265Vac input. The product is backed with a five year warranty.

With our Power Supply, Robots don't Get Tired (you Can Ask Nico)

85 million jobs may be displaced by the shift between humans and machines by 2025*. Robots work tireless hours, and deliver precise results around the clock. They don't need food and water, and don't get a salary - but they certainly need a reliable source of power.

At TDK-Lambda, we gained expertise in developing advanced and flexible power solutions for the robotics industry.

TDK-Lambda's design guidelines ensure long field life of power supplies, which is crucial for intensive environments where robots operate in.

Robots need a greater degree of protection from incoming input voltage line transients. TDK-Lambda's power supplies offer certification to Over Voltage Category (OVC) III which enables direct connection to the incoming AC distribution panel, saving the cost and space of an isolation transformer.

Our thermal management techniques allow us to offer convection or conduction cooled units, which are ideal for the tight docking stations of robots, where robots are charged between missions.

In the photo: the robot Nico, that works in TDK-Lambda's DC-DC manufacturing line in Japan

* Harvard Business Review:
<https://hbr.org/2021/03/why-robots-wont-steal-your-job>



Another Shipment of GSPS - the Ideal Solution for Customers with High-Power Needs

Team members of our Product Engineering Department in Karmiel completed final tests for a new GSPS shipment to customers.

The new GSPS high power systems are the result of the creativity and hard work of our teams in the Karmiel factory, where the systems are manufactured. Their bright ideas and precise work made it an ideal solution for customers with high power needs.

The GSPS is a programmable DC series system, that offers 60 kW in a single cabinet of 20U Height. This patented system provides more dynamic characteristics comparable with that of single power supplies.

The system is also very functional. If you operate in a big production or research facility, the GSPS can easily be repositioned around the whole place, since the cabinet is mounted on wheels.

The Programmable Power Supply Market is Expected to Reach \$1.3 Billion in 2030

According to a new research, the global programmable power supply market is expected to reach \$1.28 billion in 2030, with an average annual growth of 6.4% in 2023-2030*.

The key applications that the study highlights include semiconductors, automotive power testing, industrial production and the healthcare industry. The markets that are mentioned in the research as dominant are the U.S, China, Germany, Japan and South Korea.

TDK-Lambda is a global supplier of programmable power supplies with the most comprehensive offering, from 200W to 15kW with parallel capability up to 60kW.

TDK-Lambda's programmable range includes GENESYS+™, Genesys™, Z+, and the new GSPS high-power system.

The Israeli branch of TDK-Lambda has succeeded in setting a new standard in the market of programmable power supplies. The GENESYS+™ series, developed and manufactured in Karmiel, has gained a global reputation.

* Source: [marketwatch.com](https://www.marketwatch.com)



Our new customer portal. Useful and intuitive

Keep in Touch!

Huge thanks to everyone who follows our page and shares our content.

Our top priority is the close relationship with each and every customer. This includes personal meetings, customer events and more. Moreover, on a professional level, we do our best to provide a quick response to every request, and shorten delivery times even during the challenging inventory crisis in the industry.

Recently, we launched of a new and upgraded customer portal, that offers many new advantages. The customers of TDK-Lambda Israel can now benefit from a more advanced, stable and intuitive portal, with a direct connection to our ERP system.

Keep following us!

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