

Power-specific integrated DC power supply



Article Overview

Integrated DC power supplies combine controllers, power switches, and passive components into compact modules, offering high efficiency, reduced design complexity, and improved reliability.

Overview

Power-specific integrated DC power supplies are pre-packaged modules that integrate all essential components of a DC-DC converter, including controllers, MOSFETs, inductors, and passive elements, into a single compact package. These modules are designed to simplify power supply design, reduce PCB area, and improve system reliability while maintaining high efficiency and power density .

Types of Integrated DC Power Modules

1. Isolated Power Modules: These modules integrate a high-performance transformer with the power stage, providing electrical isolation between input and output. They are ideal for applications requiring safety isolation, such as industrial and automotive systems. Advanced packaging technologies, like TI's IsoShield™ , enhance power density, reduce solution size, and improve system durability . 2. Inductor-Integrated Power Modules: Modules with integrated inductors, such as those using MagPack™ technology, combine FETs, controllers, inductors, and passives in a single package. This integration reduces parasitic inductance, improves EMI performance, and allows the module to be placed close to the load for higher efficiency. These modules also...

Article Content

Oct 26, 2025

Digital Isolators with Integrated Power

Garner significant PCB space savings and improve system performance in your design with MPS's latest digital isolators with

Sep 02, 2025

Village of Clinton - The Web Home of Village of Clinton, Ohio

Thank You for 34 years of Service!! On December 31 st, Janice (Cameron) Godwin will complete her 34th year of public service to

Mar 18, 2026

Integrated Power Designs, Made in the US Power Supplies

Integrated Power Designs (IPD) is an ISO 9001:2015 registered company. IPD is a US Power Supply manufacturer of AC-DC & DC

Feb 06, 2026

Bidirectional Power Supply

The EA-PSB Series bidirectional DC programmable power supply has an integrated, regenerative electronic load and therefor can

Oct 27, 2025

Google Gemini

Meet Gemini, Google's AI assistant. Get help with writing, planning, brainstorming, and more. Experience

Jul 31, 2025

DC/DC power modules

In this training series, we discuss the high level of integration of our power modules and the significant implications that this has on

Nov 08, 2025

Quality Power Supplies and Converters | XP Power

XP Power introduces the APM240 series of 240W external desktop AC-DC power supplies that simplify integration in medical, home

Jul 19, 2026

Power Conversion and Control | ABB

From generator voltage control to high-efficiency power conversion, ABB helps you maintain safe, reliable and resilient operations

Jun 15, 2026

Introduction

Compact Design: By incorporating the power supply within the isolator package, a more compact overall design is achieved, which

Mar 08, 2026

Integrated Power Designs AC-DC & DC-DC Power Supplies

Integrated Power Designs manufactures a large array of AC-DC & DC-DC Power Supplies suitable for Medical, Industrial, Audio

Sep 14, 2025

“Power Supply in a Module” Integrates Transformer Tech

TI leverages its integrated transformer technology in its latest isolated DC-DC power module, which is claimed to be close to 90%

Dec 09, 2025

Programmable Power

The AMETEK Programmable Power designs, manufactures, and markets precision, ac & dc programmable power supplies,

Mar 13, 2026

Integrated Power Designs AC-DC Power Supplies 25-400 Watts

IPD's AC-DC power supplies range in power from 25 - 1000 watts and have 1 - 4 outputs. The units have 60601-1 and 62368-1

Nov 30, 2025

Power Modules | High-efficiency DC/DC Converters | Flex

Flex Power Modules is a global leader in advanced power conversion solutions, delivering high-efficiency, reliable DC/DC converters

Nov 15, 2025

Isolated power modules (integrated transformer) | TI

Our portfolio of isolated power modules combines high-density integrated field-effect transistor and integrated transformer technology

Apr 11, 2026

DC-DC Integrated Switching Power Modules

Our highly integrated power modules contain a controller, power switches and the necessary passive components—all of which are

May 03, 2026

DC power supplies | Rohde & Schwarz

Rohde & Schwarz offers a versatile portfolio of DC Power supplies that fit variety of test and measurement scenarios. Whether you

Feb 17, 2026

DC/DC power modules

TI's comprehensive power module portfolio delivers space-efficient, high-performance solutions for today's demanding applications.

Dec 07, 2025

Power supply

A simple general-purpose desktop power supply used in electronic labs, with power output connector seen

Jun 12, 2026

Programmable Power Supplies and Electronic Loads

Combining robust power processing topologies with state-of-the-art vertically integrated USA manufacturing, tens of thousands of

Feb 23, 2026

DC Sources and Power Supply Solutions | Analog Devices

Precision DC sources and programmable power supplies are highly reliable, low-noise devices dedicated to setting

Jul 11, 2026

DC/DC Power Module

Explore our high-efficiency DC/DC power modules, delivering high-performance and highly reliable power management solutions for

Mar 30, 2026

DC Power Supplies

Modular DC Power Solutions Keysight modular DC power solutions enable you to optimize performance and power to match test

Jan 26, 2026

How a tiny isolated DC/DC module is enabling higher power density

Breakthroughs in transformer design have allowed integrated circuit designers to fully integrate a transformer and silicon into one

Jun 07, 2026

Integrated DC-DC Converters Save Space and Design Time in

Integrated switching regulators are ideal candidates for the intermediate-bus power-supply architectures of modern

Dec 02, 2025

Configurable Power Solutions

Advanced Energy produces a wide range of medium to high power AC-DC modular power supplies, primarily composed of highly

Dec 02, 2025

Programmable DC Power Supplies

Integrated Options Standard integrated options are available for Magna-Power products, allowing the product's performance and

Apr 25, 2026

How the Smart Hardware Engineer Can Easily Design Power ...

This mini tutorial covers the basics of power supply design by giving an overview of the most common topologies and

Nov 13, 2025

AC-DC Power Supplies and Electronic Loads by Kepco

Kepco's US government CAGE code is 85604. Kepco products range from cutting edge, OEM and programmable switch mode

Jan 25, 2026

Power modules (integrated inductor) | TI

Power modules with integrated inductors and innovative packaging technology, like those that utilize our new MagPack™ package,

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.greatpremiersolutions.co.za>

Email: sales@greatpremiersolutions.co.za

Phone: +27 82 914 3675

Address: Unit 5, Silicon Heights, 22 Electron Avenue, Cape Town, 8001, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

