

New Products

No. 130

Direct from IDEC Corporation

November 15, 2004



- Compact size:
120W - 50mm width
240W - 80mm width
- Universal AC input (85 to 264V AC)
- DC input (100 to 350V DC)
- Power factor correction (EN61000-3-2)
- Meet SEMI F47 Sag Immunity
- Class 1, Div 2 Hazardous Locations
- DC ON LED indicator & DC low LED indicator
- Overcurrent protection, auto reset
- Overvoltage protection, shut down
- Adjustable output voltage ($\pm 10\%$)
- Screw terminal type, IP20
- Surface mount or DIN rail mount
- Additional Approvals: EMI: EN61204-3 (class B)
EMS: EN61204-3 (industrial), UL508,
CSA, IEC/EN60950, UL1604, TUV
- For more information, contact Technical Support at
800-262-IDEA (press 2) or email support@idec.com

All the Features, All the Power, Half the Size & Now More Choices - 120W & 240W Slim Line Power Supplies

IDEC is pleased to introduce the newest additions to the PS5R Slim Line power supply series, the 120W and 240W models. They were developed to meet the demand for a power supply that is space saving and compliant to SEMI F47. These two new slim lines are high in performance, reliability and meet many standards and approvals. That means our power supplies can easily be integrated into any industrial application anywhere in the world.

New Features

The PS5R Slim Line 120W and 240W power supplies are lightweight and compact in size. With the 120W only 50mm wide and the 240W only 80mm wide, they are about 50% smaller in size than standard DIN rail power supplies. The narrow width of the slim line models means that the end users save not only space but also time and money. Moreover, these power supplies have Class 1, Div. 2 ratings for hazardous locations and are compliant to SEMI

F47 Sag Immunity Standard (which is required within the semiconductor industry).

An additional feature of these new power supplies is the ease of installation. They are spring-up terminal type with IP20 protection (finger-safe) and can be DIN rail or direct surface mountable.

Increased safety is another feature. These power supplies have two important functions: overcurrent and overvoltage protection. With overcurrent protection, when the output current rises between 105% to 135% of the rated current, the protection function is triggered, decreasing the output voltage. When the output current falls back within the rated range, the overload protection function is automatically cleared. The overvoltage protection is triggered when the output voltage of the power supply rises to 120% or more of the rated value resulting in the output shutting off. Lastly, the wide range of approvals and the universal AC/DC input opens our power supply business to the global market.

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800-262-IDEA (4332) www.idec.com

Smart Products. Simple Solutions.

Product Advantages

The PS5R Slim Line power supplies cater to today's market requirements. IDEC has significantly reduced the size of these units which has a substantial positive impact on panel savings, which in turn can save an end user anywhere from \$30 to \$45 per square inch!

Another key advantage to our slim line of power supplies is the fast and easy installation. They can quickly snap onto a DIN rail which means no more spending time in trying to mount the power supply on a panel. The PS5R Slim Line model terminations are spring-up terminal type which provides effortless wiring. Just snap in place and you are done.

In addition, all of the PS5R Slim Line models carry standard approvals (see front page for complete listing) and are UL1604

approved for Class 1 Div. 2 hazardous locations. More importantly, a new feature which is seldom seen from the competition is SEMI F47 Approval.

The semiconductor industry is driving the requirement for SEMI F47 approved equipment to be used when manufacturing semiconductor fabrication machinery. The EAC PEAC Corporation is a third party agency and a global leader in conducting voltage sag testing on semiconductor machinery. They certified the 120W and 240W to comply with SEMI F47 approval. In fact, **we are the first company to use the actual certification mark right on the power supply itself.** This approval ensures protection and immunity from interruptions due to voltage sags of 50% in durations up to 200ms. This can mean huge savings and protection for manufacturers!

Competitors Comparison and List Prices

		IDEC (PS5R Slim)	OMRON S8VS	SOLA (SDN Series)	ASTRODYNE (DRP Series)	PHOENIX (QUINT Series)	PULS
Voltage Input (AC)		85-264V AC	85-264V AC	85-132/176-264V AC	85-264V AC	85-264V AC	85-132V AC
Voltage Input (DC)		100-350V DC	90 - 350V DC	90-375V DC	Not possible	90-350V DC	210-375V DC
Terminals	Spring-up	Yes	No	No	No	No	No
	Finger-safe (IP20)	Yes	Yes	Yes	Yes	Yes	Yes
Adjustable Output		Yes	Yes	Yes	Yes	Yes	Yes
Efficiency		84%	80%	90%	84%	91%	90%
Overload Protection		Yes	Yes	Yes	Yes	Yes	Yes
Indicator LED		Yes	Yes	Yes	Yes	Yes	Yes
Series Wattage Range		30, 60, 90, 120, 240	15, 30, 60, 90, 120, 240	60, 100, 120, 240, 480	75, 120, 240, 480	60, 120, 240, 480	24-480W
SEMI F47		Yes (120, 240W)	Yes (60W only)	Yes	No	Yes	No
UL508		Yes	Yes	Yes	No	Yes	Yes
UL1604 (Class 1-Div 2) Haz. Loc.		Yes	Yes (15W, 30W)	Yes	No	Yes	Yes
UL1310 (Class 2)		Yes (30W, 60W)	Yes (15W, 30W, 60W)	Yes (60W)	No	Yes (60W)	Yes
CE		Yes	Yes	Yes	Yes	Yes	Yes
Dimensions (HxWxD mm)	120W	115x50x129	115x50x121	124x65x116	99x66x124	130x55x125	124x64x102
	240W	125x80x149.5	115x100x125	124x83x116	124x99x124	130x85x125	124x120x102
List Price	120W	\$215	\$200	\$216	\$94	\$240	\$172
	240W	\$310	\$345	\$293	\$149	\$345	\$252

For more information call IDEC at:
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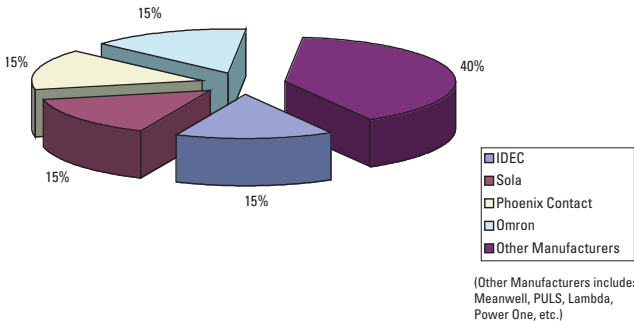
Market & Applications

Market Information

Like many other products, industrial power supplies are constantly changing to meet the market's demand for better operation, performance and adaptability in different environments. In today's industrial market, switching power supplies are a major influence in the U.S. power supply market. The most commonly used power supplies are 24V DC switch mode types. Nearly all now have output characteristics with better safety protections in overload conditions (the power supply will shutdown and automatically reset).

There is also a huge demand in the market to have the appropriate standards. The UL508 standard continues to be important, especially for control panels. All IDEC PS5R power supplies are UL 508 certified which allows for no derating when specifying the appropriate power supply size. The Class 1, Div. 2 (UL1604) certification is another essential standard in the market since there are many applications where the power supply can be in an environment with gases, harmful vapors, or explosive materials. There is power factor correction which minimizes the harmonic distortion resulting in better life operation and reliability. Lastly, there is an increasing demand to comply with the SEMI F47 standard and its benefit is to ignore potential input power sags. This can save loss of production time and money.

2004 Din Rail Switching Power Supply Market Share



slim line power supply models will make a big impact on sales with new and existing customers. In comparison with other manufacturers, our biggest competitors Sola, Phoenix and Omron each hold about 15% of the market share. The remaining 40% is shared with several manufacturers such as Puls, Meanwell, Lambda, Power One and many other manufacturers. This analysis shows us that IDEC has a very positive outlook in the power supply market. Eventually, as the economy recovers and as IDEC continues to supply power supplies that meet industrial demands, we look to take an even greater share of the global market.

Applications

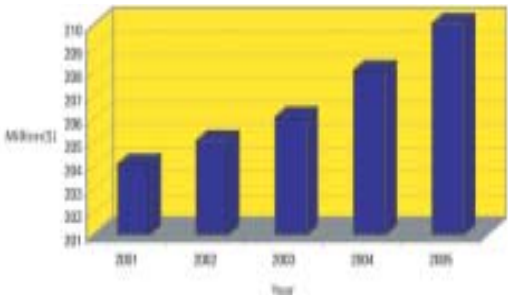
The PS5R Slim Line power supplies can be used in a wide range of applications. From PLCs & I/Os, DC motors and solenoids, DC sensors and DC relays, to many industries such as industrial/machine control, process control, and material handling, the applications are endless. Anywhere there is a panel, there is a potential to use these new power supplies!

The SEMI F47 Sag Immunity rating opens up new markets and new target customers. One of the primary industries to target the SEMI F47 feature to is the semiconductor industry. In particular, the semiconductor processing equipment segment, but definitely do not limit it to that area alone. Other possible applications include automation, etch, thermal, and film deposition equipment, plus many more.

Overall, the new features in our power supplies are the main tools to use in targeting new applications and customers. IDEC continues to provide solutions that meet industry needs. Use that as an advantage when selling these new power supplies and capturing new business opportunities!

For more information on these new power supplies or to download a data sheet on the 120W and 240W power supplies visit www.idec.com/usa/powersupplies.

Industrial Power Supply Market (Linear, Switching, DIN Rail)

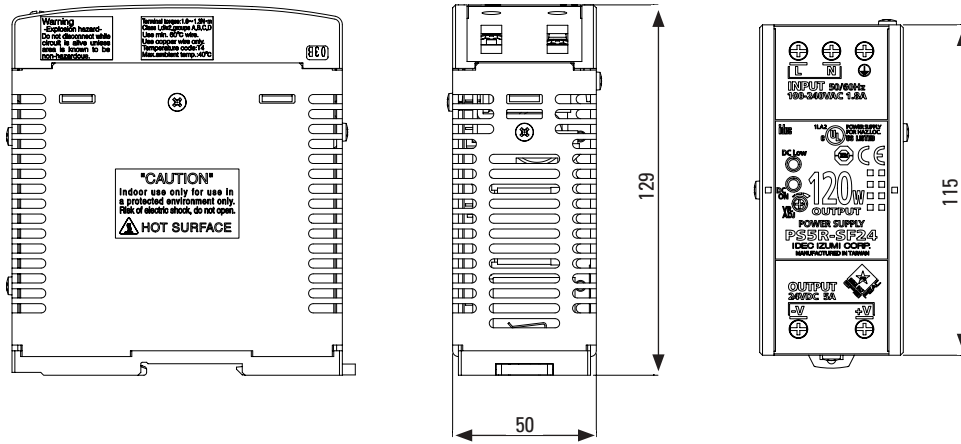


In reference to the graph above, the industrial switching power supply market in the U.S. slightly increased from 2001 to 2004. This year, 2004, the overall industrial switching power supply market is projected to be at over \$200 million in sales. The DIN rail switching power supply sector (single phase only) has grown 10% over the last several years. Overall, the trend continues to indicate marginal increase in sales with about 5% annual growth.

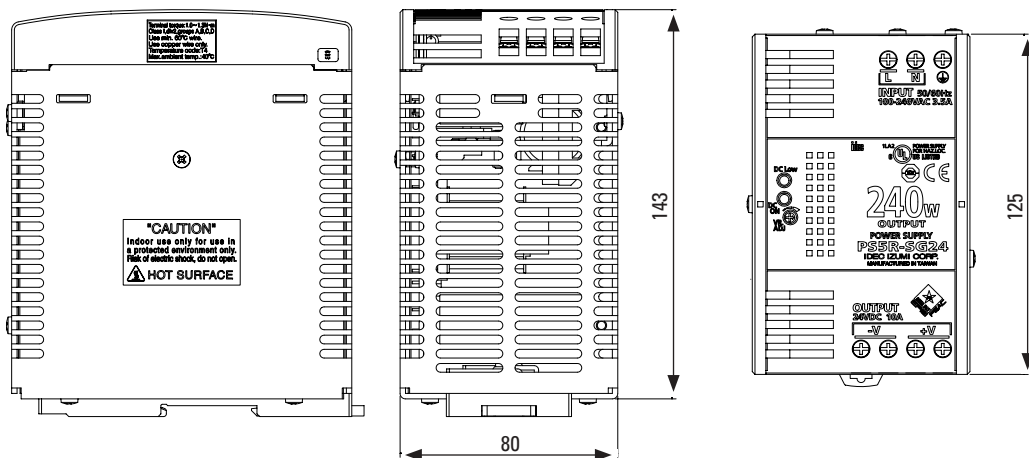
IDEC's focus is the DIN rail switching power supply and IDEC has approximately 15% of the DIN rail switch mode power supply market share in the U.S. The release of our newest

Dimensions

PS5R-SF (120W)



PS5R-SG (240W)



In addition to the new 120W and 240W, there are also 30W, 60W and 90W Slim Line models available. With all these choices, you can choose the model that is exactly right for you! The PS5R Slim Line series are all UL508 listed and approved for Class I Div 2 hazardous locations. The 30W and 60W models are NEC Class 2 rated.

Like all IDEC switching power supplies, the PS5R Slim Line series has worldwide approvals, spring-up screw terminals, fused inputs, and overload protection. They are DIN Rail or direct surface mountable and have universal (85 - 264V AC) voltage inputs. No derating means you can save money, space, and time. IDEC quality means you get the power you need, just the way you need it. For further information, visit www.idec.com/usa/powersupply.

For more information call IDEC at:
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