

PROFILE OF THE EUROPEAN POWER SUPPLIES INDUSTRY

MARKET PROSPECTS TO 2008

SAMPLE PAGES

Reed Electronics Research
Unit 4, Harvard House
Grove Technology Park
Wantage, Oxon OX12 9FF
United Kingdom
Tel: +44 (0) 1235 227310
Fax: +44 (0) 1235 868811
Website: www.rer.co.uk

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Research Consultants: Graham Weaver, Weaver Associates

Research Manager: Andrew Fletcher

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1 INTRODUCTION & EXECUTIVE SUMMARY

1.1 Introduction

Profile of the European Power Supply Industry reviews the markets, technological trends and major European manufacturers of power supplies, in the following categories:

- External power supplies – an AC/DC power supply that is located outside the equipment, usually in a wall plug-in or desktop style and also including mobile phone chargers.
- Non-captive switched mode AC/DC power supplies
- Non-captive switched mode DC/DC power supplies (DC/DC converters)
- DC power systems
- Uninterruptible power supplies (UPSs), excluding installation and service revenues

Chapter 2 provides an economic overview of Europe and a general review of the European electronics industry.

Chapter 3 analyses the market with forecasts through to 2008.

Chapter 4 reviews the main technological trends including the progress of and impact of new legislation and standards.

Chapter 5 reviews the changing structure of the power supply industry in Europe.

Chapter 6 provides detailed profiles of the top 27 manufacturers of power supply equipment in Europe. Information for these profiles has been obtained from data supplied by the companies themselves and from our own electronics database. The Reed Electronics database is compiled from company press and statistical sources worldwide.

Chapter 7 provides a directory of over 270 companies who have manufacturing facilities for power supply equipment in Europe.

1.2 Executive Summary

The two years after the boom year 2000 saw a severe decline in power supply equipment sales in Western Europe – a drop of over 40% between 2000 and 2002. However the market appears to have bottomed out in 2003, with sales of Euro 3.51 billion (at 2002 exchange rates).

OEMs, with an increasing amount of box-build using imported sub-assemblies from the cheaper areas in Eastern Europe and the Far East, as well as the increasing use of CEMs.

For the time being, design may stay in Europe, requiring power supply companies to provide design support on one continent whilst delivering the product to another continent.

However, even design in Europe is under threat as OEM's make greater use of ODM's (Original Design Manufacturers). In this case the OEM provides a top level specification, with the ODM carrying out the detailed design, sourcing and manufacturing. To date this has been for mobile phones, laptop computers and PDAs, with Taiwanese companies, such as Arima, Benq, Compal, Dbtel Technology, GVC and Quanta, being particularly active. This is expected continue for other high volume commodity products and an increasing number of Chinese companies are expected to offer these facilities in the future.

West Europe will remain a significant electronics market, maintaining a global market share around 20%. However, in terms of production, the region is expected to lose further ground as companies continue to migrate manufacturing to low cost countries, with China and East Europe the main beneficiaries. However, as the EU expands in the coming years to include a number of the Eastern European countries, low-cost manufacturing in these countries may become more expensive. Shifts in manufacturing over the forecast period will be largely predicated upon individual company strategies.

Table 2.2 Production of Electronic Equipment in West Europe – 2003

Country	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
	EDP	Office Equip	Control & Instr	Medical & Industrial	Radio Comms & Radar*	Telecomm-unications	Consumer	TOTAL
Austria	520	17	351	256	125	281	225	1775
Belgium	1416	50	401	214	514	535	469	3597
Denmark	171	14	490	476	723	84	211	2170
Finland	296	1	567	322	4858	1283	113	7439
France	5051	232	2458	923	8730	3365	1697	22455
Germany	8146	430	10929	3888	6051	4178	1587	35209
Greece	129	47	40	13	115	129	65	539
Ireland	8099	41	305	1219	237	709	70	10681
Italy	4758	99	2632	743	1594	1627	263	11717
Netherlands	2672	558	1639	1050	577	323	222	7040
Norway	168	0	410	112	313	230	6	1239
Portugal	481	8	67	29	90	157	738	1570
Spain	1214	67	233	253	386	1223	1535	4912
Sweden	190	7	1006	215	2614	1696	46	5774
Switzerland	415	57	1971	1298	267	326	2700	7036
UK	9266	435	4719	1292	10273	1985	1539	29510
TOTAL	42992	2064	28218	12302	37466	18132	11488	152662

Notes:

Values stated at 2002 constant values and exchange rates

* Includes mobile communications

Source: Yearbook of World Electronics Data 2004 – Volume 1 West Europe

Table 3.13 Rest of West Europe Non-Captive Power Supply Market 2003-2008

Euro Millions	2003	2004	2005	2006	2008
EXTERNAL POWER SUPPLIES	83	84	89	93	98
AC-DC SMPS	275	281	293	302	323
DC-DC SMPS	131	133	139	143	151
DC POWER SYSTEMS	67	68	72	75	80
UPS EQUIPMENT	143	149	158	168	181
TOTAL	699	715	751	781	833

Note: Based on constant 2002 exchange rates

independently for sales and product development for its own global customers. The global functions common to all parts of the group are new customer acquisition, production and supply management. From 1 July 2003, the organisation was modified to five customer focused business units – OEM1, OEM2, OEM3, OEM4 and OEM5 – each responsible for customers in the group's five main segments: Information Technology, Industry and Automation, Medical Electronics, Energy Production and Transmission, Transport and Defence.

As part of its restructuring, Efore is in the process of dismantling Efore Power Design Oy as a company and transferring its operations and personnel to the parent company.

Most of Efore's current business (over 80%) is concerned with the design and production of customer specific AC/DC and DC/DC power supplies from 20W to 1.5kW (but typically 150W – 600W). The annual production volumes vary between 1000 and 100,000 units depending on the product and the customer.

Efore's standard power supplies include a wide range of AC/DC and DC/DC power supplies and inverters of various power ratings. This range is complemented by laboratory power supplies, electronic loads and military products. The inverters include both Efore's own design and manufacture (125 – 375VA) and those developed and manufactured by its German affiliate company, Power Innovation GmbH (125 – 4000VA, with parallel mode up to 48kVA). Additionally Efore represent Chloride's UPS products and lead acid and nickel cadmium batteries of several manufacturers.

Efore's DC energy systems are mostly modular using rectifier modules from 240W up to 1800W for telecommunications and industry.

As part of the group's new strategy, Efore is also providing power electronics manufacturing and integration services. In addition to electronic design, Efore offers its contract manufacturing customers software and mechanical design, and design of production and testing systems.

FINANCIAL INFORMATION – Year ending 31 October

Efore Group

Sales by Area

Euro millions	2002	2001	2000
Finland	16.7	24.7	33.3
Rest of European Union	15.9	19.8	17.7
USA	0.8	1.1	3.5
Other	5.4	10.7	5.4
Net Turnover	38.8	56.3	59.9

7 EUROPEAN POWER SUPPLY EQUIPMENT MANUFACTURERS

Company Name: 3T SRL
Address: Via Pian dei Molini 12, 06031 Bevagna (Perugia)
Country: Italy
Tel: +39 0742 360 500
Fax: +39 0742 360 876
Employees: 30
Sales: Euro 1.7 million (2001)
Products: UPS systems (500 - 1500 VA)

Company Name: ACAL POWER DIVISION
Address: Redfields Park, Church Crookham, Hants GU52 ORD
Country: United Kingdom
Tel: +44 1252 858727
Fax: +44 1252 858001
Website: www.acalelec.co.uk
Key Executive: Steve Carr (Divisional Manager)
Parent Company: Acal Plc
Mfg. Plant Area: 2800 sq m
Employees: 97 (988 in group)
Sales: £272 million (Group - year ending March 2003)
Products: Design and manufacturer of custom power supplies (DC-DC up to 400W, AC psu's). Full design, PCB and mechanical CAD support. Distributor for Alcatel, Aucon, C&D Technologies, Delta Elektronika, Emerson Energy Systems, EOS, Ericsson, Excelsys Technologies, FSP Group, Gaston, Ibek, Mascot, MGE UPS, Power One, Protek, Reliability, Timonta, Unipower Europe, Vicor, Volgen and Wattpower

Company Name: ACE POWER ELECTRONICS LTD
Address: 5 Pipinou Street, 17342 Athens
Country: Greece
Tel: +32 10 9966555
Fax: +32 10 9969444
Website: www.acepower.gr
Key Executive: Raftopoulos Klimis (Sales Director)
Employees: 18
Sales: Euro 1.4 million (2001)
Products: UPS (300 VA to 100 kVA), voltage stabilizers (300 to 5000 VA), DC power supplies, inverters

Company Name: ACROGEN LTD
Address: Westfield House, Puncknowle, Dorchester, Dorset DT2 9BP
Country: United Kingdom
Tel/Fax: +44 1308 897734
Website: www.acrogen.com
Key Executive: Raymond Peto (Technical & Sales)
Employees: Under 10
Sales: Under £0.25 million
Products: Variable mains AC switch mode power supplies (up to 2 kVA)