CBI
Ministry of Foreign Affairs

CBI Product Factsheet:

Power Supply Units in Italy and Spain

Introduction

Penetration of electronics into new markets such as the electronic lighting market, energy storage market, and smart grid market will create demand for customised and more intelligent power supply products in Spain and Italy. However, be aware of the economic slowdown in Spain and Italy. Many Original Equipment Manufacturers (OEMs) in Spain and Italy began outsourcing production of low-tech products and began re-focusing on high-tech and highly customised products after they had been hit by the economic crisis. This also makes the market for low-cost power supply products and components for power supply units attractive for exporters in developing countries.

Product Definition

Power supply units are a sub-category within the sector Electronics and Electrical Engineering (EEE). The power supply units' product category includes power supplies (HS code 85044030), transformers (85042100), measuring transformers (HS code 85043121), batteries (HS code 850680), UPS (HS code 850440), DIN rail, voltage stabiliser, inverters, converters (HS code 850440), and accessories such as chargers (HS code 850690) and coilware accessories (HS code 850490).

Typical applications of power supplies are all in leading industries such as energy, automotive, lighting, and many others. Electronic lighting and smart metering application industries are particularly strong in Italy and Spain, driven by legal requirements.

Typically, brand names of power supplies are not very significant, while the product quality and design are of higher importance. However, industrial users may still go for established brands in electronic components. The number of global suppliers of power supplies exceeds 100. Some of the leading suppliers of power supplies include Acal Bfi, Ansmann, Benning, Codico, Dehner, Emerson Network Power, Friwo, Mean Well, TDK Lambda.

Product Specifications

Quality: European companies are typically looking for power supplies that meet the following requirements: 1) fulfil the agreed-upon specifications, 2) are energy efficient and sustainable, 3) and have up-to-date (intelligent) technology.

- Power supply units are used in all application industries. Depending on the application, power supplies have various specifications. Voltage, consumption, adapter, and plugs are some of the parameters that define the product application. To assure the durability and safety, products must comply with the relevant EU regulations and standards. The materials used and especially hazardous substances have to comply with RoHS and must also meet REACH requirements.
- Depending on the design, a power supply may be powered by:
    - Electrical energy transmission systems. Common examples of this include power supplies that convert AC line voltage to DEVELOPING COUNTRY voltage,
    - Energy storage devices such as batteries and fuel cells,
    - Electromechanical systems such as generators and alternators,
    - Solar power.
- In some application industries, such as electronic lighting and energy, the function of power supply units changes to more complicated and intelligent solutions, e.g. power supplies with integrated controlling units. The ability to supply products with customised designs can be advantageous for market players that are willing to export to Europe.

Labelling:

- Power supplies would be typically labelled with a description of the content, including the following information:
    - type of product,
    - model type,
    - quantity,
    - net and gross weight (in kilograms),
    - supplier/manufacturer name and location,
    - serial number.
- DEVELOPING COUNTRY exporters have to familiarise themselves with the labelling of energy-related products pursuant to the Waste of Electrical and Electronic Equipment (WEEE) Directive in order to formulate labels, indicate all product information, and mark products accordingly (e.g., the symbol of the crossed-out wheeled bin).

Packaging:

- Power supplies are typically packaged in plastic bags and cardboard boxes to protect them from damaging.

Legislative Requirements

To assure the durability and safety, products must comply with the relevant EU regulations and standards. Compliance with European legislative as well as non-legislative requirements is a basic necessity for all exporters in the electronics and electrical engineering sector. Overall it is recommendable to aim for global compliance, but also consider country-specific requirements. Below, you will find the main mandatory requirements that your products must comply with. Make sure you have familiarised yourself with legal requirements in terms of labelling, dangerous substances, product safety and liability. Your products must comply with all EU directives.

Liability for defective products. The liability applies to all products manufactured or imported to the European market. Typically, the company that brings the product onto the European market is responsible, but a claim can be passed on to the producer or exporter.

Tips:

- Familiarise yourself with standards that specifically apply to your products. To ensure that your products are of high quality, review your quality assurance and testing procedure, e.g. through the implementation of an accredited quality management system (ISO 9001).
- Carefully formulate labels, instructions for use, and disclaimers.
- Finally, make sure your insurance covers product liability. Have a look at the EU legislation on liability for defective products

CE marking. Power supply units must meet several technical standards laid down in EU legislation. The manufacture must carry out a conformity assessment and when compliant, the product must be marked with the CE mark. With a few exceptions, all components must be marked with the CE mark. When electronic components are sold as a subsystem or part of a finished good, they do not legally require the CE mark. However, driven by market requirements, nearly all customers will still demand the CE mark for most components, in particular when the components are critical in the application. For power supply units, the following directives may be relevant:

- Electromagnetic compatibility (EMC Directive 2004/108/EC)
- Low voltage equipment (LVD 2006/95/EC)
- Ecodesign for Energy related products (Directive 2009/125/EC)
- Equipment for use in potentially explosive atmosphere (ATEX Directive 94/9/EC).
- RoHS Directive

Tips:

- Apply for CE marking, which is required by all customers, also in cases when your product is a subsystem or part of a finished good and legally does not require the CE mark. If you are a manufacturer, you have to be familiar with the process of affixing the CE marking to power supplies. The European Commission has a very insightful website that illustrates the key steps to undertake from the beginning to the trading of the product. See the following documents for more information on EU legislation:
- CE marking for Electromagnetic compatibility
- CE marking for Low Voltage Devices
- CE marking for Eco-design of energy related products
- Directive 94/9/EC (ATEX)

Waste of Electrical and Electronic Equipment (WEEE). If you want to export electronic or electrical products to the EU, you have to take into account that your EU buyers have obligations regarding the waste of these products. EU producers are obliged to participate in product take-back schemes. However, this does not directly affect exporters from developing countries. Its requirements may have an impact when EU buyers ask their suppliers to meet specific design requirements or provide certain information.

Tips:

- Make sure your product design complies with WEEE and enables product recycling, recovery or dismantling. (Note that these requirements may differ per EU Member State.) Carefully formulate labels and mark products in accordance with WEEE (e.g. the symbol of the crossed-out wheeled bin).

- See the EU document on Waste Electrical and Electronic Equipment (WEEE) for more information.

Labelling of energy-related products. EU producers and exporters are obliged to indicate energy consumption on household appliances and other energy-related products. (The list is being extended into industrial used products. Please, check when importing your products and discuss this with your European customers.)

Tip:

- Make sure you indicate all product details (including, energy class, performance, capacity, noise level, etc.) required by the EU. For more information check EU sources on energy labels of energy using and energy-related products.

REACH regulation to manage the risks from chemicals and to provide safety information on the substances. This legislation restricts the use of certain hazardous chemicals used. Furthermore, it sets some requirements regarding information on the used chemicals. Manufacturers are required to provide information on the properties of chemical substances used to their buyers.

Tip:

- Ask your buyer for their requirements regarding REACH. List all chemicals, including raw materials and additional materials, used in your production process.

Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS). The directive bans the placing on the EU market of electrical and electronic equipment that contains more than the agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl and polybrominateddiphenyl ether flame retardants.

Tip:

- Make sure that none of the hazardous substances referred to in the RoHS Directive is used in your production process. Exporters of electronic components have to meet the requirements under both RoHS and REACH, since they are complementary. See the document Substances in Electrical and Electronic Equipment (RoHS).

Heavy metals in batteries and accumulators. Manufacturers and exporters of batteries and accumulators to Europe must make sure that the products do not contain heavy metals in levels that are prohibited by the EU. There are also labelling requirements for batteries and accumulators you must apply for.

Tip:

- Make sure that heavy metals used in your products do not exceed the allowed levels. Be aware of the labelling requirements for batteries and adapt your packaging labelling as required. See the document on EU legislation: Heavy metals in batteries and accumulators on the EU webpage.

Non-Legislative Requirements

Although compliance with non-legislative requirements is entirely voluntary, buyers often request it. In effect, 'private' or 'voluntary' standards are often established by industry players themselves. They are regularly perceived by producers as a barrier to entering a market, but compliance equally constitutes an opportunity to enhance your competitive advantage for the export of your product.

Quality management systems (QMS) – ISO 9001. If you plan to export to Europe, all products must meet buyers' quality demands. ISO 9001 is designed to make sure that the manufactured products and/or products exported to Europe meet the needs of customers. This document provides information on the world's most widely used QMS.

Tips:

- Apply for ISO 9001 as quickly as possible. Understand your target customers' requirements and if you plan to target automotive industry, get ISO 16949.
- See the document Quality Management Systems on the ISO webpage.

For automotive applications, components within an assembly, subassembly, and finished goods have to meet quality demands outlined in *ISO/TS 16949 QMS*.

Tip:

- See automotive application-related requirements in terms of quality management systems also on the ISO webpage.

Functional Safety in accordance with ISO 26262. ISO 26262 focuses on the functional safety of electrical and electronic systems in vehicles.

Tip:

- Apply for ISO 26262. Even though these requirements are not mandatory, they will definitely give you an advantage over other DEVELOPING COUNTRY exporters. See the ISO webpage for more information on the guidelines of ISO 26262.

Occupational health and safety in the electronic components sector. Occupational health and safety (OHS) issues are all aspects related to labour conditions and are very often part of EU buyers' social requirements for their suppliers.

Tip:

- Consider implementing a management system on OHS (e.g. OHSAS 18000). European buyers are increasingly becoming more sensitive and need transparency in the supply chain and in labour conditions at all levels. Even though these requirements are not mandatory, they will definitely give you an advantage over other DEVELOPING COUNTRY exporters if you can comply with them. Get more insights into occupational health and safety in the EU.

Electronic Industry Citizenship Coalition (EICC) Initiative. The most important sustainability initiative in the Electronics Sector, in Europe and internationally, focuses on social, ethical, health and safety and environmental issues. Members are required to comply with the Code requirements. Some industry buyers can require their suppliers to follow the EICC code of conduct. Relevant for first tier suppliers especially

Tip:

- Find out what buyers (what industry) may require regarding the EICC code of conduct. Try to implement this policy. This will give you an advantage over other exporters. Explain your steps in this area on your website and in other company's literature. See EICC webpage for more information on the sustainability initiative.

CEI published standards in the electrotechnical field in Italy. National standards are harmonised with European and International Standards, and define best practices and requirements for the design, use, installations, and specifications of electric and electronic components. The application of standards is generally voluntary. However, for medical, toy, military, and some other applications, there are some additional standards on a country level, which have sometimes different limits/requirements as compared to the European standards.

Tips:

- You should primarily aim for global compliance, but also consider country-specific requirements.
- Familiarise yourself with the Italian standards, if you plan to enter this market. Even though these requirements are not (legally) mandatory, they are often required by buyers. The decision whether to apply for country-specific standards can be driven by the application industry you are aiming for. Besides, Waste of Electrical and Electronic Equipment standards are regulated on a country level. See the CEI webpage for more information on the national standardisation in Italy

AENOR

Spanish national standards published by AENOR, which is responsible for the technical development of standards and certification. National standards are harmonised with European and International Standards. The application of standards is generally voluntary. However, for medical, toy, military, and some other applications, there are some additional standards on a country level, which have sometimes different limits/requirements as compared to the European standards.

Tip:

- Familiarise yourself with the Spanish standards, if you plan to enter this market. Even though these requirements are not (legally) mandatory, they are often required by buyers. The decision whether to apply for country-specific standards can be driven by the application industry you are aiming for. Besides, Waste of Electrical and Electronic Equipment standards are regulated on a country level. See the AENOR webpage for more information on the national standardisation in Spain.

Trade Statistics

Imports and Exports

Italy and Spain present opportunities to DEVELOPING COUNTRY exporters through the supply of customised products for various development projects, e.g. energy storage systems, electronic lighting, smart grid, RFID. Nevertheless, be aware of the economic slowdown in Spain and Italy. Consider targeting other European countries through re-export.

Figure 1: Imports and growth of Power supply units (<2kW) to Italy and Spain in 2014, %

Countries	Share of total imports in EU+EFTA, 2014	CAGR* of total imports (2009-2014)	Share of imports from developing countries 2014	CAGR* of imports from developing countries (2009-2014)
Italy	6.8%	0.6%	31%	7.5%
Spain	3.8%	-0.01%	20%	3.2%

**Compound annual growth rate*

Source: Eurostat (2015)

Figure 2: Exports and growth of Power supply units (<2kW) from Italy and Spain in 2014, %

Countries	Share of total exports in EU+EFTA, 2014	CAGR* of total exports (2009-2014)	Share of exports to developing countries 2014	CAGR* of exports to developing countries (2009-2014)
Italy	9.1%	0.3%	23%	-4%
Spain	3%	0.9 %	34%	4%

**Compound annual growth rate*

Source: Eurostat (2015)

Most important developments

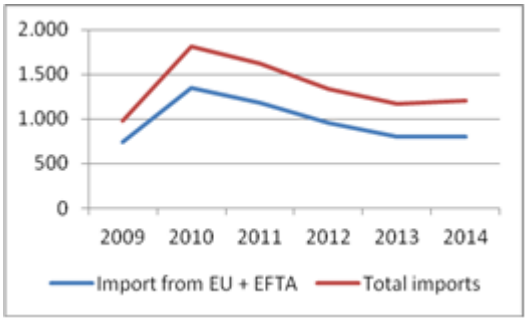
Italy and Spain are significant markets in terms of the number of power supply units they import, holding a cumulative share of 10.6% of total European imports. Italy recorded a slight growth in imports of power supply units between 2009-2014, but in 2011 and 2012 the imports' value declined. Yet, imports stabilized in 2013 and 2014. Industry experts foresee further decline in the electric and electronics industry in Italy. Spain saw a slight negative development for power supply imports over the last five years and the country's electrical industry is expected to continue to decline. However, the economy is beginning to stabilize and imports went up slightly again in 2014.

Tip:

- Though both Spain and Italy have been hit hard by the European crisis and the outlooks for 2013 for the electrical industry are not satisfactory, there are still some opportunities for DEVELOPING COUNTRY exporters. Italy and Spain have a number of market development projects in various application industries such as smart grid, photovoltaic, energy storage systems, electronic lighting, RFID and production automation. Consider supplying Italy and Spain with customised solutions for these projects.

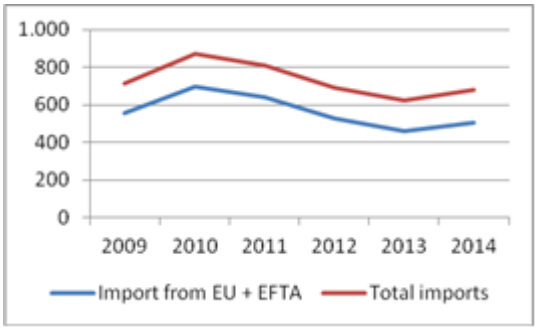
In 2014 Italy imported electronic equipment worth some 32.1 billion USD. This represented 6.8% of the total imports. Spain imported just 24.4 billion USD, but this meant an import share of 6.9%

Figure 3: Imports of Power supply units (<2kW) to Italy, value in € million



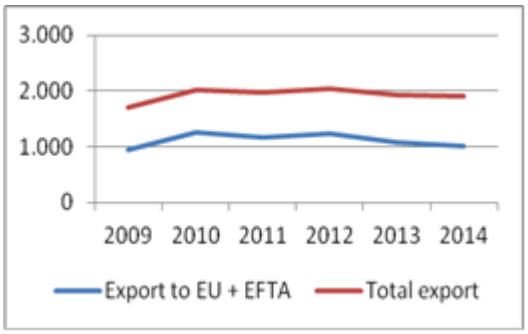
Source: Eurostat (2015)

Figure 4: Imports of Power supply units (<2kW) to Spain, value in € million



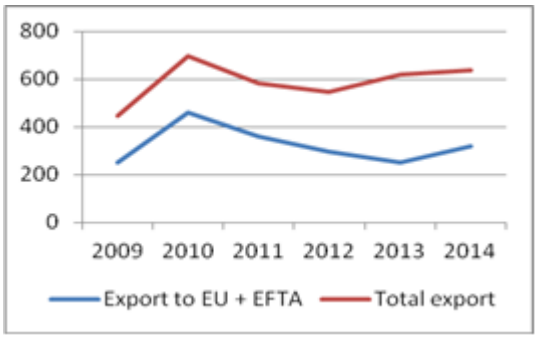
Source: Eurostat (2015)

Figure 5: Exports of Power supply units (<2kW) from Italy, value in € million



Source: Eurostat (2015

Figure 6: Exports of Power supply units (<2kW) from Spain, value in € million



Source: Eurostat (2015)

Most important developments

The importance of cooperating with developing countries became clear in the 2009 – 2014 period in both Spain and Italy, and showed significant growth. Besides China, the largest exporters of power supply units in developing countries are located in India, Tunisia, Indonesia, Thailand, Vietnam, Croatia and Brazil. The fastest growth of imported power supply unit was demonstrated by Vietnam, Turkey, the Philippines, Croatia, Thailand, and Brazil. These countries are expected to continue to take up the same share of imports as China, benefiting from the improvement of expertise in more intelligent electronic solutions. In addition to that, Vietnam benefits from lower costs compared to China where wages are on the increase as the economic growth in the country continues.

Tips:

- Any developing country with a profound know-how and good product quality has opportunities for entering the European market.
- Whereas with the increasing importance of customised electronic products and more intelligent electronic solutions may be a significant influencing factor in entering the European market.
- Competitive pricing is also a key to a market entry.

Italy's exports of power supply units stabilized after demand declined and as a result of the declining investments in the electric and electronics industry. Spain's exports remained relatively stable and trade with European countries increased by CAGR 6-7% in the 2009-2014 period. The share of exports to Europe increased in both countries in the 2009-2014 period. Italy and Spain's export of power supplies depend on the economic situation and production development. Exporters in developing countries will benefit from the expected growth of the share of exports to Europe, as the role of re-exports increases.

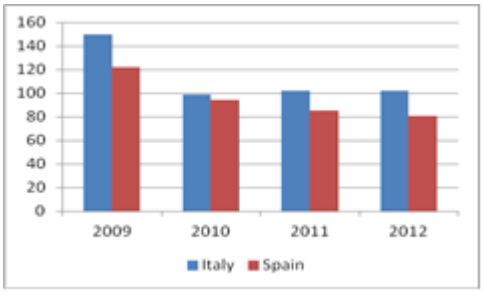
Tip:

- Be aware of the economic slowdown in Spain and Italy, when partnering with companies from Southern Europe. There is a possibility to target other European countries through re-export.

Production and Consumption

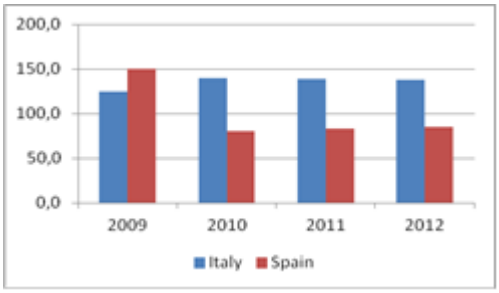
Penetration of electronics into new markets such as electronic lighting, energy storage, and smart grid will create demand for customised and more intelligent power supplies. The market for low-cost power supplies and components for power supply units can be also attractive for DEVELOPING COUNTRY exporters.

Figure 7: Production of Power supply units in Italy and Spain, value in € million



Source: Prodcom (2015)

Figure 8: Consumption of Power supply units in Italy and Spain, value in € million



**Apparent consumption (Production + Imports – Exports)*
Source: Prodcom (2013)

Most important developments

Both countries are relatively strong at manufacturing (16% of GDP in Italy and 13% of GDP in Spain in 2014. Source: World Bank). Production of power supplies has declined since 2007 in both Spain and Italy and reached European average in 2011. Many European countries started outsourcing production of low-tech products and started re-focusing on high-tech and highly customised products after the economic crisis hit. This trend is expected to pick up in Italy and Spain, as well as in many other European countries.

Tip:

- Consider supplying Spain's and Italy's OEMs with low-cost power supply units or components for power supplies, as well as with customised products for more intelligent solutions (e.g. power supplies with integrated controlling unit and/or sensor).

Consumption in Italy and Spain suffered from the re-location of production facilities outside these respective countries and the increasing role of cooperation with overseas suppliers. At the same time, with the growing role of production automation and developments in new markets such electronic lighting, smart grid, energy storage, the demand for power supplies and intelligent power solutions is expected to grow.

Tip:

- DEVELOPING COUNTRY exporters will benefit from the growing demand for power supply units in various application industries and in new markets such as electronic lighting through higher sales of value-added, customised product solutions.

Market Trends

Most important developments

European OEMs began separating high-tech and low-tech or high-price and low-price electronic product parts. Electronic solutions (also power supplies) become more intelligent and integrated (e.g., with a controlling unit). Thus, there are opportunities for DEVELOPING COUNTRYs in supplying with low-priced components for high-tech solutions.

Tip:

- Create a product portfolio on a modular basis, enabling the possibility to order a low-tech solution (e.g. a power supply unit without a sensor) or in a combination with high-tech electronics (including sensor). European OEMs will be able to make the decision based on their needs, intellectual property requirements, and the product quality.

Energy storage is a developing market that boosts the demand for power electronics. Italy, for example, is involved in energy storage development projects aimed at finding the best technological solutions that would allow integration of traditional energy and renewable energy sources. There are already some solutions in place, e.g. "Solon SOLiberty" that enables energy storage generated through photovoltaic systems.

Tip:

- Consider differentiating your product range by offering power supply units, and/or all kind of active and other passive components needed for the control circuitry of the energy storage components. Consider partnering with OEMs in Europe for the co-development of energy storage solutions.

As a result of political measures and technological innovations such as electronic lighting, new markets emerge and create opportunities for electric and electronic component suppliers. New functions of lighting have been introduced recently: modified lighting to create an impact on emotions, adjustment of light colour, position, and micro flickering. Italy plays a significant role in the development of electronic lighting.

Tip:

- DEVELOPING COUNTRY exporters have opportunities in supplying with intelligent components for lighting solutions, e.g. intelligent power supplies for lighting with a controlling function or power supplies equipped with an integrated sensor (for example, to measure temperature changes).

Along with the development of Smart Grid and energy distribution, the importance of smart meters (used not only for consumption recording, but also for two-way communication between the meter and the central system) is set to increase. The use of smart metering is already being driven by the state support in Italy and Spain, where Telegestore smart meters are used, co-developed by Enel and Endesa.

Tip:

- Specialise in power electronic components (including power supplies) for smart metering. Consider sharing your knowledge in the energy industry and in particular in Smart Grids and/or Smart Metering through co-projects with European companies.

Not only the product quality is essential for European OEMs, but also the product design is increasingly important. DEVELOPING COUNTRYs need to work on acquiring Europe's best practices not only in the implementation of quality standards, but also in product design and presentation. E.g., no signs of handwork on product surface, clean and accurate packaging.

Tip:

- Work on the improvement of product design and packaging. Work in line with European standards and follow all the buyer requirements. Actively approach procurement managers to find out about typical requirements.

With the growing role of international cooperation, European companies will increasingly be facing various risks that need to be measured and managed in order to keep the total cost of ownership (TCO: the financial estimate to help buyers or owners to determine the direct and indirect costs of a product) at a reasonable (low) level. Both smaller and larger companies will increasingly be looking for the most reliable suppliers and will try to eliminate the risk through supplier contract and cost management.

Tip:

- European SMEs present better opportunities as potential customers for DEVELOPING COUNTRY exporters, but also larger companies may contact you as a potential supplier. That is why visibility on the market is crucial. Develop your sales and marketing strategy:
    - Work on well-structured and up-to-date content in your company's website;
    - Attend trade shows several years in a row. Start preparations for the trade show far in advance;
    - Work on your *Unique Selling Proposition*, i.e. why should European OEMs buy your product;
    - Work on the product pricing.

For more information on entering the European market, please refer to CBI Trends for Electronics and Electrical Engineering.

Market Channels and Segments

See CBI Market Channels and Segments for Electronics and Electrical Engineering, because the viable trade route from Power Supply Units does not differ significantly from the general trade route.

Market Competitiveness

See CBI Competition for Electronics and Electrical Engineering, because competitiveness of Power Supply Units does not differ significantly from this general overview.

What are the end market prices for capacitors?

Price range for Power supply units

Prices of industrial power supplies range from €10 to €3,500 in Europe. Suppliers that are present in several European countries have harmonised their prices; any differences in pricing may occur because of the different logistics, tax and other local costs.

Main groups of power supplies for industrial, automotive, lighting and communication applications	OEM volume price range, €	Major suppliers in Europe
DIN rail power supplies	€ 11 – 420	Block, Dehner, Elektro Automatik, Murr Elektronik, Phoenix Contact, Puls, Siemens, Traco Power, Wago, Weidmüller
Rack mount power supplies	€ 12 – 400	Elektro Automatik, FG Elektronik, MGV
DC-AC inverters	€ 30 - 1,275	Co Tech, Custom Power, Mean Well, Stuber Innotec, Sterling
DC-DC converters, isolated/non-isolated	€ 3 – 310	Astec, Cosel, Mean Well, Murata Power, TDK-Lambda, Traco Power
Power supplies	€ 20 – 3,500	Agilent, Aim-TTI, Elektro Automatik, Telemecanique, Voltcraft
UPS	€ 40 - 2,750	APC, Block, Elektro Automatik, Eaton, Phoenix Contact, Riello
Voltage stabiliser	€ 10 – 300	Block, Crydom, Sollatek
Chargers	€ 5 – 150	Ansmann, EnerDan, Energier, Sanyo, Voltcraft

DEVELOPING COUNTRY producers have to be aware of different costs and value chain margins that add up to the product price. Production and administration costs of the manufacturer make usually 44-51% of the end price (OEM volume price). The production and administration costs should include all raw material costs, development, labour, and other fixed and administration costs. To make a unique selling proposition, DEVELOPING COUNTRY exporters have to understand own costs, liabilities and responsibilities, and to analyse product market price levels.

OEM volume price breakdown	Margin
Production and administration costs	50%
Marketing and sales costs in DEVELOPING COUNTRYs	3%
Freight to Europe and other related costs	6%
Import and other (e.g., VAT financing) costs	5%
Marketing costs in Europe	7-10%
Importer margin	8-10%
Distributor margin	20%

Main Sources

Europe

- Eurostat, URL: http://ec.europa.eu/eurostat/web/international-trade/statistics-illustrated
- Eurostat ProDeveloping Countryom, URL: http://ec.europa.eu/eurostat/web/prodcom/overview
- Organisation for Economic Co-operation and Development (OECD), URL: http://www.oecd.org
- Distributors of electronics in all countries, URL: http://www.list-of-companies.org
- IDEA, a federation of component distribution trade associations, URL: http://www.ideaelectronics.com

Italy

- Italian Electrotechnical committee, URL: http://www.ceiweb.it/en
- Online Italian electronics portal, URL: http://www.elettronet.it
- Online Italian electronics portal Ellettricoplus, URL: http://www.elettricoplus.it
- National Association of Electronics Suppliers in Italy (Assodel), URL: http://www.assodel.it
- National Federation of Electrotechnical and Electronics industry (ANIE), URL: http://www.anie.it
- Worldbank, URL: http://www.worldbank.org

Spain

- Spanish Association for Standardisation and Certification, URL: http://www.aenor.es
- Spanish online electromechanical magazine Connectronica, URL: http://www.conectronica.com
- Spain's observatory for Industrial Technology Foresight (OPTI), URL: http://www.opti.org/en/index.asp
- Spanish business news portal, URL: http://www.eleconomista.es
- Spanish Association for the Internationalisation of Enterprises of Electronics, Information and Telecommunications Companies, URL: http://www.secartys.org
- Worldbank, URL: http://www.worldbank.org/

Useful Sources

Leading trade fairs in Europe

- Electronica (www.electronica.de)
- CeBIT (www.cebit.de)
- Hannover Messe (www.hannovermesse.de)
- PCIM (www.pcim.com)
- Light & Building (http://light-building.messefrankfurt.com/frankfurt/de)
- *Leading trade fairs in Italy*
- Affidabilitá & Tecnologie (http://www.affidabilita.eu)
- BIAS, trade fair for automation, instrumentation, electronic production and microelectronics (http://www.eventseye.com)
- Expo Elettronica (http://www.eventseye.com)
- Klimaenergy (http://www.fierabolzano.it/klimaenergy/en/)
- Energy Expo Forli (http://www.nfiere.com/energy-expo-forli/)
- Zero Emission Rome (http://www.zeroemission.eu/)
- Euroluce, International Lighting Expo (http://www.eventseye.com/fairs/f-euroluce-4324-1.html)

Leading trade fairs in Spain

- Ifema (http://www.ifema.es/Institucional_01/)

More information

CBI market information:

- Trade Statistics for Electronics and Electrical Engineering;
- Trends for Electronics and Electrical Engineering;
- Market Channels and Segments for Electronics and Electrical Engineering;
- Competition for Electronics and Electrical Engineering.

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