

THE YEARBOOK OF WORLD ELECTRONICS DATA

Components
Computers
Consumer
Control and Instrumentation
Medical and Industrial
Office Equipment
Radio Communications
Telecommunications

Volume One **WEST EUROPE**

Introduction

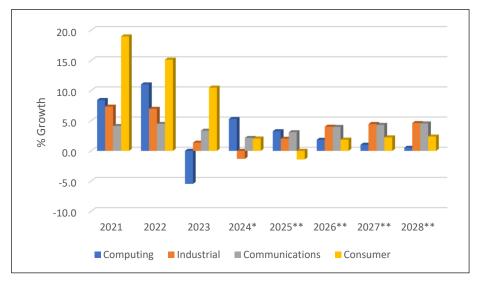
In providing the forecasts for the current study, which were made at the end of July/beginning of August, we have:

- Taken into accounts developments in the European and global economy, and the on-going impact of tariffs on growth.
- That the impact of inventory balancing across several segments and notably industrial eased over the final months of 2024 with orders normalising in the first half of 2025.
- Component prices and shortages normalised in 2024 although tariffs have put pressure on prices in 2025.
- Consumer spending will remain subdued due to the combination of higher inflation and on-going geopolitical uncertainty.
- Al and data centre consumption will be a key driver of growth in the overall computer market in 2025 and 2026. We also expect demand to feed through to higher computer equipment production.

As a result, we expect growth in the European electronics industry to strengthen in the second half of 2025 and then gain momentum over the period to 2028. However, as in previous years significant downside risks remain which could still push a sustained recovery into the first quarter of 2026.

In Euro's the production of electronic equipment in Western Europe increased by an estimated 0.2% in 2024 to Euro 131.2 billion, down from growth of 1.7% in the prior year, growth in the computing and communications segments – primarily radar and navigation/defence – offsetting falling industrial output.

Based on current indicators we are forecasting that growth in electronic equipment output in Western Europe will increase by 2.2% in 2025, 3.7% in 2026 and then accelerate to 4.0% in 2027 and 4.2% in 2028.



Electronics Equipment Production by Country/Region 2021-2028

Growth in the industrial segment, which accounted for an estimated 60.1% of electronics equipment output in 2024, slowed in the second half of 2023 and then declined by 1.3% in 2024 through a combination of inventory re-balancing and weaker demand. Growth is forecast to gain traction in the second half of 2025 and then accelerate over the forecast period.

The outlook for the communications segment, which includes defence and commercial aviation is mixed. Lower spending by network providers and enterprises, which had negative impact in the final months of 2023, continued in 2024 and into the first half of 2025. This has been offset by growth in defence and commercial aviation. After increasing by 3.8% in 2023, growth in the communications & radar segment eased to 3.7% in 2024 and then accelerate to 4.6% at the end of the forecast. In contrast, the telecommunications segment increased by 1.7% in 2023, declined by 3.8% in 2024 before resuming growth in 2025 and reach 4.4% in 2028.

Strong demand for AI and the growth in data centres has had positive impact on the development of the computer segment in 2024 and 2025, this following the decline of 5.5% in 2023. Growth is expected to ease year on year over the forecast period reaching 0.6% in 2028 from 3.4% in 2026. The on-going decline in the production of video and audio equipment will continue over the period to 2028.

In 2024, the production of electronic components in Western Europe amounted to Euro 49.3 billion, 27.3% of overall electronics production. After two years of double-digit growth electronic component production declined by 2.0% in both 2023 and 2024 on the back of weaker demand and prices normalising following the period of higher prices fuelled by shortages.

In 2024, active components accounted for 61.7%, passive 31.9% and other 6.4% while Germany accounted for the largest share of production at 34.9%, followed by Ireland 14.9%, France 14.2%, Italy 11.2% and the UK 5.7%.

With the EU and several countries, notably Germany, France and Italy, looking to secure the future supply of leading-edge semiconductors several advanced wafer fabs were announced although several major projects have been shelved or cancelled since the last report including Intel and Wolfspeed/ZF's fabs in Germany and the STMicroelectronics/GlobalFoundries joint wafer fab in France. The region will still however benefit from the TSMC joint venture in Germany – scheduled to start operations in 2028 – and on-going investment in existing fabs. Western Europe is also home to a number of fabless semiconductor companies and remains a centre for research and design with a strong start-up culture.

At Euro 252.4 billion in 2024 the West European market for electronic equipment and components was 1.4% lower than the Euro 256.1 billion reported in the prior year and is forecast to increase to Euro 257.9 billion in 2025. In 2024, growth of 8.8% and 3.1%, respectively in the computer and communications & radar were offset by declining demand in the industrial, telecommunication and component segments. Led again by the computer segment, all market segments apart from office equipment and consumer are forecast to post growth in 2025.

The Yearbook of World Electronics Data – tracking developments in the global electronics industry

With a history now extending over 50 years, the first edition of the Volume 1 of the Yearbook of World Electronics Data was first published in 1973, the Yearbook series has been extended to cover 53 countries globally to provide an invaluable and unique insight into the global trends, regional variations and the underlying state of the global electronics market for all stages of the supply chain - OEM, contract manufacturing and design, components and materials suppliers to financial /industry analysts and government and academia.

Although encompassing a range of published and bespoke products the core of RER's research programme is one of the most comprehensive statistical databases covering the global electronics industry, with the resulting analysis being published through three concise and clear demographic volumes, as a series of individual country reports, through customised solutions to meet specific client requirements and a series of Excel databases providing the combination of both historical and forecasted data.

Yearbook of World Electronics Data - Volume 1 West Europe

Published since 1973 Volume 1 of the Yearbook of World Electronics Data provides:

- A single source solution allowing you to track the electronics industry in 16 countries in Western Europe.
- 13 major product groups.
- Market and production forecasts.
- Summaries provided in US dollars and Euros.
- CD-option allows you to manipulate the data quickly and easily: produce your own subsets or summaries of the data, create your own forecasts or cut and paste the data into your own in-house reports and presentations.

Who will benefit?

The Yearbook is essential research providing key data for all areas of the electronics industry including:

- Distributors and manufacturers of electronic components and materials.
- Suppliers of electronic production equipment.
- OEMs.
- EMS Providers.
- Government, including investment organizations.
- Financial and industry analysts.
- Academic institutes & universities tracking developments in the electronics industry.

The Yearbook of World Electronics Data

The Yearbook of World Electronics Data series presents market and production statistics for the GLOBAL electronics industry. Available in three published volumes covering 53 countries and 13 major product groups, the yearbook is used in the formulation of business and market planning, in tracking trends based on a clear understanding on how the industry has developed historically and to provide a basis for medium and long-term forecasting.

53 country coverage, 13 major product groups

... comparable country by country and product by product.

Methodology

The Yearbooks highlight market trends and opportunities and offer corroborative evidence for individual research. Each new edition is fully revised and updated. Trade statistics are analyzed in detail, with over 500 separate categories being employed. Production statistics are collected from Government and Manufacturer's Association sources where these are available. Extensive use is also made of research reports, company reports, news items and work by other consultants to supplement and cross check the official and semi-official sources.

Markets are forecast in real terms for the next five years, with production forecast for the next two years, using constant exchange rates and excluding inflation. These are based on our extensive knowledge of the historical performance of each product, the general economic outlook and the major growth influencing factors.

2025 Series

Volume 1 2025 West Europe

Synopsis: Economic Overview; Electronics Market Overview; Imports 2022-2023; Exports 2022-2023; Production Data 2022-2025; Market Data 2022-2028

16 country coverage

Austria; Belgium; Denmark; Finland; France; Germany; Greece; Ireland; Italy; Netherlands; Norway; Portugal;

Spain; Sweden; Switzerland; UK Publication Data: August 2025

Volume 2 2025 America, Japan, Asia Pacific

Synopsis: Economic Overview; Electronics Market Overview; Imports 2022-2023; Exports 2022-2023; Production

Data 2022-2025; Market Data 2022-2028

19 country coverage

Australia; Brazil; Canada; China, Hong Kong; India; Indonesia; Israel; Japan; Malaysia; Mexico, Philippines;

Singapore; South Africa; South Korea; Taiwan Thailand; Vietnam, USA

Publication Data: September 2025

Volume 3 2025 East Europe & World Summary

Synopsis: Economic Overview; Electronics Market Overview; Imports 2022-2023; Exports 2022-2023; Production Data 2022-2025; Market Data 2022-2028

53 Country World Summary covering production data 2022-2025 and market data for 2022-2028

13 country coverage

Bulgaria; Croatia; Czech Republic; Estonia; Hungary; Lithuania; Poland; Romania; Russia; Slovakia; Slovenia;

Turkey, Ukraine

Publication Data: October 2025

For each country production and market data is supplied for the following product groups:

- Computers
- Consumer Video; Audio; Personal
- Control & Instrumentation
- Medical & Industrial
- Office Equipment
- Radio Communications
- Telecommunications
- Components Passive Components; Semiconductors; Other Components

Related Products & Services

European Electronics Production 2000-2028

As part of its program of research covering developments in the European electronics industry RER has released a new statistical database providing a medium-term outlook for electronics production in Europe. Covering the period 2000-2028 the research allows you to track developments both geographically and by major product group.

The database is provided as an Excel spreadsheet providing production data for 13 product groups and 29 countries split by Western Europe and Central and Eastern Europe.

Global Electronics Production & Markets

Launched in 2012, Global Electronics Production & Markets provides top line analysis on the global electronics industry for the period 1995 to 2028 for markets and 1995-2025 for production. Through two Excel databases you can quickly analyze the structure of the global industry and how it has changed both geographically, through RER's unique coverage of 53 countries, and by thirteen major product groups. The new database will be available in October 2025.

Country Reports

Drawing on data from its core statistical database RER provides a quick, reliable and cost-effective assessment of the electronics industry for an individual country. For a full listing please visit www.rer.co.uk

Custom Research

Building on the flexibility of the two databases and the Yearbook series we can quickly search data by product or country/region to provide solutions tailored to your specific needs or budgets. Ideal for input into internal presentations/ documents the data is supplied via email.

European Electronic Markets Forecast

Market data is only one part of the equation when analyzing the European electronics industry. Updated monthly, *European Electronic Markets Forecast* (EEMF) enables you to track with minimum time and cost, the key issues and opportunities impacting the European electronics industry. From originally researched articles to the latest company developments and market analysis EEMF is your virtual "Research Analyst" utilizing over 40 years of industry and market research experience to provide you both in hardcopy and electronic formats not only reliable but objective analysis and news on the European and global electronics industry.

Summary of Contents

Market Analysis: Up-to-the-minute analysis of the key sectors of the European and Global electronics industry

Industry News: The latest industry and company news split by:

- Mergers & Acquisitions
- Automotive
- Battery Technology/Electrification
- Electronic Manufacturing Services/PCB
- Production
- Aerospace & Defence
- Semiconductors
- Renewable Energy/CleanTech

Asia Pacific Electronics: A monthly summary of key company developments within the region.

Industry Outlook – Monthly overview of developments in the broader European manufacturing sector focusing on the latest Purchasing Managers' Index (PMI) data. In addition, the section provides regular updates on the European and global economy and developments in the supply chain.

For additional information on the above publications or Reed Electronics Research's complete range of research products please contact or visit www.rer.co.uk

Andrew Fletcher, Research Manager andrew.fletcher@rer.co.uk

Reed Electronics Research 7 Rectory Farm West Hanney Wantage, Oxon OX12 0LF United Kingdom

Tel: +44 (0) 1235 868620 website: www.rer.co.uk

Yearbook of World Electronics Data Volume 1 2025

1 INTRODUCTION	15
2 SUMMARY DATA	17
2.1 Economic Overview	17
2.2 Electronics Overview	18
2.3 Imports 2022-2023	25
2.4 Exports 2022-2023	26
2.5 Consolidated Summary of Production 2022	27
2.6 Consolidated Summary of Production 2023	27
2.7 Consolidated Summary of Production 2024	28
2.8 Consolidated Summary of Production 2025	28
2.9 Summary of EDP Production	29
2.10 Summary of Control & Instrumentation Production	30
2.11 Summary of Medical & Industrial Production	31
2.12 Summary of Communications & Radar Production	32
2.13 Summary of Telecommunications Production	33
2.14 Summary of Consumer Production	34
2.15 Summary of Components Production	35
2.16 Summary of Active Component Production	36
2.17 Summary of Passive Component Production	36
2.18 Summary of Other Component Production	36
2.19 West Europe Total Production	37
2.20 Consolidated Summary of Markets 2022	40
2.21 Consolidated Summary of Markets 2023	40
2.22 Consolidated Summary of Markets 2024	41
2.23 Consolidated Summary of Markets 2025	41
2.24 Consolidated Summary of Markets 2026	42
2.25 Consolidated Summary of Markets 2027	42
2.26 Consolidated Summary of Markets 2028	43
2.27 Summary of EDP Markets	44
2.28 Summary of Control & Instrumentation Markets	45
2.29 Summary of Medical & Industrial Markets	46
2.30 Summary of Communications & Radar Markets	47
2.31 Summary of Telecommunications Markets	48
2.32 Summary of Consumer Markets	49
2.33 Summary of Components Markets	50
2.34 Summary of Active Component Markets	51
2.35 Summary of Passive Component Markets	51
2.36 Summary of Other Component Markets	51
2.37 West Europe Total Markets	52
3 COUNTRY DATA	55
3.1 AUSTRIA	55
3.1.1 Economic Outlook	55
3.1.2 Electronics Industry Overview	56
3.1.3 Austria Production	60
Computing 2022-2025	60
Office Equipment 2022-2025	60
Control & Instrumentation 2022-2025	60
Medical & Industrial 2022-2025	60
Communications & Radar 2022-2025	61
Telecommunications 2022-2025	61
Consumer 2022-2025	61

Video 2022-2025	61					
Audio 2022-2025	61					
Personal 2022-2025	61					
Components 2022-2025	61					
Active 2022-2025	61					
Passive 2022-2025	62					
Other 2022-2025	62					
3.1.4 Austria Markets	64					
Computing 2022-2028	64					
Office Equipment 2022-2028	64					
Control & Instrumentation 2022-2028	64					
Medical & Industrial 2022-2028	64					
Communications & Radar 2022-2028	65					
Telecommunications 2022-2028	65					
Consumer 2022-2028						
Video 2022-2028	65					
Audio 2022-2028	65					
Personal 2022-2028	66					
Components 2022-2028	66					
Active 2022-2028	66					
Passive 2022-2028	66					
Other 2022-2028	67					
3.2 BELGIUM	68					
3.2.1 Economic Outlook	68					
3.2.2 Electronics Industry Overview	79					
3.2.3 Belgium Production	73					
Computing 2022-2025	73					
Office Equipment 2022-2025	73					
Control & Instrumentation 2022-2025	73					
Medical & Industrial 2022-2025	74					
Communications & Radar 2022-2025	74					
Telecommunications 2022-2025	74					
Consumer 2022-2025	74					
Video 2022-2025	74					
Audio 2022-2025	74					
Personal 2022-2025	75					
Components 2022-2025	75					
Active 2022-2025	75					
Passive 2022-2025	75					
Other 2022-2025	76					
3.2.4 Belgium Markets	77					
Computing 2022-2028	77					
Office Equipment 2022-2028	77					
Control & Instrumentation 2022-2028	77					
Medical & Industrial 2022-2028	78					
Communications & Radar 2022-2028	78					
Telecommunications 2022-2028	78					
Consumer 2022-2028	78					
Video 2022-2028	78					
Audio 2022-2028	79					
Personal 2022-2028	79					
Components 2022-2028	79					
Active 2022-2028	79					
Passive 2022-2028	80					

Otner 2022-2028	80
3.3 DENMARK	81
3.3.1 Economic Outlook	81
3.3.2 Electronics Industry Overview	82
3.3.3 Denmark Production	86
Computing 2022-2025	86
Office Equipment 2022-2025	86
Control & Instrumentation 2022-2025	86
Medical & Industrial 2022-2025	87
Communications & Radar 2022-2025	87
Telecommunications 2022-2025	87
Consumer 2022-2025	88
Video 2022-2025	88
Audio 2022-2025	88
Personal 2022-2025	88
Components 2022-2025	88
Active 2022-2025	88
Passive 2022-2025	89
Other 2022-2025	89
3.3.4 Denmark Markets	91
Computing 2022-2028	91
Office Equipment 2022-2028	91
Control & Instrumentation 2022-2028	91
Medical & Industrial 2022-2028	92
Communications & Radar 2022-2028 Telecommunications 2022-2028	92 92
Consumer 2022-2028	92
Video 2022-2028	93
Audio 2022-2028	93
Addio 2022-2026 Personal 2022-2028	93
Components 2022-2028	94
Active 2022-2028	94
Passive 2022-2028	94
Other 2022-2028	95
3.4 FINLAND	96
3.4.1 Economic Outlook	96
3.4.2 Electronics Industry Overview	97
3.4.3 Finland Production	101
Computing 2022-2025	101
Office Equipment 2022-2025	101
Control & Instrumentation 2022-2025	101
Medical & Industrial 2022-2025	101
Communications & Radar 2022-2025	102
Telecommunications 2022-2025	102
Consumer 2022-2025	102
Video 2022-2025	102
Audio 2022-2025	102
Personal 2022-2025	102
Components 2022-2025	102
Active 2022-2025	102
Passive 2022-2025	103
Other 2022-2025	103
3.4.4 Finland Markets	104
Computing 2022-2028	104

Office Equipment 2022-2028	104
Control & Instrumentation 2022-2028	104
Medical & Industrial 2022-2028	104
Communications & Radar 2022-2028	105
Telecommunications 2022-2028	105
Consumer 2022-2028	105
Video 2022-2028	105
Audio 2022-2028	106
Personal 2022-2028	106
Components 2022-2028	106
Active 2022-2028	106
Passive 2022-2028	107
Other 2022-2028	107
3.5 FRANCE	109
3.5.1 Economic Outlook	109
3.5.2 Electronics Industry Overview	110
3.5.3 France Production	114
Computing 2022-2025	114
Office Equipment 2022-2025	114
Control & Instrumentation 2022-2025	114
Medical & Industrial 2022-2025	115
Communications & Radar 2022-2025	115
Telecommunications 2022-2025	116
Consumer 2022-2025	116
Video 2022-2025	116
Audio 2022-2025	116
Personal 2022-2025	116
Components 2022-2025	117
Active 2022-2025	117
Passive 2022-2025	117
Other 2022-2025	118
3.5.4 France Markets	119
Computing 2022-2028	119
Office Equipment 2022-2028	119
Control & Instrumentation 2022-2028	119
Medical & Industrial 2022-2028	120
Communications & Radar 2022-2028	120
Telecommunications 2022-2028	121
Consumer 2022-2028	121
Video 2022-2028	121
Audio 2022-2028	121
Personal 2022-2028	121
Components 2022-2028	122
Active 2022-2028	122
Passive 2022-2028	122
Other 2022-2028	123
3.6 GERMANY	124
3.6.1 Economic Outlook	124
3.6.2 Electronics Industry Overview	125
3.6.3 Germany Production	129
Computing 2022-2025	129
Office Equipment 2022-2025	129
Control & Instrumentation 2022-2025	129
Medical & Industrial 2022-2025	130

Communications & Radar 2022-2025	130
Telecommunications 2022-2025	131
Consumer 2022-2025	131
Video 2022-2025	131
Audio 2022-2025	131
Personal 2022-2025	132
Components 2022-2025	132
Active 2022-2025	132
Passive 2022-2025	132
Other 2022-2025	133
3.6.4 Germany Markets	134
Computing 2022-2028	134
Office Equipment 2022-2028	134
Control & Instrumentation 2022-2028	135
Medical & Industrial 2022-2028	136
Communications & Radar 2022-2028	136
Telecommunications 2022-2028	137
Consumer 2022-2028	137
Video 2022-2028	137
Audio 2022-2028	137
Personal 2022-2028	137
Components 2022-2028	138
Active 2022-2028	138
Passive 2022-2028	138
Other 2022-2028	139
3.7 GREECE	140
3.7.1 Economic Outlook	140
3.7.2 Electronics Industry Overview	140
3.7.3 Greece Production	144
Computing 2022-2025	144
Office Equipment 2022-2025	144
Control & Instrumentation 2022-2025	144
Medical & Industrial 2022-2025	144
Communications & Radar 2022-2025	144
Telecommunications 2022-2025	145
Consumer 2022-2025	145
Video 2022-2025	145
Audio 2022-2025	145
Personal 2022-2025	145
Components 2022-2025	145
Active 2022-2025	145
Passive 2022-2025	145
Other 2022-2025	146
3.7.4 Greece Markets	147
Computing 2022-2028	147
Office Equipment 2022-2028	147
Control & Instrumentation 2022-2028	147
Medical & Industrial 2022-2028	147
Communications & Radar 2022-2028	148
Telecommunications 2022-2028	148
Consumer 2022-2028	148
Video 2022-2028	148
Audio 2022-2028	149
Personal 2022-2028	149

Components 2022-2028	149					
Active 2022-2028	149					
Passive 2022-2028 Other 2022-2028						
Other 2022-2028	150					
3.8 IRELAND	151					
3.8.1 Economic Outlook	151					
3.8.2 Electronics Industry Overview	152					
3.8.3 Ireland Production	156					
Computing 2022-2025	156					
Office Equipment 2022-2025						
Control & Instrumentation 2022-2025						
Medical & Industrial 2022-2025						
Communications & Radar 2022-2025						
Telecommunications 2022-2025	157					
Consumer 2022-2025	157					
Video 2022-2025	157					
Audio 2022-2025	157					
Personal 2022-2025	157					
Components 2022-2025	157					
Active 2022-2025	157					
Passive 2022-2025	158					
Other 2022-2025	158					
3.8.4 Ireland Markets	159					
Computing 2022-2028	159					
Office Equipment 2022-2028	159					
Control & Instrumentation 2022-2028	159					
Medical & Industrial 2022-2028						
Communications & Radar 2022-2028						
Telecommunications 2022-2028						
Consumer 2022-2028						
Video 2022-2028						
Audio 2022-2028	160					
Personal 2022-2028						
Components 2022-2028						
Active 2022-2028	161					
Passive 2022-2028	161					
Other 2022-2028	162					
3.9 ITALY	163					
3.9.1 Economic Outlook	163					
3.9.2 Electronics Industry Overview	164					
3.9.3 Italy Production	168					
Computing 2022-2025	168					
Office Equipment 2022-2025	168					
Control & Instrumentation 2022-2025	168					
Medical & Industrial 2022-2025	169					
Communications & Radar 2022-2025	169					
Telecommunications 2022-2025	169					
Consumer 2022-2025	170					
Video 2022-2025	170					
Audio 2022-2025	170					
Personal 2022-2025	170					
Components 2022-2025	170					
Active 2022-2025	170					
Passive 2022-2025	171					

Other 2022-2025	171
3.9.4 Italy Markets	173
Computing 2022-2028	173
Office Equipment 2022-2028	173
Control & Instrumentation 2022-2028	173
Medical & Industrial 2022-2028	174
Communications & Radar 2022-2028	174
Telecommunications 2022-2028	175
Consumer 2022-2028	175
Video 2022-2028	175
Audio 2022-2028	175
Personal 2022-2028	175
Components 2022-2028	176
Active 2022-2028	176
Passive 2022-2028	176
Other 2022-2028	177
3.10 NETHERLANDS	178
3.10.1 Economic Outlook	178
3.10.2 Electronics Industry Overview	179
3.10.3 Netherlands Production	183
Computing 2022-2025	183
Office Equipment 2022-2025	183
Control & Instrumentation 2022-2025	183
Medical & Industrial 2022-2025	184
Communications & Radar 2022-2025	184
Telecommunications 2022-2025	184
Consumer 2022-2025	184
Video 2022-2025	184
Audio 2022-2025	185
Personal 2022-2025	185
Components 2022-2025	185
Active 2022-2025	185
Passive 2022-2025	186
Other 2022-2025	186
3.10.4 Netherlands Markets	188
Computing 2022-2028	188
Office Equipment 2022-2028	188
Control & Instrumentation 2022-2028	188
Medical & Industrial 2022-2028	189
Communications & Radar 2022-2028	189
Telecommunications 2022-2028	189
Consumer 2022-2028	190
Video 2022-2028	190
Audio 2022-2028	190
Personal 2022-2028	190
Components 2022-2028	191
Active 2022-2028	191
Passive 2022-2028	191
Other 2022-2028	192
3.11 NORWAY	193
3.11.1 Economic Outlook	193
3.11.2 Electronics Industry Overview	194
3.11.3 Norway Production	198
Computing 2022-2025	198

Office Equipment 2022-2025	198
Control & Instrumentation 2022-2025	198
Medical & Industrial 2022-2025	198
Communications & Radar 2022-2025	198
Telecommunications 2022-2025	199
Consumer 2022-2025	199
Video 2022-2025	199
Audio 2022-2025	199
Personal 2022-2025	199
Components 2022-2025	199
Active 2022-2025	199
Passive 2022-2025	200
Other 2022-2025	200
3.11.4 Norway Markets	201
Computing 2022-2028	201
Office Equipment 2022-2028	201
Control & Instrumentation 2022-2028	201
Medical & Industrial 2022-2028	201
Communications & Radar 2022-2028	202
Telecommunications 2022-2028	202
Consumer 2022-2028	202
Video 2022-2028	202
Audio 2022-2028	202
Personal 2022-2028	203
Components 2022-2028	203
Active 2022-2028	203
Passive 2022-2028	203
Other 2022-2028	204
3.12 PORTUGAL	205
3.12.1 Economic Outlook	205
3.12.2 Electronics Industry Overview	206
3.12.3 Portugal Production	210
Computing 2022-2025	210
Office Equipment 2022-2025	210
Control & Instrumentation 2022-2025	210
Medical & Industrial 2022-2025	210
Communications & Radar 2022-2025	210
Telecommunications 2022-2025	211
Consumer 2022-2025	211
Video 2022-2025	211
Audio 2022-2025	211
Personal 2022-2025	211
Components 2022-2025	211
Active 2022-2025	211
Passive 2022-2025	212
Other 2022-2025	212
3.12.4 Portugal Markets	214
Computing 2022-2028	214
Office Equipment 2022-2028	214
Control & Instrumentation 2022-2028	214
Medical & Industrial 2022-2028	214
Communications & Radar 2022-2028	214
Telecommunications 2022-2028	214
Consumer 2022-2028	215

Video 2022-2028	215
Audio 2022-2028	215
Personal 2022-2028	215
Components 2022-2028	216
Active 2022-2028	216
Passive 2022-2028	216
Other 2022-2028	217
3.13 SPAIN	218
3.13.1 Economic Outlook	218
3.13.2 Electronics Industry Overview	219
3.13.3 Spain Production	223
Computing 2022-2025	223
Office Equipment 2022-2025	223
Control & Instrumentation 2022-2025	223
Medical & Industrial 2022-2025	223
Communications & Radar 2022-2025	224
Telecommunications 2022-2025	224
Consumer 2022-2025	224
Video 2022-2025	224
Audio 2022-2025	224
Personal 2022-2025	224
Components 2022-2025	224
Active 2022-2025	224
Passive 2022-2025	225
Other 2022-2025	225
3.13.4 Spain Markets	226
Computing 2022-2028	226
Office Equipment 2022-2028	226
Control & Instrumentation 2022-2028	226
Medical & Industrial 2022-2028	226
Communications & Radar 2022-2028	227
Telecommunications 2022-2028	227
Consumer 2022-2028	227
Video 2022-2028	227
Audio 2022-2028	227
Personal 2022-2028	228
Components 2022-2028	228
Active 2022-2028	228
Passive 2022-2028	228
Other 2022-2028	229
3.14 SWEDEN	230
3.14.1 Economic Outlook	230
3.14.2 Electronics Industry Overview	231
3.14.3 Sweden Production	235
Computing 2022-2025	235
Office Equipment 2022-2025	235
Control & Instrumentation 2022-2025	235
Medical & Industrial 2022-2025	236
Communications & Radar 2022-2025	236
Telecommunications 2022-2025	236
Consumer 2022-2025	237
Video 2022-2025	237
Audio 2022-2025	237
Personal 2022-2025	237

Components 2022-2025	237
Active 2022-2025	237
Passive 2022-2025	237
Other 2022-2025	238
3.14.4 Sweden Markets	239
Computing 2022-2028	239
Office Equipment 2022-2028	239
Control & Instrumentation 2022-2028	239
Medical & Industrial 2022-2028	240
Communications & Radar 2022-2028	240
Telecommunications 2022-2028	241
Consumer 2022-2028	241
Video 2022-2028	241
Audio 2022-2028	241
Personal 2022-2028	241
Components 2022-2028	242
Active 2022-2028	242
Passive 2022-2028	242
Other 2022-2028	243
3.15 SWITZERLAND	244
3.15.1 Economic Outlook	244
3.15.2 Electronics Industry Overview	245
3.15.3 Switzerland Production	249
Computing 2022-2025	249
Office Equipment 2022-2025	249
Control & Instrumentation 2022-2025	249
Medical & Industrial 2022-2025	249
Communications & Radar 2022-2025	250
Telecommunications 2022-2025	250
Consumer 2022-2025	250
Video 2022-2025	250
Audio 2022-2025	250
Personal 2022-2025	250
Components 2022-2025	251
Active 2022-2025	251
Passive 2022-2025	251
Other 2022-2025	251
3.15.4 Switzerland Markets	253
Computing 2022-2028	253
Office Equipment 2022-2028	253
Control & Instrumentation 2022-2028	253
Medical & Industrial 2022-2028	253
Communications & Radar 2022-2028	254
Telecommunications 2022-2028	254
Consumer 2022-2028	254
Video 2022-2028	254
Audio 2022-2028	255
Personal 2022-2028	255
Components 2022-2028	255
Active 2022-2028	255
Passive 2022-2028	256
Other 2022-2028	256
3.16 UNITED KINGDOM	257
3.16.1 Economic Outlook	257

3.16.2 Electronics Industry Overview	258
3.16.3 UK Production	262
Computing 2022-2025	262
Office Equipment 2022-2025	262
Control & Instrumentation 2022-2025	262
Medical & Industrial 2022-2025	263
Communications & Radar 2022-2025	263
Telecommunications 2022-2025	264
Consumer 2022-2025	264
Video 2022-2025	264
Audio 2022-2025	264
Personal 2022-2025	264
Components 2022-2025	265
Active 2022-2025	265
Passive 2022-2025	265
Other 2022-2025	266
3.16.4 UK Markets	267
Computing 2022-2028	267
Office Equipment 2022-2028	267
Control & Instrumentation 2022-2028	267
Medical & Industrial 2022-2028	268
Communications & Radar 2022-2028	269
Telecommunications 2022-2028	269
Consumer 2022-2028	269
Video 2022-2028	269
Audio 2022-2028	269
Personal 2022-2028	270
Components 2022-2028	270
Active 2022-2028	270
Passive 2022-2028	271
Other 2022-2028	271
4 APPENDICES	273
4.1 Consolidated Summary of West European Electronics Production 2022-2025 (Euro)	273
4.2 Consolidated Summary of West European Electronics Production 2022-2028 (Euro)	275
4.3 Exchange Rates	279
4.4 Guide to Interpretation of the Statistics	280
4.5 Guide to Statistical Trade Classifications	284
4.6 Guide to the Definition of the Electronic Product Headings	286
4.7 List of Sources	293

SAMPLE DATA

Over the following pages we provide sample data from the **current** edition of the report. This includes summary data for both production and markets, and sample data from several countries.

CONSOLIDATED SUMMARY OF PRODUCTION 2024

Table 2.7

	\$M	\$M	\$M	\$M	\$M Radio	\$M	\$M	\$M	\$M
Country		Office	Control	Medical &	Comms	Telecomm-		Compo-	
	Computing	Equip	& Instr	Industrial	& Radar*	unications	Consumer	nents	TOTAL
Austria	179	3	1448	1002	390	342	4	2409	5778
Belgium	516	-	873	1027	543	174	5	930	4070
Denmark	249	-	1391	1104	476	65	17	409	3711
Finland	40	-	1147	422	597	310		410	2925
France	783	54	3993	2214	11728	1398	115	7605	27891
Germany	2473	46	24200	9093	3109	1508	993	18684	60105
Greece	193	7	79	22	188	80	2	73	645
Ireland	1261	4	848	2471	280	125	9	8001	12999
Italy	766	33	4082	1801	2783	978	25	5996	16463
Netherlands	821	-	3228	3623	454	272	28	1335	9761
Norway	91	-	614	213	436	77	-	99	1530
Portugal	38	-	245	101	402	120	921	536	2362
Spain	318	5	598	592	953	533	13	1164	4177
Sweden	60	-	1522	217	1914	931	65	581	5291
Switzerland	447	7	5364	2461	510	377	4111	2277	15555
UK	2638	86	6203	3533	6585	510	224	3066	22846
TOTAL	10875	245	55834	29897	31349	7799	6533	53576	196109

CONSOLIDATED SUMMARY OF MARKETS 2024

Table 2.22

	\$M	\$M	\$M	\$M	\$M Radio	\$M	\$M	\$M	\$M
Country		Office	Control	Medical &	Comms	Telecomm-		Compo-	
	Computing	Equip	& Instr	Industrial	& Radar*	unications	Consumer	nents	TOTAL
Austria	1818	20	1043	901	737	390	605	1711	7226
Belgium	3301	33	827	710	1436	510	402	1508	8726
Denmark	1661	28	500	306	472	317	231	942	4458
Finland	1509	22	625	329	393	115	230	1125	4349
France	10051	254	3288	2512	7558	2273	2651	7013	35600
Germany	21084	292	10520	4349	5421	2516	4607	21175	69964
Greece	797	43	325	179	516	299	376	933	3468
Ireland	2627	19	743	380	537	220	214	2584	7324
Italy	6076	239	4038	1876	4685	1777	1918	6749	27359
Netherlands	7009	120	2043	1243	1647	961	889	2871	16783
Norway	1239	29	489	405	503	172	329	636	3803
Portugal	1295	17	487	362	804	374	407	1148	4894
Spain	4318	153	1733	1380	4387	1661	1508	4408	19548
Sweden	2195	30	1023	326	1596	444	440	1808	7861
Switzerland	4951	183	2049	856	2392	613	1073	2348	14465
UK	11426	453	3923	2251	8871	1824	3346	6360	38454
TOTAL	81357	1935	33656	18367	41954	14467	19227	63317	274281

^{*} inc mobiles.

3.9 Italy

3.9.1 Economic Outlook

GDP

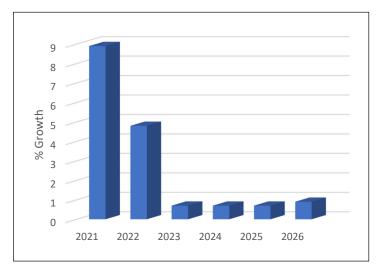
Real GDP growth is expected to remain stable at 0.7% in 2025. While domestic demand is expected to accelerate in 2025, US trade tariffs are set to affect exports of goods, while imports are still expected to expand on the back of strengthening domestic demand. Equipment investment is expected to recover from the slump of 2024, as the gradual pass-through of monetary easing lowers financing costs. In 2026, real GDP growth is expected to pick up to 0.9%. While private consumption is forecast to continue growing apace, investment is set to accelerate thanks to a further expansion in infrastructure construction, investment fuelled by RRF-related spending.

Inflation

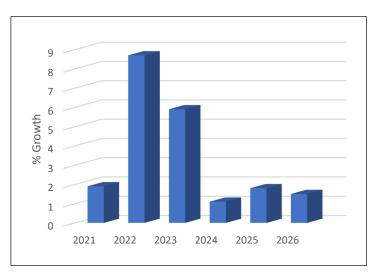
The drop in energy prices and the euro appreciation exert strong downward pressure on headline inflation, keeping the 2025 annual rate below 2%. In 2026, wage restraint, increasing productivity and further falling energy prices are forecast to push inflation down to 1.5%.

Employment

Employment is forecast to continue growing though at a slowing pace over 2025-26. The unemployment rate is expected to fall further, as the labour force expands less than total employment, in the context of a falling working-age population.



Italian GDP Growth 2021-2026



Italian Consumer Prices 2021-2026

Italy Real GDP Growth 2021-2026

	Actual			Forecast					
% Increase	2021	2022	2023	2024	2025	2026			
Growth of GDP	8.9	4.8	0.7	0.7	0.7	0.9			
Consumer Prices*	1.9	8.7	5.9	1.1	1.8	1.5			

Note: Percentage change on previous year * Harmonised index of consumer prices. Source: EU Spring Economic Forecast May 2025

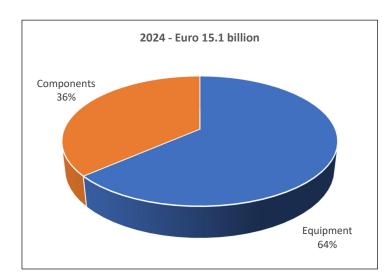
3.9.2 Electronics Industry Overview

Overview

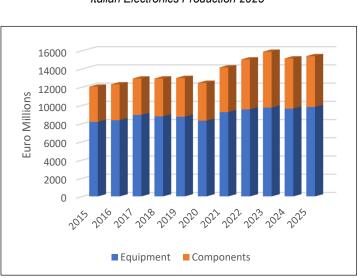
Summary of Italian Electronics Production 2020-2025

Euro Millions	2020	2021	2022	2023	2024	2025
Computing	383	633	628	734	735	745
Industrial	4741	5345	5522	5562	5412	5504
Communications	3160	3247	3374	3422	3460	3535
Consumer	21	22	23	23	23	23
Components	4155	4909	5489	6137	5516	5585
Total	12460	14156	15036	15878	15146	15392

Notes: Computing includes office equipment; Industrial combines control and instrumentation and medical and industrial; and communications combines fixed and wireless communications (inc. defence). Due to computer rounding the summary figures above may differ slightly from the figures presented in the main tables.



Italian Electronics Production 2025



Italian Electronics Production 2015-2025

The production of electronics equipment and components, after increasing by 5.6% in 2023, declined by 4.6% in 2024 on the back of weaker demand an inventory rebalancing primarily in control and instrumentation. Electronics equipment output, which accounted for 63.6% of electronics production in 2024, declined by 1.1% while electronic component production fell by 10.1%.

Italy is also an important centre for the production of automotive electronics and household appliances, although production of appliances has been scaled-back in recent years.

Electronics Equipment

Control and instrumentation and communications and radar accounted for 39.0% and 26.6% of electronics equipment output respectively in 2024.

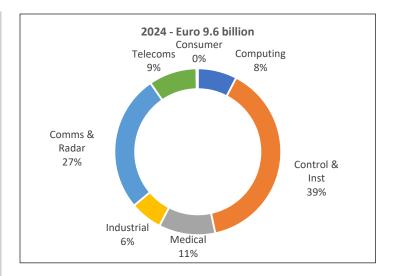
After increasing by 3.0% output for the control and instrumentation sector declined 5.1% in 2024, the subdued European and global economy impacting both domestic and overseas demand. Growth is forecast to increase by 2.7% in 2025 on the back of the expected recovery in demand in the second half of the year.

The medical sector accounted for 11.0% of electronic equipment production in 2024, production for the year increasing by 2.4%. Lower exports in the first half of 2025 is expected to dampen growth with output forecast to decline by 2.0% for the year.

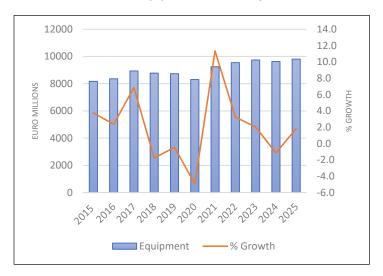
Output for the telecommunications segment after increasing by 3.1% in 2022 has been impacted by lower spending by service providers and enterprises production declining by 1.4% in 2023, 3.4% in 2024 with a further fall of 2.5% forecast for 2025.

The communications and radar sector posted growth of 2.8% in 2024. Defence and aerospace related output offsetting lower production for wireless infrastructure equipment. Leonardo holds a leading position in the European aerospace and defence industry and is a key member of several pan-European joint ventures in the sector.

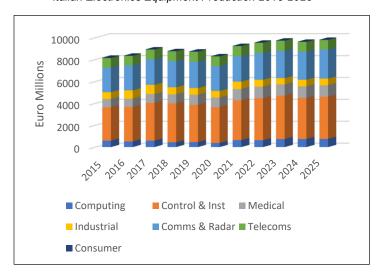
Like other countries in Western Europe the production of consumer electronics is now minimal.



Italian Electronics Equipment Production by Sector 2024



Italian Electronics Equipment Production 2015-2025



Italian Electronics Equipment Production by Sector 2015-2025

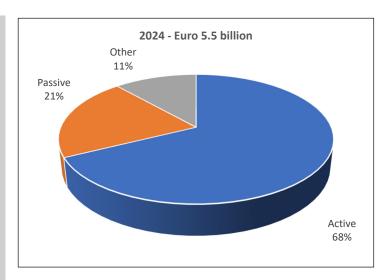
Components

The Italian components sector is dominated by the production of active components which accounted for 67.6% of output in 2024.

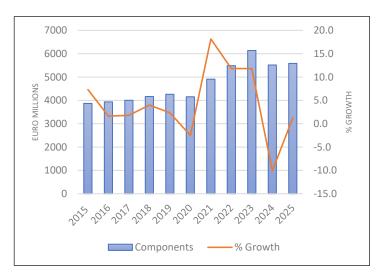
The production of ICs, after increasing by 7.2% in 2023, declined by 14.3% in 2024 on the back of lower demand in several end-markets including industrial and automotive. A modest recovery is expected in 2025 with output increasing by 2.0%.

In April 2025, ST outlined plans for the reorganization of its semiconductor manufacturing operations. In Italy, the 300mm fab in Agrate, will see capacity doubled to 4,000 wafers per week (wpw) by 2027, with planned modular expansions increasing capacity up to 14,000 wpw, depending on market conditions. The site in Catania will continue to serve as a centre of excellence for power and widebandgap semiconductor devices. The development of the new Silicon Carbide Campus, announced in May 2024, is progressing as planned, with production of 200mm wafers set to begin in Q4 2025, reinforcing ST's leadership in nextgeneration power technologies.

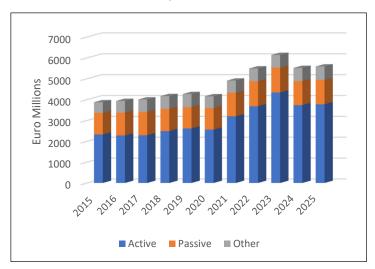
Passive components accounted for 20.8% of electronic component production in 2024. The production of connectors accounted for 40.1% of the total in 2024 while PCBs accounted for 24.4%.



Italian Electronics Component Production 2024



Italian Electronics Component Production 2015-2025



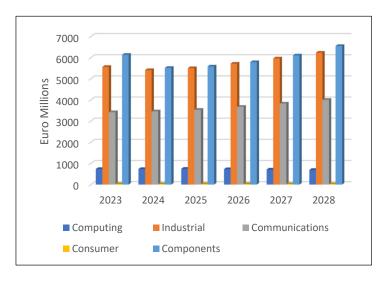
Italian Electronics Component Production by Sector 2015-2025

Outlook

Summary of Italian Electronics Production – Medium Term Forecast 2023-2028

Euro Millions	2023	2024	2025	2026	2027	2028
Computing	734	735	745	728	710	692
Industrial	5562	5412	5504	5716	5965	6235
Communications	3422	3460	3535	3675	3832	4005
Consumer	23	23	23	23	22	21
Components	6137	5516	5585	5790	6108	6554
Total	15878	15146	15392	15932	16636	17506

Notes: Computing includes office equipment; Industrial combines control and instrumentation and medical and industrial; and communications combines fixed and wireless communications (inc. defence). Due to computer rounding the summary figures above may differ slightly from the figures presented in the main tables.



Italian Electronics Production by Sector 2023-2028

Equipment production in the period to 2028 will continue to be focused on industrial and fixed and wireless communications including defence, with these sectors offsetting the gradual decline in the computer segment.

The production of passive components will show modest growth over the forecast period with production of commodity products being transferred to lower cost locations while the semiconductor sector, as highlighted, will continue to be influenced by developments at STMicroelectronics with recent investments by the company expected to boost output over the later part of the forecast.

3.5.3 FRANCE PRODUCTION

COMPUTING		2022	2023	2024	2025
Complete Systems	€M	215	200	220	222
Complete dystems	\$M	226	217	239	241
Darinharala	<i>E</i> M	475	480	460	448
Peripherals	€M \$M	475 500	522	460 500	448 487
				40	40
Accessories & Parts	€M \$ M	57 60	45 49	40 43	40 43
	4	•			
Computing Total	€M \$ M	747 786	725 788	720 783	709 771
	ΦIAI	700	700	703	771
OFFICE EQUIPMENT		2022	2023	2024	2025
OFFICE EQUIPMENT		2022	2023	2024	2025
Office Equipment Total	€M	5 0	45	50	40
Office Equipment Total	€IVI \$M	50 53	45 49	50 54	48 52
CONTROL & INSTRUMENTATIO	N	2022	2023	2024	2025
T	G) I	1000	4.400	4400	4545
Total Industrial & Process Control	€M \$M	1380 1453	1490 1620	1480 1609	1515 1647
Instrumentation					
Analytical Instruments	€M	380	430	390	421
	\$M	400	467	424	458
Nucleonic Instruments	€M	120	152	143	167
	\$M	126	165	155	182
Signal Generators	€M	20	20	22	19
	\$M	21	22	24	21
Telecoms Instruments	€M	39	36	31	29
rolosomo modalnonto	\$M	41	39	34	31
Machine & Materials Test	<i>C</i> M	102	110	105	116
Instruments	€M \$M	102 107	110 120	125 136	126
FI () 10 () M	C) I	400	400	405	400
Electrical Quantity Measuring Instruments	€M \$M	108 114	128 139	125 136	123 134
Other Test & Measuring Instruments	€M \$M	828 872	853 927	843 916	835 908
HISHUITIGHIS	ΦIAI	012	921	310	900
Total Instrumentation	€M	1597	1729	1679	1711
	\$M	1681	1879	1825	1859
Accessories & Parts	€M	530	520	515	521
	\$M	558	565	560	567
Control & Instrumentation	€M	3507	3739	3674	3747
Total	\$M	3692	4064	3993	4073

FRANCE PRODUCTION (ctd)

MEDICAL & INDUSTRIAL		2022	2023	2024	2025
X-Ray & Medical Equipment					
Medical X-Ray Equipment	€M	375	450	400	418
Medical X-Itay Equipment	\$M	395	489	435	454
Industrial X-Ray Equipment	€M \$ M	60 63	50 54	50 54	52 56
	ψ		0.	-	
Electrocardiographs	€M	20	20	20	18
	\$M	21	22	22	20
Other Electromedical Equipment	€M	485	520	500	527
	\$M	511	565	543	573
Hearing Aids	€M	14	14	10	14
risamig / tide	\$M	15	15	11	15
v = 		0.5.4	4054		4000
X-Ray & Medical Equipment Total	€M \$ M	954 1004	1054 1146	980 1065	1029 1118
Total	4				
la desatrial Francisco est					
Industrial Equipment					
Traffic Signalling Equipment	€M	290	285	285	284
	\$M	305	310	310	309
Other Signalling Equipment	€M	575	600	550	588
3 3 1 1	\$M	605	652	598	639
Other Industrial Equipment	£M.	245	220	222	217
Other Industrial Equipment	€M \$ M	245 258	238 259	222 241	217 235
	·				
Total Industrial Equipment	€M	1110	1123	1057	1089
	\$M	1168	1221	1149	1183
Medical & Industrial Equipment	€M	2064	2177	2037	2118
Total	\$M	2173	2366	2214	2302
COMMUNICATIONS & RADAR		2022	2023	2024	2025
Radar & Navigational Aids	€M	6500	6900	7400	7769
radai a Navigational Alus	\$ M	6842	7500	8043	8445
Radio Comms inc Mobile Phones	€M	3560	3560 3870	3390	3431
Public Broadcasting & Parts	\$M	3747	3870	3685	3729
Communications & Radar Total	€M	10060	10460	10790	11200
	\$M	10589	11370	11728	12174

FRANCE PRODUCTION (ctd)

TELECOMMUNICATIONS		2022	2023	2024	2025
	<i>a.</i> .			40	
Telephone Sets	€M	50	45	40	39
	\$M	53	49	43	42
Other Telecoms Equipment	€M	1241	1266	1246	1253
	\$M	1306	1376	1354	1362
Telecommunications Total	€M	1291	1311	1286	1292
	\$M	1359	1425	1398	1405

CONSUMER		2022	2023	2024	2025
Video Equipment					
Video Cameras	€M	2	2	2	2
	\$M	2	2	2	2
Video Tuners & Satellite	€M				
Receivers	\$M	1 1	1 1	1 1	1 1
Video Equipment Total	€M	1	1	1	1
	\$M	3	3	3	3
Audio Equipment					
Car Audio	€M	17	15	12	11
	\$M	18	16	13	12
Audio Equipment Total	€M	17	15	12	11
	\$M	18	16	13	12
Personal Consumer Equipment					
Electronic Musical Instruments	€M	7	7	7	8
	\$M	7	8	8	8
Electric/Electronic Watches	€M	80	80	78	75
	\$M	84	87	85	82
Electric/Electronic Clocks	€M	6	6	5	5
	\$M	6	7	5	5
Electronic Flashlights	€M	1	1	1	1
	\$M	1	1	1	1
Total Personal Equipment	€M	94	94	91	89
• •	\$M	99	102	99	97
Consumer Equipment Total	€M	114	112	106	103
	\$M	120	122	115	112

FRANCE PRODUCTION (ctd)

COMPONENTS		2022	2023	2024	2025
Active Components					
Valves & Tubes	€M	282	305	320	326
valves a rabes	\$M	297	332	348	354
Diadaa	CM	005	000	400	470
Diodes	€M \$M	265 279	200 217	180 196	173 188

Transistors	€M \$M	110	100 109	90	91
	φIVI	116	109	98	99
Other Discrete Semiconductors	€M	875	830	600	621
	\$M	921	902	652	675
ICs & Other Microcircuits	€M	3450	3520	3300	3429
	\$M	3632	3826	3587	3727
Active Components Total	C M	4982	4955	4490	4640
Active Components Total	€M \$M	5244	5386	4490 4880	4640 5043
Passive Components					
Electrolytic Capacitors	€M	54	56	50	50
, .	\$M	57	61	54	54
Other Fixed Consisters	C M	105	100	110	111
Other Fixed Capacitors	€M \$M	105 111	100 109	110 120	114 124

Variable Capacitors	€M	2	2	2	2
	\$M	2	2	2	2
Fixed Resistors	€M	75	75	70	68
	\$M	79	82	76	74
Variable Resistors	€M	2	2	2	2
	\$M	2	2	2	2
Connectors	€M	1340	1425	1400	1442
Connectors	\$M	1411	1549	1522	1567
Transformers & Inductors	€M \$M	102 107	100 109	95 103	97 105
	φivi	107	109	103	103
Relays	€M	47	47	45	44
	\$M	49	51	49	48
Switches	€M	65	68	66	67
	\$M	68	74	72	73
Printed Circuit Boards	€M	285	292	280	291
	\$M	300	317	304	316
Total Passive Components	€M	2077	2167	2120	2177
-	\$M	2186	2355	2304	2366

Yearbook of World Electronics Data 2025 Volume 1 West Europe

FRANCE PRODUCTION (ctd)

COMPONENTS (ctd)		2022	2023	2024	2025
Other Components					
Microphones	€M \$M	2 2	2 2	2 2	2 2
Loudspeakers	€M \$M	180 189	195 212	205 223	211 229
Amplifiers	şivi €M	189	5	5	4
Aerials	\$M €M	5 34	5 32	5 30	5 29
Aeriais	€IVI \$M	36 36	35 35	33	31
Unrecorded Media	€M \$M	14 15	12 13	10 11	9 10
Accessories & Parts for Consumer Equipment	€M \$M	145 153	138 150	135 147	136 148
Total Other Company	€M	380	384	387	390
Total Other Components	\$ M	400	417	421	424
Total Components Production	€M \$M	7439 7831	7506 8159	6997 7605	7207 7834
TOTAL PRODUCTION - FRANCE		2022	2023	2024	2025
Total	€M \$M	25272 26602	26075 28342	25660 27891	26425 28723

Notes: 2022 and 2023 are current figures at current exchange rates. 2024 is an estimate and 2025 a forecast at 2024 constant values and exchange rates (i.e. inflation is not included). Base year 2024

3.6.4 GERMANY MARKETS

COMPUTING		2022	2023	2024	2025	2026	2027	2028
Computers Total	€M \$ M	8026 8448	8005 8701	9834 10689	10607 11529	11226 12202	11755 12777	12201 13262
Peripherals - Storage	€M \$M	2636 2775	2627 2855	3136 3409	3359 3651	3531 3838	3672 3991	3785 4114
Other Peripherals & Equipment	€M \$M	1805 1900	1670 1815	1533 1666	1642 1785	1726 1876	1795 1951	1850 2011
Accessories & Parts	€M \$M	4874 5131	4770 5185	4894 5320	5146 5594	5310 5772	5421 5892	5485 5962
Computing Total	€M \$M	17341 18254	17072 18557	19397 21084	20755 22560	21793 23688	22642 24611	23322 25350
OFFICE EQUIPMENT		2022	2023	2024	2025	2026	2027	2028
OF FICE EQUIPMENT		2022	2023	2024	2023	2020	2021	2020
Office Equipment	€M \$M	295 311	281 305	269 292	264 287	253 275	242 264	230 250
Office Equipment Total	€M \$M	295 311	281 305	269 292	264 287	253 275	242 264	230 250
CONTROL & INSTRUMENTATION	1	2022	2022	2024	2025	2026	2027	2020
CONTROL & INSTRUMENTATION	N	2022	2023	2024	2025	2026	2027	2028
Total Industrial & Process Control	N €M \$ M	2022 6595 6942	2023 6816 7409	6469 7032	2025 6632 7208	2026 6971 7577	7346 7985	7762 8437
Total Industrial & Process	€M	6595	6816	6469	6632	6971	7346	7762
Total Industrial & Process Control	€M	6595	6816	6469	6632	6971	7346	7762
Total Industrial & Process Control Instrumentation	€M \$M	6595 6942	6816 7409 584	6469 7032 541	6632 7208 547	6971 7577 567	7346 7985 589	7762 8437 614
Total Industrial & Process Control Instrumentation Analytical Instruments Machine & Materials Test	€M \$ M €M \$ M	6595 6942 624 657 500	6816 7409 584 635 512	6469 7032 541 588 503	6632 7208 547 594 494	6971 7577 567 616 497	7346 7985 589 640 502	7762 8437 614 667 508
Total Industrial & Process Control Instrumentation Analytical Instruments Machine & Materials Test Instruments Electrical Quantity Measuring	€M \$M \$M \$M €M \$M	6595 6942 624 657 500 526	6816 7409 584 635 512 557	541 588 503 547	6632 7208 547 594 494 537	6971 7577 567 616 497 540	7346 7985 589 640 502 545	7762 8437 614 667 508 552
Total Industrial & Process Control Instrumentation Analytical Instruments Machine & Materials Test Instruments Electrical Quantity Measuring Instruments Other Test & Measuring	€M \$M \$M €M \$M €M \$M	6595 6942 624 657 500 526 106 112	6816 7409 584 635 512 557 109 118	541 588 503 547 102 111	547 594 494 537 100 109	6971 7577 567 616 497 540 101 110	7346 7985 589 640 502 545 102 111	7762 8437 614 667 508 552 104 113
Total Industrial & Process Control Instrumentation Analytical Instruments Machine & Materials Test Instruments Electrical Quantity Measuring Instruments Other Test & Measuring Instruments	€M \$M \$M €M \$M €M \$M €M	6595 6942 624 657 500 526 106 112 1417 1492	6816 7409 584 635 512 557 109 118 1439 1564	541 588 503 547 102 111 1346 1463 2492	547 594 494 537 100 109 1336 1452	6971 7577 567 616 497 540 101 110 1360 1478	7346 7985 589 640 502 545 102 111 1387 1508	7762 8437 614 667 508 552 104 113 1419 1543

GERMANY MARKETS (ctd)

MEDICAL & INDUSTRIAL		2022	2023	2024	2025	2026	2027	2028
Medical X-Ray Equipment	€M	588	604	552	573	597	622	650
, , ,	\$M	619	657	600	623	649	676	706
Industrial X-Ray Equipment	€M	23	25	24	25	25	26	26
	\$M	24	27	26	27	27	28	29
Medical Radiation Equipment	€M	44	45	43	43	44	44	44
	\$M	46	49	47	47	47	48	48
Industrial Radiation Equipment	€M	27	28	28	28	29	29	30
	\$M	28	30	30	31	31	32	33
Other Electromedical Equipment	€M	1237	1290	1325	1385	1452	1523	1600
(inc Electrocardiographs)	\$M	1302	1402	1440	1505	1579	1656	1740
Hearing Aids	€M	117	108	109	110	112	114	116
	\$M	123	117	118	120	122	124	127
X-Ray & Medical Equipment Total	€M	2036	2100	2081	2164	2259	2359	2467
	\$M	2143	2283	2262	2352	2456	2564	2682
Railway Signalling Equipment	€M \$M	361 380	476 517	451 490	472 513	502 546	536 583	573 622
	ФІМ	300	317	430	313	340	303	022
Traffic Signalling Equipment	€M \$M	206 217	229 249	224 243	224 243	228 248	232 253	237 258
	ΨΨ	217	243	243	243	240	200	230
Security & Fire Alarms	€M \$M	601 633	615 668	611 664	628 683	657 714	690 750	724 787
	·							
Other Signalling Equipment	€M \$M	507 534	487 529	470 511	470 510	478 519	487 530	498 541
	·							
Other Industrial Equipment	€M \$M	184 194	179 195	164 178	165 180	170 184	175 190	180 196
Industrial Continues at Total	CM	4050	1000	4020	1050	2025	2420	0044
Industrial Equipment Total	€M \$ M	1859 1957	1986 2159	1920 2087	1958 2129	2035 2212	2120 2305	2211 2404
Medical & Industrial Total	€M	3895	4086	4001	4123	4294	4479	4679
Medical & Illustrial Total	\$M	4100	4441	4349	4481	4668	4869	5086
COMMUNICATIONS & RADAR		2022	2023	2024	2025	2026	2027	2028
Radar & Navigational Aids	€M	1168	1237	1365	1407	1490	1589	1696
·	\$M	1229	1345	1484	1529	1620	1727	1844
Radio Comms inc Mobile Phones,	€M	3746	3785	3622	3605	3687	3796	3914
Public Broadcasting & Parts	\$M	3943	4114	3937	3919	4008	4126	4255
Communications & Radar Total	€M	4914	5022	4987	5012	5177	5384	5611
	\$M	5173	5459	5421	5448	5628	5853	6098

GERMANY MARKETS (ctd)

TELECOMMUNICATIONS		2022	2023	2024	2025	2026	2027	2028
Telephone Sets	€M \$M	215 226	198 215	183 199	176 191	174 189	173 188	172 187
	·							
Other Telecommunications Equipment	€M \$M	2190 2305	2232 2426	2132 2317	2158 2345	2250 2446	2351 2556	2458 2672
Едирион	ΨIII	2000	2420	2011	2040	2440	2000	20/2
Telecommunications Total	€M	2405	2430	2315	2334	2425	2524	2630
	\$M	2532	2641	2516	2536	2635	2743	2859
CONCUMED		2022	2022	2024	2025	2020	2027	2020
CONSUMER		2022	2023	2024	2025	2026	2027	2028
Video Equipment								
Colour Television	€M	2230	2126	2182	2130	2170	2131	2088
	\$M	2347	2311	2372	2315	2359	2316	2270
DVD Players & Recorders	€M	47	41	37	34	30	27	25
	\$M	49	45	40	37	33	29	27
Video & Digital Still Cameras	€M	450	436	434	429	416	402	386
·	\$M	474	474	472	466	452	437	420
Video Tuners & Satellite	€M	114	110	106	102	97	93	88
Receivers	\$M	120	120	115	111	105	101	96
Video Equipment Total	€M	2841	2713	2759	2695	2713	2653	2587
	\$M	2991	2949	2999	2929	2949	2884	2812
Audio Equipment								
Audio Equipment	€M	878	831	822	801	777	753	725
riadio Equipino	\$M	924	903	893	871	845	819	788
Audio Equipment Total	€M	878	831	822	801	777	753	725
7.44.P	\$M	924	903	893	871	845	819	788
Personal Consumer Equipment								
Electronic Musical Instruments	€M	119	114	113	110	112	113	114
Electronic Musical Instruments	\$M	125	124	123	120	121	123	124
Electric/Electronic Watches	€M	518	509	499	496	511	526	541
Liectifo/Liectionic Wateries	\$ M	545	553	542	540	555	571	588
Electric/Electronic Clocks	€M	47	45	43	39	37	34	32
Electric/Electronic Clocks	\$M	49	49	47	42	40	37	35
Electronic Flashlights	€M	10	7	3	2	2	2	1
Electronic Flacinights	\$M	11	8	3	3	2	2	1
Personal Consumer	€M	694	675	658	648	661	674	688
Equipment Total	\$ M	731	734	715	704	719	733	748
Consumer Equipment Total	€M	4413	4219	4239	4144	4151	4080	4001
	\$M	4645	4586	4607	4505	4512	4435	4349

Yearbook of World Electronics Data 2025 Volume 1 West Europe

GERMANY MARKETS (ctd)

COMPONENTS		2022	2023	2024	2025	2026	2027	2028
Active Components								
X-Ray Tubes	€M \$M	209 220	220 239	210 228	215 234	222 241	228 248	235 255
Other Valves & Tubes	€M	27	239	19	19	18	18	17
Culci Valves & Fabes	\$ M	28	23	21	21	20	20	18
Diodes	€M \$M	317 334	315 342	268 291	263 286	272 296	283 308	294 320
Transistors	€M	393	407	348	336	350	364	379
	\$M	414	442	378	365	380	396	412
Thyristors	€M \$M	78 82	77 84	70 76	71 77	74 80	77 84	80 87
Photocells	€M	3644	3152	1631	1435	1493	1560	1638
	\$M	3836	3426	1773	1560	1623	1696	1780
Other Discrete Semiconductors	€M \$M	330 347	318 346	338 367	331 360	344 374	359 390	374 407
Piezoelectric Crystals	€M	184	180	163	165	170	177	184
,	\$M	194	196	177	179	185	192	200
Hybrid Circuits	€M \$M	95 100	98 107	90 98	88 96	90 98	88 96	86 93
ICs & Other Microcircuits	€M	9373	9797	8747	8834	9188	9601	10014
	\$M	9866	10649	9508	9602	9987	10436	10885
Active Components Total	€M \$M	14650 15421	14585 15853	11884 12917	11757 12779	12221 13284	12755 13864	13301 14458
Passive Components								
Electrolytic Capacitors	€M	297	303	267	259	269	281	293
	\$M	313	329	290	282	292	305	318
Other Fixed Capacitors	€M \$M	579 609	581 632	487 529	477 518	497 540	519 564	543 590
Variable Capacitors	€M	6	5	4	4	4	4	4
	\$M	6	5	4	4	4	4	4
Fixed Resistors	€M \$M	188 198	179 195	154 167	152 165	158 172	165 179	172 187
Variable Resistors	€M	34	31	27	26	26	25	25
	\$M	36	34	29	28	28	27	27
Multi-Pin & RF Connectors	€M \$M	1646 1733	1750 1902	1649 1792	1707 1855	1782 1937	1862 2024	1948 2117
Other Connection Devices	€M \$ M	821 864	795 864	765 832	787 855	821 892	857 932	896 974

Yearbook of World Electronics Data 2025 Volume 1 West Europe

GERMANY MARKETS (ctd)

COMPONENTS (ctd)		2022	2023	2024	2025	2026	2027	2028
Passive Components								
Inductors	€M	420	405	385	377	392	408	426
	\$M	442	440	418	410	426	443	463
Relays	€M	123	119	113	114	118	122	127
	\$ M	129	129	123	124	128	133	138
Switches	€M	172	163	154	156	162	169	176
	\$M	181	177	167	170	176	184	191
Printed Circuit Boards	€M	1535	1479	1295	1321	1374	1436	1502
	\$ M	1616	1608	1408	1436	1493	1561	1633
Passive Components Total	€M	5821	5810	5300	5380	5603	5848	6112
	\$ M	6127	6315	5761	5848	6090	6357	6643
Other Components								
Microphones	€M	83	89	93	91	93	95	97
	\$M	87	97	101	99	101	103	105
Loudspeakers	€M	773	714	674	694	716	740	764
	\$ M	814	776	733	754	778	804	830
Amplifiers	€M	162	166	159	163	168	174	179
	\$M	171	180	173	177	183	189	195
Aerials	€M	56	53	52	53	53	52	51
	\$M	59	58	57	58	58	57	55
Unrecorded Media	€M	158	150	138	134	129	123	118
	\$M	166	163	150	146	140	134	128
Headphones	€M	672	632	595	616	637	660	683
	\$M	707	687	647	670	692	717	742
Accessories & Parts for Consumer Equipment	€M	595	587	586	594	606	620	634
	\$M	626	638	637	646	659	674	689
Other Components Total	€M	2499	2391	2297	2345	2402	2464	2526
	\$M	2631	2599	2497	2549	2611	2678	2746
Components Total	€M	22970	22786	19481	19482	20226	21067	21939
	\$ M	24179	24767	21175	21176	21985	22899	23847
TOTAL MARKET - GERMANY		2022	2023	2024	2025	2026	2027	2028
TOTAL MARKET	€M	66195	66091	64367	65926	68525	71065	73546

Notes: 2022 and 2023 are current figures at current exchange rates

\$M

2024 is an estimate and 2025 to 2028 are forecasts at 2024 constant values & exchange rates (i.e. Inflation is not included) Base year 2024

71838

69964

71659

74484

77244

79941

69679

YEARBOOK 2025 ORDER FORM



Title	Report Only	CD Rom (plus report)	Corporate Licence**	VAT UK Customers* only, European customers see below	Total £/US\$/€
Volume 1 West Europe 2025: (Pub Date 06/24)	£995/\$1245 €1145	£1295/\$1620 €1490	£1990/\$2490 €2290		
Volume 2 America, Japan, Asia Pacific 2025: (Pub Date 8/24)	£1295/\$1620 €1490	£1595/\$1995 €1835	£2590/\$3240 €2980		
Volume 3 East Europe & World Summary 2025: (Pub Date 9/24)	£995/\$1245 €1145	£1295/\$1620 €1490	£1990/\$2490 €2290		
2 Volume Set (Volumes 1 & 2)	£1995/\$2495 €2295	£2595/\$3245 €2985	£3990/\$4990 €4590		
3 Volume Set	£2556/\$3195 €2940	£3522/\$4400 €4050	£5112/\$6390 €5880		
	•	•		TOTAL	

*UK customers: to calculate VAT amount (applicable to CD-ROM and Corporate Licence only) deduct the 'REPORT ONLY' price from the CD-ROM or 'Corporate Licence' price (as applicable) to arrive at the taxable amount. VAT is currently 20%.

European customers please enter your VAT No. here (to avoid addition of VAT):

to third parties

	DAMAGNIT
DELIVERY ADDRESS	PAYMENT
Name (Mr/Ms):	Payment enclosed - cheques payable to
Position:	Reed Electronics Research (postage free of charge)
Organisation:	
Address:	Please charge my MasterCard/Visa/ American Express (postage free of charge)
City:	Cardholder Name:
Postcode/Zip:	Cardholder Address:
Country:	
Tel:	
Fax:	Card Number:
Email Address ⁺ :	Security Number: Expiry Date:
RETURN TO: ORDERS DEPARTMENT	
Tel: +44 (0) 1235 868620 Post: Reed Electronics Research, 7 Rectory Farm West Hanney, Oxon OX12 0LR United Kingdom	Please invoice me: Company Purchase Order No: (postage and packing at cost)
Email: orders@rer.co.uk	Signature
*We would like to keep you informed about our products and services. Please tick here if you do not wish to be contacted about this information. We do not pass email addresses on	Date:

RER Ltd Registered in England (Registered number 4596362) VAT No: GB 798 3767 49

^{**} The Corporate License allows electronic distribution (excluding distribution to third parties) of the report throughout your organisation, making it a cost effective and essential tool for your business.