

WinterGreen Research, INC.

**Wireless Car Charging: Market Shares, Strategies, and Forecasts,
Worldwide, 2013 to 2019**

**Wireless Car Charging Providing a Flexible, Convenient System For Powering
Electrical Vehicles**

Mountains of Opportunity



Picture by Susan Eustis

WinterGreen Research, Inc.

Lexington, Massachusetts

www.wintergreenresearch.com

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REPORT # SH25734099

260 PAGES

72 TABLES AND FIGURES

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CHECK OUT THESE KEY TOPICS

Wireless Car Charging
Wireless Power Transfer
Electric Vehicles
EV
Vehicle Sharing
Wireless Car Charger
Auto Wireless Charging
Inductive Coil
Induction Coil

Car Wireless Charging
Inductive Wireless Charging
Wireless Transmitter And
Receiver
Wireless Charging
Transmitter For Wireless
Charging
Human Safety Limits
Frequency Selection

Loosely-Coupled
Wireless Phone Charging
Wireless Phone Charger
Electricity Generated In A
Coil

Wireless Phone Charging Growth Strategy:

Wireless Car Chargers: Market Shares, Strategies, and Forecasts, Worldwide, 2013-2019

LEXINGTON, Massachusetts (October 10, 2013) – WinterGreen Research announces that it has published a new study **Wireless Car Chargers: Market Shares, Strategy, and Forecasts, Worldwide, 2013 to 2019**. The 2013 study has 260 pages, 72 tables and figures. Worldwide markets are poised to achieve significant growth as wireless car charging pads permit users to charge the electric auto without disconnecting/reconnecting cables. Electrical vehicle charging can be done anywhere just by driving the car over the charger and positioning it correctly to pick up the current.

Wireless charging in the automotive industry brings inductive power for EV cars. Short distance power transmission is based on magnetic induction. With this technology, power is transferred when the receiver is close to the transmitter. Magnetic induction has been used for decades in electronic equipment. It is good because it is simple, efficient, and safe. It is now being applied to charging for electric vehicles.

As power is induced through the primary charging coil, a magnetic field is produced. The magnetic field is received by the secondary coil. It is converted back into a voltage. Shielding can be added to either coil of the transformer system. The aim is to direct the field effects. This can be useful in multiple pad charging applications. The aim is to eliminate power cross-talk. Wireless inductive charging is gaining popularity for use in consumer rechargeable applications such as cordless power tools, net books, note books and other power-hungry rechargeable devices.

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Market driving forces relate primarily to the need for efficient power generation for autos. Wireless car charger manufacturers are positioning car models with wireless charging to drive demand at the high end. Many electric vehicle car vendors are making wireless power a reality. Only two vehicles are supported now, the Chevy Volt and the Nissan Leaf.

Wireless power is an emerging technology that creates a better charging experience for consumers. Just as Wi-Fi replaced the need to use an Ethernet cable for Internet connectivity, so also wireless power is making recharging wirelessly a feature that is demanded by consumers with an electric vehicle. .

According to Susan Eustis, lead author of the WinterGreen Research team that prepared the study, “wireless car charging represents the major force impacting electrical charging. Car vendors are coming together to create standards and to leverage standards to gain competitive advantage with highly differentiated product sets.”

Inductive wireless charging does not use as much grid electricity to achieve device charging. Electricity is generated in a coil. Inductive charging means the primary coil in the charger induces a current in the secondary coil in the device being charged.

Wireless charging is already available for-low power applications. The charging systems are suitable for electronic devices. Wireless chargers use magnetic induction. They offer the promise of being able to place a car over the charging device and have the electrical vehicle EV charge automatically — no fiddling with cables required. Remote power transfer is a complex business with some very fine tuning required to make it work well. Wireless charging is more accurately described as “inductive charging” because it uses magnetic induction.

Inductive charging uses magnetism to transmit energy. The current coming from the wall power outlet moves through the wire in the wireless charger, creating a magnetic field. The magnetic field creates a current in the coil inside the device. This coil is connected to the battery and the current charges the battery. Cars must have the appropriate hardware in them to support wireless charging — a device without the appropriate coil cannot charge wirelessly.

Consideration of wireless car charging market forecasts indicates that markets at \$1.7 million will reach \$4.6 billion by 2019. Growth comes as a result of the rapid adoption of electric vehicles that pushes the user base up by 2019. While wireless car charging is considered a requisite for an EV, it is soon expected to become a necessary feature.

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WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by the implementation of ROI models that are used to calculate the total cost of ownership of equipment, services, and software. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets, Bloomberg, and Thompson Financial.

WinterGreen Research is positioned to help customers face challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust WinterGreen Research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

This wireless car charger shipment analysis is based on consideration of the metrics for the number of electric cars shipped. Distributor and customer experience using the wireless car chargers is another factor that contributes to development of triangulation regarding market forecasts for the sector.

Key Words: . Wireless Car Charging, Wireless Power Transfer, Qi Wireless Charging , Inductive Wireless Charging, Wireless Transmitter And Receiver, Wireless Charging , Transmitter For EV, Wireless Charging , Transmitter For Chevy Volt, Transmitter For Nissan Leaf, Human Safety Limits, Frequency Selection, Loosely-Coupled, Wireless Auto Charging, Wireless Car Charger, Electricity Generated In A Coil,

Companies Profiled

Market Leaders

Bosch

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Market Participants

Alliance for Wireless Power	Intel	Rexpower Industrial
Apple	iPDA - Newlift Technologies	Development
AudioDev	LG	Samsung
Consumer Electronics Association	MAPTech Co	Shenzhen Koeok Electronic
Convenient Power	MC Power Technology	Technology
Energizer	Microsoft / Nokia	Shineworld Innovations,
Good & Easy Technology	Nokia	Texas Instruments
Google,	Procter & Gamble	Toyota
Google / Motorola	Procter & Gamble / Duracell	Visteon
HLC Electronics	PowerbyProxi	Wireless Power Consortium
HLC Electronics	Power Matters Alliance	
Integrated Device Technology	Qualcomm	
Business	Qualcomm / WiPower	

Wireless Car Charger: Market Shares, Strategies, and Forecasts, Worldwide, 2013 to 2019

Report Methodology

This is the 574th report in a series of primary market research reports that provide forecasts in communications, telecommunications, the Internet, computer, software, telephone equipment, health equipment, and energy. Automated process and significant growth potential are a priority in topic selection. The project leaders take direct responsibility for writing and preparing each report. They have significant experience preparing industry studies.

They are supported by a team, each person with specific research tasks and proprietary automated process database analytics. Forecasts are based on primary research and proprietary data bases.

The primary research is conducted by talking to customers, distributors and companies. The survey data is not enough to make accurate assessment of market size, so WinterGreen Research looks at the value of shipments and the average price to achieve market assessments. Our track record in achieving accuracy is unsurpassed in the industry. We are known for being able to develop accurate market shares and projections. This is our specialty.

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The analyst process is concentrated on getting good market numbers. This process involves looking at the markets from several different perspectives, including vendor shipments. The interview process is an essential aspect as well. We do have a lot of granular analysis of the different shipments by vendor in the study and addenda prepared after the study was published if that is appropriate.

Forecasts reflect analysis of the market trends in the segment and related segments. Unit and dollar shipments are analyzed through consideration of dollar volume of each market participant in the segment. Installed base analysis and unit analysis is based on interviews and an information search. Market share analysis includes conversations with key customers of products, industry segment leaders, marketing directors, distributors, leading market participants, opinion leaders, and companies seeking to develop measurable market share.

Over 200 in depth interviews are conducted for each report with a broad range of key participants and industry leaders in the market segment. We establish accurate market forecasts based on economic and market conditions as a base. Use input/output ratios, flow charts, and other economic methods to quantify data. Use in-house analysts who meet stringent quality standards.

Interviewing key industry participants, experts and end-users is a central part of the study. Our research includes access to large proprietary databases. Literature search includes analysis of trade publications, government reports, and corporate literature.

Findings and conclusions of this report are based on information gathered from industry sources, including manufacturers, distributors, partners, opinion leaders, and users. Interview data was combined with information gathered through an extensive review of internet and printed sources such as trade publications, trade associations, company literature, and online databases. The projections contained in this report are checked from top down and bottom up analysis to be sure there is congruence from that perspective.

The base year for analysis and projection is 2011. With 2011 and several years prior to that as a baseline, market projections were developed for 2012 through 2018. These projections are based on a combination of a consensus among the opinion leader contacts interviewed combined with understanding of the key market drivers and their impact from a historical and analytical perspective.

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The analytical methodologies used to generate the market estimates are based on penetration analyses, similar market analyses, and delta calculations to supplement independent and dependent variable analysis. All analyses are displaying selected descriptions of products and services.

This research includes referencde to an ROI model that is part of a series that provides IT systems financial planners access to information that supports analysis of all the numbers that impact management of a product launch or large and complex data center. The methodology used in the models relates to having a sophisticated analytical technique for understanding the impact of workload on processor consumption and cost.

WinterGreen Research has looked at the metrics and independent research to develop assumptions that reflect the actual anticipated usage and cost of systems. Comparative analyses reflect the input of these values into models.

The variables and assumptions provided in the market research study and the ROI models are based on extensive experience in providing research to large enterprise organizations and data centers. The ROI models have lists of servers from different manufacturers, Systems z models from IBM, and labor costs by category around the world.

This information has been developed from WinterGreen research proprietary data bases constructed as a result of preparing market research studies that address the software, energy, healthcare, telecommunications, and hardware businesses.

YOU MUST HAVE THIS STUDY

Wireless Car Chargers: Market Shares, Strategies, and Forecasts, Worldwide, 2013-2019

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The study is designed to give a comprehensive overview of the Wireless Car Chargers equipment market segment. Research represents a selection from the mountains of data available of the most relevant and cogent market materials, with selections made by the most senior analysts. Commentary on every aspect of the market from independent analysts creates an independent perspective in the evaluation of the market. In this manner the study presents a comprehensive overview of what is going on in this market, assisting managers with designing market strategies likely to succeed.

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ABOUT THE COMPANY

WinterGreen Research, research strategy relates to identifying market trends through reading and interviewing opinion leaders. By using analysis of published materials, interview material, private research, detailed research, social network materials, blogs, and electronic analytics, the market size, shares, and trends are identified. Analysis of the published materials and interviews permits WinterGreen Research senior analysts to learn a lot more about markets. Discovering, tracking, and thinking about market trends is a high priority at WinterGreen Research. As with all research, the value proposition for competitive analysis comes from intellectual input.

WinterGreen Research, founded in 1985, provides strategic market assessments in telecommunications, communications equipment, health care, Software, Internet, Energy Generation, Energy Storage, Renewable energy, and advanced computer technology. Industry reports focus on opportunities that expand existing markets or develop major new markets. The reports access new product and service positioning strategies, new and evolving technologies, and technological impact on products, services, and markets. Innovation that drives markets is explored. Market shares are provided. Leading market participants are profiled, and their marketing strategies, acquisitions, and strategic alliances are discussed. The principals of WinterGreen Research have been involved in analysis and forecasting of international business opportunities in telecommunications and advanced computer technology markets for over 30 years.

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WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

ABOUT THE PRINCIPAL AUTHORS

Ellen T. Curtiss, Technical Director, co-founder of WinterGreen Research, conducts strategic and market assessments in technology-based industries. Previously she was a member of the staff of Arthur D. Little, Inc., for 23 years, most recently as Vice President of Arthur D. Little Decision Resources, specializing in strategic planning and market development services. She is a graduate of Boston University and the Program for Management Development at Harvard Graduate School of Business Administration. She is the author of recent studies on worldwide telecommunications markets, the top ten internet equipment companies, the top ten contract manufacturing companies, and the Top Ten Telecommunications market analysis and forecasts.

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Susan Eustis, President, co-founder of WinterGreen Research is a senior analyst. She has done research in communications and computer markets and applications. She holds several patents in microcomputing and parallel processing. She has the original patents in electronic voting machines. She has new patent applications in format varying, multiprocessing, and electronic voting. She is the author of recent studies of the Solar RENEWABLE Energy, Wind Energy, Thin Film Batteries, Business Process Management marketing strategies, Internet equipment, biometrics, a study of Internet Equipment, Worldwide Telecommunications Equipment, Top Ten Telecommunications, Digital Loop Carrier, Web Hosting, Web Services, and Application Integration markets. Ms. Eustis is a graduate of Barnard College. . Ms. Eustis was named Top Woman CEO in 2012 by Who's Who Worldwide. She was named Top Woman Market Research Analyst the same year.

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