



*The Technology Resource for PV Professionals*

# Photovoltaics

International

**The time is now!** The world's first technical manufacturing journal for the PV industry is here. The economic, technological and political forces are converging to make photovoltaic cell manufacturing one of the fastest growing and dynamic industries in the world. As fuels for traditional energy supplies dwindle and end consumers become increasingly conscious of their impact on climate change and the environment, the time is now for PV to gain a strong share of the renewable energies marketplace.

**JobsinPV.com**  
Recruitment

**SolarLeaders**  
Television

**PV-tech.org**  
Daily News

"The challenge for the PV industry going forward is to push itself, without subsidies, into the mainstream, and that battle will be won on the manufacturing floor."

Gerhard Rauter, COO, Q-Cells

## Reaching the Photovoltaic business marketplace

Focusing on technology, the Photovoltaics International portfolio is specifically designed for the PV supply chain, including materials, components, equipment, manufacturing and large-scale utility installation. In-print and online business-to-business publications will influence the purchasing decisions of professional PV manufacturers, energy utilities and integrators through independent editorial and high-quality technical articles.

The Photovoltaics International publishing programme will allow key suppliers of equipment, materials and cells to influence technology-based purchasing decisions. The information provided direct to the engineers and specifiers will help them select the correct technologies, products and services to enable their production facilities to exceed price and yield goals.



**Photovoltaics**  
International

your quarterly resource for technology  
advancements in real-world PV manufacturing.

**PV-tech.org**  
Daily News

your daily dose of PV news.

**JobsinPV.com**  
Recruitment

sourcing specific skills in PV manufacturing.

## Editorial Advisory Board

Our editorial advisory board is made up of senior engineers from PV manufacturers worldwide. Meet some of our board members below:



**Q.CELLS**

*Gerhard Rauter*

*Chief Operating Officer, Q-Cells AG*

Since 1979, Gerhard Rauter – a native Austrian – had been working in managerial positions for Siemens AG at different facilities in Germany. In 2005 he became Vice President of Operations & Production with responsibility for the technology transfer between plants at home and abroad. As Vice President and Managing Director at Infineon Technologies Dresden GmbH & CO.OHG he was in charge of the Dresden facilities and their 2,350 employees since 2006. His main responsibilities at the Dresden facility had been in the fields of Development, Production and Quality. In October 2007 Gerhard Rauter was appointed as Chief Operating Officer at Q-Cells AG, being in charge of Production, InterServices, Quality, Safety and Process Technology.



**SHARP**

*Takashi Tomita*

*Senior Executive Fellow, Sharp Solar*

Takashi Tomita has been working at Sharp for 34 years and is widely recognised as a fore-father of the solar industry in Japan. He was responsible for setting up Sharp's solar cell manufacturing facilities in Nara and silicon production in Toyama. Takashi's passion for solar power has led him to hold numerous posts outside of his roles at Sharp, including: Vice Representative at the Japan Photovoltaic Industry Association; Committee Member of Renewable Energy Portfolio Standard of METI; Adviser Board Member of Advanced Technology of Nara; Visiting Professor of Tohoku University; Adviser of ASUKA DBJ Partners (JAPAN) and Adviser of Global Catalyst Partners (US).



**evergreen solar**  
Think Beyond.

*Rodolfo Archbold,*

*Vice President of Operations, Evergreen Solar*

Rodolfo Archbold joined Evergreen Solar in August 2007 as Vice President of Operations. Prior to joining Evergreen Solar, Mr. Archbold served as an operations consultant at Teradyne, Inc., a \$1.1 billion global leader in semiconductor test equipment, and at other leading electronics manufacturing firms. In this role, Archbold developed strategy and execution plans designed to improve global operations and supply chain design, reducing manufacturing costs and increasing responsiveness across global supply chain networks.



**MOTECH**  
Modern Technology for a Sustainable World

*Dr. Kuo En Chang*

*President of Solar Division, Motech Industries, Inc.*

Dr. Kuo En Chang joined Motech in 1999 as Chief Technology Officer and became President of the Solar Division in 2008, with responsibility for all technology and manufacturing. Motech is the sixth largest solar cell producer in the world. Before Dr. Chang joined Motech Solar, he worked on secondary battery research at the Industrial Technology Research Institute (ITRI) for more than three years. Dr. Chang holds a Ph.D. degree in Metallurgical & Materials Engineering from the University of Alabama.



**ISE**

*Professor Eicke R. Weber*

*Director of the Fraunhofer Institute for Solar Energy Systems ISE in Freiburg*

Professor Eicke R. Weber is the Director of the Fraunhofer Institute for Solar Energy Systems ISE in Freiburg. Weber has earned an international reputation as a materials researcher for defects in silicon and III-V semiconductors such as gallium arsenide and gallium nitride. He spent 23 years in the U.S. in research roles, most recently as Professor at the University of California in Berkeley. Weber is also the Chair of Applied Physics, Solar Energy, at the University of Freiburg, and during his career has been the recipient of several prestigious awards including the Alexander von Humboldt Prize in 1994, and the German Cross of Merit on ribbon in June 2006.



**SUNTECH**

*Dr. Zhongrong Shi*

*Chief Executive Officer, Suntech*

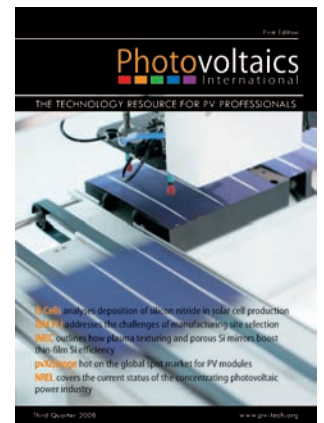
Dr. Zhongrong Shi is founder, CEO and Chairman of the board of directors of Suntech. Prior to founding Suntech in 2001, he was a Research Director and Executive Director of Pacific Solar Pty., Ltd., the next-generation thin-film technology company, before which he was a Senior Research Scientist and leader of the Thin Film Solar Cells Research Group in the Centre of Excellence for Photovoltaic Engineering at the University of New South Wales in Australia. Dr. Shi holds 11 patents in PV technologies and is a much-published author in the industry. His work has earned him such accolades as "Hero of the Environment" (TIME magazine 2007) and "Corporate Citizen of the Year" at the China Business Leaders Awards 2007. A member of the NYSE advisory board, Dr. Shi has a Bachelor's degree in optical science, a Master's degree in laser physics and a Ph.D. in electrical engineering.

*“A simple concept for an advanced process.”*

## Editorial Philosophy for the Journal

Sections are presented using a colour-coding system, to allow ease of navigation to the most relevant technical articles. The journal covers industry news and technological developments and our comprehensive Product Briefing sections will form a necessary core of literature for any informed purchasing decisions in PV facilities globally.

Articles presented in Photovoltaics International are independent and depict actual data and findings for the education of facilities managers, executives and engineers. We provide coverage of the best and latest developments in the PV manufacturing industry, and present these in a clear, easily-navigable format.



First Edition

### In each issue of the journal we will focus on the following sections:

**Fab and Facilities:** looking at the core functions of PV facilities

**Materials:** analysis of all materials including gasses, liquids, silicon and other substrates

**Cell Processing:** focuses on the technical aspects of solar cell production

**Thin Films:** papers on the production of all thin-film technologies

**PV Modules:** covers processes and technologies for packaging cells into modules

**Power Generation:** assessing the implementation and production of PV, CSP, BIPV and CPV products specifically for large-scale solar energy generation

**Market Watch:** overview of financial, corporate and comparable information of key PV manufacturing companies

## Editorial Schedule

	Copy Deadline	Thematic Focus	Distribution Date
<b>PVI 03</b>	3 <sup>rd</sup> February 2009	Specialty components, Polysilicon supply analysis, Glass, Lamination, Stringing and Tabbing equipment.	March 2009
<b>PVI 04</b>	24 <sup>th</sup> April 2009	Standards for PV manufacturing, CIGS, Turnkey vs. Made-to-order production lines, PECVD roundup, New Metrology techniques.	May 2009
<b>PVI 05</b>	24 <sup>th</sup> July 2009	CPV review, latest fab ramp activities, show guide for EU PVSEC and Solar Power International.	August 2009
<b>PVI 06</b>	20 <sup>th</sup> October 2009	Thin-film processing techniques, Module testing, large-scale PV installations.	November 2009

## Distribution Targeted Audience

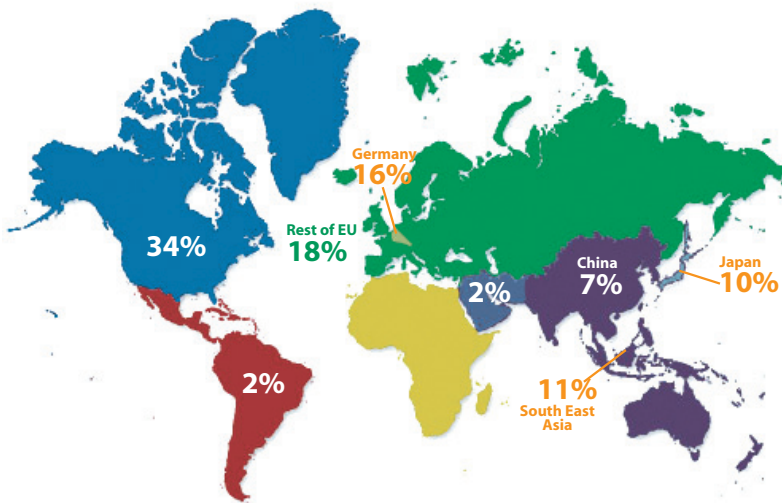
Photovoltaics International attracts request-based subscriptions from the following:

**Primary** - Managing Directors, Presidents, Chief Executive Officers, Directors, General Managers, Vice Presidents of Technology/Operations, Manufacturing Process Development Officers, Materials and Equipment Purchasing Officers, Engineering Management.

**Secondary** - Process Managers, Process Engineers, Process Development Engineers, Site Managers, Production Managers, Facilities Managers, Facilities Engineers, Tool Engineers, Maintenance Engineers, Management in large-scale utility integrators, Equipment Suppliers, R&D Managers, R&D Engineers.

**Tertiary** - Financial Community, Architects, Installers, Research and Development (non-facility-based).

## Distribution by Country/Region



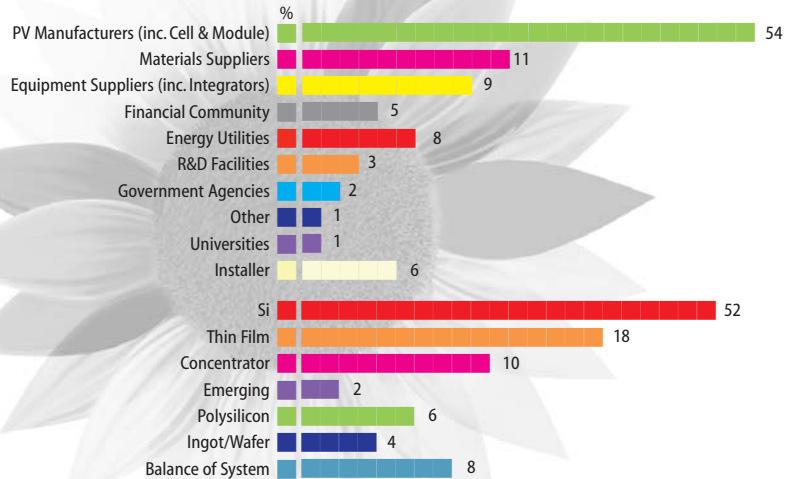
## Photovoltaics International 5 - 24th EU PVSEC and Solar Power International

**August 2009** - Direct distribution to 12,500 named individuals, request-based. Free to qualified recipients (primary and secondary audiences as above), paid for by tertiary audiences. Additional event distribution at EU PVSEC and Solar Power International 2009.

## Photovoltaics International 6

**November 2009** - Direct distribution to 12,500 named individuals, request-based. Free to qualified recipients (primary and secondary audiences as above), paid for by tertiary audiences.

## Distribution by Business Type



## Distribution by Product/Technology Type

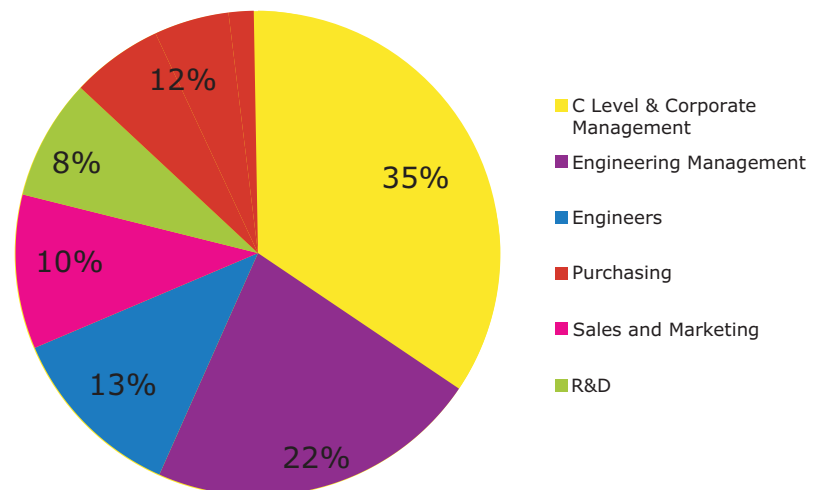
### Photovoltaics International 3 - Intersolar Issue

**March 2009** - Direct distribution to 12,500 named individuals, request-based. Free to qualified recipients (primary and secondary audiences as above), paid for by tertiary audiences. Additional event distribution at Intersolar Munich.

### Photovoltaics International 4 - Intersolar North America

**May 2009** - Direct distribution to 12,500 named individuals, request-based. Free to qualified recipients (primary and secondary audiences as above), paid for by tertiary audiences. Additional event distribution at Intersolar North America.

## Distribution by Job Title



## Photovoltaics International Lite

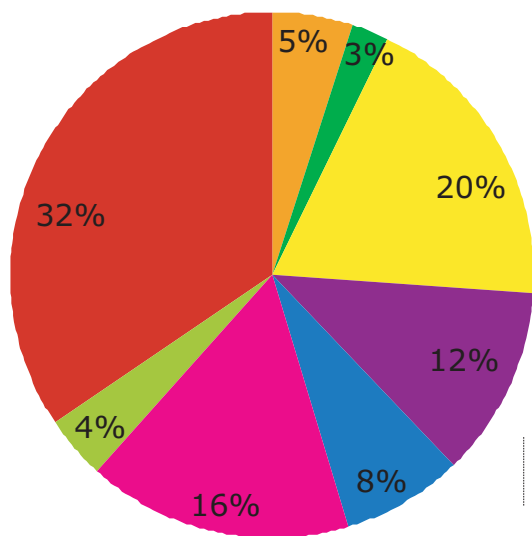
The high quality technical content produced by the Photovoltaics International team is sought after at key regional events around the world. In 2008 we produced three individual technical supplements. Supplements are 40-50pp produced exclusively for distribution at shows. In 2009 there will be editorial and advertising opportunities in four supplements throughout the year:

The PV Fab Managers' Forum in Dresden .....	March	Print Run: 600	FP/FC: £1,500
Intersolar Munich and North America .....	May /July	Print Run : 10,000	FP/FC: £3,500
24 <sup>th</sup> EU PVSEC and Solar Power International.....	September/October	Print Run: 10,000	FP/FC: £3,500

## Newsletter Sponsorship – Direct e-mail

Get your message in to the inboxes of the people that count. Our weekly newsletter reviews the biggest and best stories of the week. It provides a direct marketing tool for companies that want to add more of a personal touch to their advertising campaigns. Click-through banner space is provided in three locations on the newsletter for prominent exposure. Monthly rates through to yearly sponsorships are available.

### PV-Tech.org E-News Distribution by Job Function - 6,428 (request-based).



**Open Rate: 36.2%**  
**Click Rate: 18.6%**

- C Level & Corporate Management
- Sales & Marketing
- Engineering Management
- Engineers
- R&D
- Analyst
- Purchasing
- Utilities

N.B. Stats taken from Mail Chimp third-party newsletter software for newsletter 8th October 2008

**Top Banner, 468 pixels x 60 pixels**  
3 months £2,400  
6 months £4,500

**Top Side Banner, 120 pixels x 600 pixels**  
3 months £2,400  
6 months £4,500

**Bottom Side Banner, 120 pixels x 600 pixels**  
3 months £1,900  
6 months £3,600

**Bottom Banner, 468 pixels x 60 pixels**  
3 months £1,900  
6 months £3,600

## New marketing opportunities

PV Sourcing directory (Launching November 2008)

Interactive microsites for companies in the PV industry. Each microsite will have unique content, company details, product information, press releases and latest news.

- **Company Profile £450 per annum**
- **Premium Company Profile £1,500 per annum**

## The Number One PV Technology and Manufacturing Resource online

Photovoltaic Technology is a dynamic new media platform that is designed to give real-world manufacturing information to decision makers and implementers responsible for producing solar cells, modules and thin films.

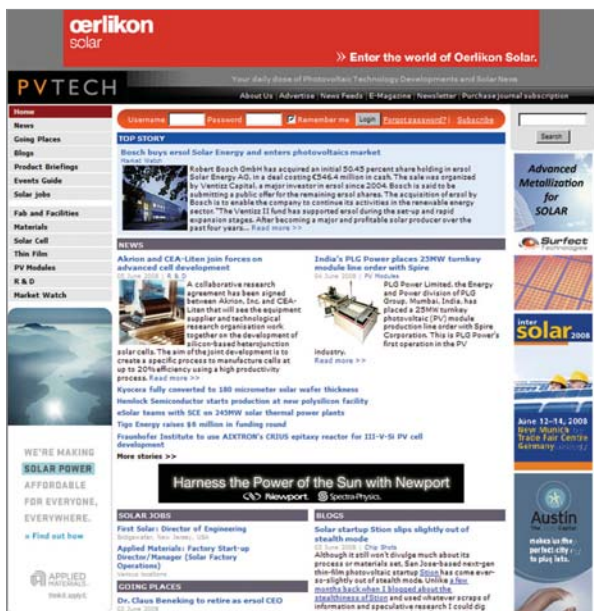
By placing your banner advertisements on PV-tech.org you can ensure that your message reaches members of the PV industry actively looking at implementing new technologies to increase yield and throughput to meet rising market demand.

PV-Tech.org offers you dynamic advertising space to help you capture mindshare and reach a high CTR (Click-Through Rate).

Our industry news coverage attracts a mix of senior executives, manufacturing and technical managers, VPs of operations, technology and R&D from the photovoltaic industry.

The secondary audience for the site is made up of senior people in equipment and materials suppliers to the PV manufacturers as well as financial analysts and commentators.

The content on the site also attracts installers and solar power generation utilities.

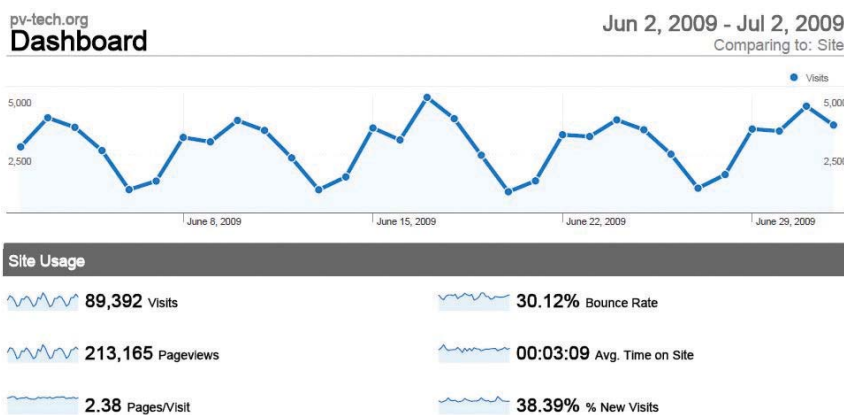


## Measurable Return on Investment

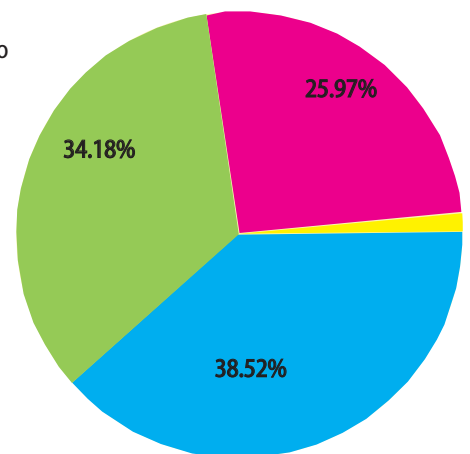
PV-Tech.org is committed to giving advertisers a measurable return on investment through the use of third party software that can be used to effectively track your online campaigns. This allows you to track how successful your campaigns are in comparison with the overall traffic levels on the site.

We firmly recommend that all advertisers change their banner campaigns as frequently as possible to maximise brand interest and CTR. There are no additional charges for changing ad copy on our site.

### Traffic - page views displayed last 30 day report\*



### Geographic traffic split\*



Americas  
Asia  
Europe  
Oceania

\* All Statistics from Google Analytics

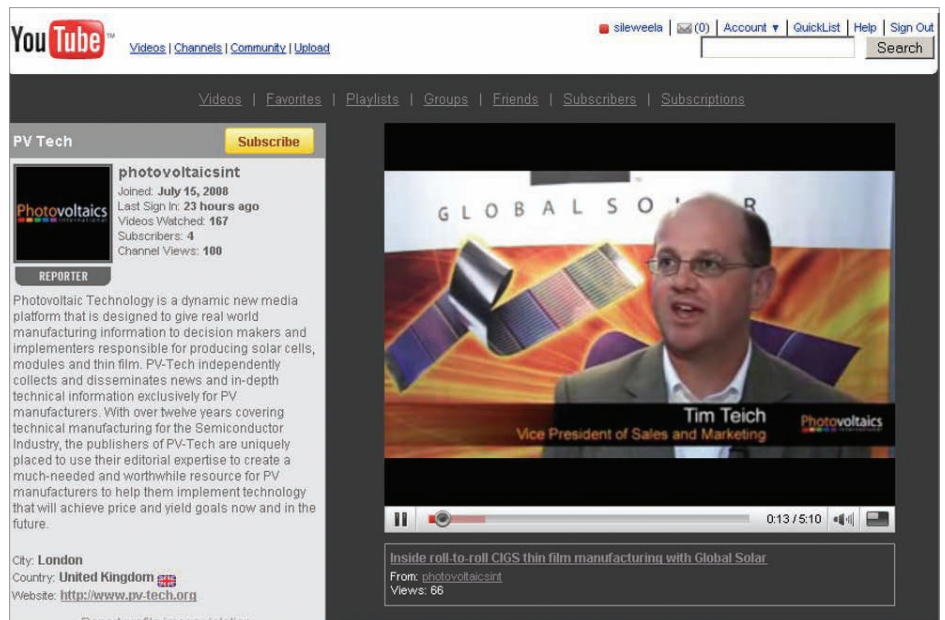
## Video Products for PV-tech.org

### Solar Leaders TV

The number one online PV technology and manufacturing resource now brings you closer to remarkable people at the forefront of developing the solar industry.

Technology leaders at key companies are driving the scale of the solar industry towards mainstream power generation within the next five years. Solar Leaders TV is your opportunity to join them!

As a technology company in the solar industry, you can reach a highly influential audience of C-level executives in the PV supply chain, financing professionals, investment analysts and power generation companies worldwide.



### By promoting yourself through video you can:

- Attract potential joint venture partners
- Influence the investment community
- Announce key company events
- Create a strong sales tool that you can distribute
- Associate your company with leading blue chips in the PV industry, such as Q-Cells, Applied Materials, REC and Evergreen Solar.
- All videos are displayed in the Photovoltaics International YouTube channel

*A unique way to convey financial and technical messages to the PV industry.*



### The Solar Leaders Package includes:

- scripting, filming and editing of a five-minute executive interview.
- editing may include adding additional footage of company, products and customers, subject to footage being provided by client.
- encoding and placement of interview on new Solar Leader page on PV-tech website for 6 months.
- promotion of interview on homepage and in weekly e-newsletter.
- joint ownership of IP rights to interview, enabling client to place interview on own website and link to PV-tech website.

**Cost: £9,500 - Including production and 6 months' online broadcast on PV-tech.  
£5,000 - For additional 6 months' broadcast.**

## Advertising rates

### Homepage & Solar Leaders TV pages

#### 6-month rate (per section)

Leaderboard	£6,400
Skyscraper	£5,600
Horizontal	£4,800
Vertical	£3,200

#### 12-month rate (per section)

Leaderboard	£12,000
Skyscraper	£9,600
Horizontal	£8,000
Vertical	£6,000

Rotates with a maximum of 3 other banners.

## Production requirements

### Leaderboard banner

728 pixels x 90 pixels

### Horizontal banner

468 pixels x 60 pixels

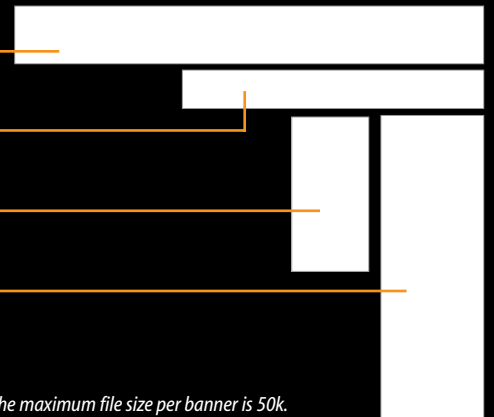
### Vertical banner

120 pixels x 240 pixels

### Skyscraper

160 pixels x 470 pixels

Banners should be supplied in the following formats: .jpg, .gif or animated.gif. ClickTAG-enabled Flash banners are also accepted. The maximum file size per banner is 50k.



## Section advertising

### Newspage, Blog pages & 7 Sections

#### 6-month rate (per section)

Leaderboard	£4,000
Skyscraper	£3,200
Horizontal	£2,800
Vertical	£2,400

#### 12-month rate (per section)

Leaderboard	£7,200
Skyscraper	£5,600
Horizontal	£4,800
Vertical	£4,000

N.B. All banners rotate with a maximum of 3 other banners.

## Section sponsorship

2 x leaderboard fixed banners on the section of your choice (one top and one bottom of the page)

1 x horizontal fixed banner in the middle of your chosen section page

1 x vertical banner within the section that also rotates on individual news stories (rotates with a maximum of 3 other banners)

#### 6-month rate POA

#### 12-month rate POA

## Print Rate Card - Full Colour

Size	Rate £	Rate €	Rate \$
Full	4,950	6,265	9,700
Half	2,750	3,480	5,390
DPS	9,500	12,025	18,625
Contents	6,950	8,795	13,625
IFC/IBC	7,950	10,050	15,580
Back Cover	9,950	12,590	19,500

### Series Discounts

2 issues	10%
3 issues	12.5%
4 issues	15%

Special Positions including belly bands, loose and bound inserts, gatefolds (POA).

N.B. All prices in this Media Pack are net.

Exchange rates taken as of August 2008. Base rate is UK pounds and dollar and euro rates will vary depending on time of payment.

## Technical Specifications

	Trim	Bleed	Type
Double-Page Spread	297 x 420 mm	303 x 426 mm	281 x 404 mm
Single Page	297 x 210 mm	303 x 216 mm	281 x 194 mm
Half-Page Horizontal			132 x 194 mm
Half-Page Vertical			281 x 88 mm

### Please Note:

Digital artwork should be PC formatted and submitted using high resolution PDF (300+ dpi). Please ensure that fonts are embedded and all images must be CMYK and in high resolution.

The PV portfolio is owned and operated by Semiconductor Media Ltd. Based in London, Semiconductor Media has been producing Semiconductor Fabtech, a quarterly journal for IC Fabrication Managers globally, for twelve years.

For enquiries contact: Semiconductor Media Ltd, Trans-World House, 100 City Road, London EC1Y 2BP, England

Telephone: +44 (0) 20 7871 0123

Facsimile: +44 (0) 20 7871 0101

Email: [info@pv-tech.org](mailto:info@pv-tech.org)