



Figure 1. Demand for IBC(e) Product in China 2005-2013

Introduction

This study is part of a series of multi-client reports on the world's market for intelligent controls in non-domestic buildings. "The Chinese Market 2008 to 2013" is our fourth edition for Intelligent Controls in Buildings, based on data from no less than 75% of the IBC(e) manufacturers business in China, is the most detailed and accurate report published on this subject. Support from all the major manufacturers and suppliers over the last 25 years has enabled us to develop a series of robust models that takes account of inputs from all distribution channels and trends, numerous market segmentations plus product and system cost structure over the last decade.

This report of nearly 200 pages benefits from comparisons with our similar studies carried out in different regions of the world and related technical infrastructures in buildings. Data on the past present and future market for IBC(e) is clearly presented in both quantitative and qualitative terms, so that strategies can be developed to fully exploit opportunities on a pan-European basis.

Study Overview

Over the last three years the Chinese market has shown significant growth of 12.6% per annum for sales of IBC(e) product and IBC(e) systems. A strong economy and new building construction output remained the main demand drivers accounting for almost 90% of IBC(e) system sales. Cities such as Beijing, Shanghai and Nanjing received a major boost from the 2008 Olympics; strong foreign direct investment during this period also helped

contributed to the growth of the IBC(e) systems market. Many multinational companies have expanded their business in China by setting up new manufacturing and operating facilities, especially in the electronic manufacturing, retail and pharmaceutical industries.

In 2008 the total IBC(e) Systems market was valued at RMB3.014 billion, with manufacturers contributing 45% representing an increase of five per cent from 2006.

The increasing concern over energy conservation will have a lasting positive effect on IBC(e) sales; leading to increased awareness that a properly specified BAS, with properly executed monitoring and control strategies can help to save energy consumption. A promising future is predicted for the Chinese IBC(e) market with many provincial governments having made concrete plans for huge investment in infrastructure construction and intensive policies for the upgrading of their infrastructures to increase energy saving in the main cities.

This study shows that Controls Contractors/Installers have now established a firm base and their influence is growing; however, foreign owned IBC(e) manufacturers are now able to offer the full solution package in China and thereby install systems directly.

Web-enabled open standard protocol products have become the biggest application accounting for 48%. Of all the protocols used today, open standard web enabled accounted for 25.3% of the total product. BSRIA

estimated the automation controller market to be RMB126 million. For the field controller market, the total sales volume reached 213,299 units in 2008.

Unsurprisingly, in 2008 offices took the largest share of the commercial business with 16.4%; followed by hotels/catering, retail and government.

The geographic distribution of IBC(e) systems continues to be concentrated in the East of the country such as Shanghai, Zhejiang and Jiangsu provinces. The North accounted for the second largest market (Beijing, Tianjin and Shandong). It is expected that the Western market will begin to experience a healthy growth in the next 5 to 10 years. Recently provinces in mid and western China such as Chongqing and Hebei released a mid-term plan for the key cities' infrastructure upgrading, which will have a knock on positive effect for the IBC(e) market.

BSRIA Worldwide Market Intelligence

BSRIA Proplan is a specialist consultancy that focuses on analysing the market for intelligent controls in buildings. Our studies are built upon their valuable data which major suppliers have entrusted to us, as well as information gathered in face-to-face interviews with end users and other players in the supply chain. Our integrity and honesty have given us this privileged and unique position - to deliver insightful analysis based on accurate quantitative data.

This report will help you to:

- Identify market opportunities
- Understand market trends
- Keep up to date with market developments, the players and routes to market
- Develop sales, marketing and distribution strategies
- Stay ahead of the competition

- The sales by Product (factory gate prices) and Systems (installed) for direct and indirect channels, to 2008, with forecast to 2013
- The level of penetration of system sales in each country and how this compares with other developing and developed markets
- The market size by type of project, new construction, refurbishment and retrofit
- The market size by contract value (4 segments)
- The market size by single, multiple & multi-site projects
- The market size by type of hardware (8 products)
- The market size by type/end use of building (16 categories)
- The distribution channels and the volume of business that they handle, comparing “product” and “total solution sales”
- Market share bands for all established suppliers by IBC(e) product and by total system sales
- Profiles of established suppliers provided in a standard format allowing comparisons to be made
- Establishes the part played by all third party suppliers and the impact that they will have in the future
- A detailed analysis of the channels of distribution and emerging trends
- Assess the IBC(e) suppliers’ influence on Total Building Solutions and measures the incidence of integrated services by both functionality and the vertical building markets in which they are installed
- Reviews the impact of Technology and IT-Convergence on IBC(e) business

CONTENTS

Part 1 (P1-P3): IBC(e) PRODUCTS ANALYSIS CHINA

P1	Structure & segmentation of IBC(e) products sales	1
P1.1	Introduction	1
P1.2	Market structure and form	3
P1.2.1.	The status of IBC(e) 2007 in China	3
P1.2.2.	A twelve year performance review	4
P1.2.3.	Market size by type of hardware	5
P1.2.4.	Communication protocols used in IBC(e)	13
P1.2.5.	Product Pricing	14
P1.2.6.	Wireless technology	14
P2	Products suppliers’ analysis	16
P2.1	Products suppliers’ shares & structure	16
P3	Products market size forecast to 2012	20
P3.1	Future demand for IBC(e) products in China	21

PART 1 (S1-S4): IBC(e) SYSTEMS ANALYSIS CHINA

S1	Structure & segmentation of IBC(e) systems sales	1
S1.1	Introduction	1
S1.2	System market structure and form	3
S1.2.1.	The status of IBC(e) 2008 in China	3
S1.2.2.	A twelve year performance review	4
S1.3	Market size by type of system	5
S1.3.1.	Communication protocols used in IBC(e)	5
S1.3.2.	Data cables in system	6
S1.4	Market size by sector	9
S1.4.1.	New construction - refurbishment - retrofit	9
S1.4.2.	Public - commercial - industrial	10
S1.4.3.	Single, multiple and multi-site projects	11
S1.4.4.	Contract size	12
S1.4.5.	Market size by end user sector	12
S1.5	Geographic distribution of IBC(e) sales	16
S2	Systems suppliers’ analysis	17
S2.1	Systems suppliers shares & structure	18
S3	Systems market size forecast too 2013	23
S3.1	Future demand for IBC(e) systems in China	23
S4	The development of Integrated Building Management Systems (IBM)	23
S4.1	Integration by vertical market	26
S4.2	Integration by building services	28

PART 1(1-5): MARKET ANALYSIS CHINA

1.	Country overview	1
1.1	Overview of China	1
1.1.1	Background information	1
1.1.2	Economics	2
1.1.3	Key economic indicators	3
2.	Market dynamics and growth prospects	5
2.1	Industry overview	6
2.2	The dynamics of the market place	7
2.1.1	Market competitive analysis	7
2.2.2	Factors for and against growth	8
2.3	Market drivers	10

3.	Trading practices and procedures and purchasing routes	13
3.1	The construction business and contractual relationships	13
3.2	Purchasing routes for IBC(e) products	16
3.2.1	New construction/refurbishment	17
3.2.2	Retrofit	18
3.2.3	Future trends	19
3.3	Third party suppliers	20
3.3.1	Controls Contractors (CC’s) (System Houses) and System integrators (SI)	21
3.3.2	Mechanical/Electrical contractors (installers)	22
3.3.3	EMSCO’s/Facilities Management (FM) Contractors	22
3.3.4	Original Equipment Manufacturers(OEM’s)	23
4	China construction market overview	25
4.1	The overall market development in 2008	25
5	Suppliers profiles	31

PART 2: PAN-REGIONAL ANALYSIS

1.	The present status of IBC(e) penetration in China	3
2	Forces that determine demand	9
2.1	Demand side factors	10
2.1.1	Energy conservation & deregulation	11
2.1.2	Indoor Air Quality (IAQ) & green issues	13
2.2	Supply side factors	14
2.2.1	Supply capacity/capability	15
2.2.2	The future	15
3	Convergence of IT and intelligent technical infrastructure	21
3.1	Introduction	21
3.2	What is IT-convergence and why is it important?	22
3.3	Has IT-convergence crossed the chasm?	24
3.4	IT-convergence with technical infrastructures - phases of adoption	26
3.5	Roadblocks that have to be overcome	28
3.6	Organising for IT-convergence - changing the business model	30
3.6.1	Changing the business model - the need for partnerships	30
3.7	Getting the message across	33
4.	Technology	37
4.1	Overview of technology	37
4.2	Product development	38
4.3	Web services & XML	39
4.3.1	Web services	39
4.3.2	XML	39
4.4	Emerging technologies	41
4.4.1	Wireless mesh networks	41
4.4.2	Wireless sensor networks	42
4.4.3	MEMS sensors	43
4.5	Product standards	44
4.5.1	CEN/TC 247 committee	44
4.5.2	ASHRAE technical committee	46
4.6	Communication standards	46
4.6.1	BACnet	46
4.6.2	Echelon-LonWorks	47
4.7	Cabling	48