

**PHOTONIC SWITCH & SWITCH MATRICES
GLOBAL MARKET FORECAST (2007-2012)**

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Photonic switches implement technologies that switch signals purely in the optical domain. The ElectroniCast Photonic Switch & Switch Matrices Global Market Forecast provides the historic year of 2007 and a 5-year (2008-2012) forecast of the consumption value of photonic switch & switch matrix (systems), segmented into the following geographic regions:

- North America
- Europe
- Asia Pacific Region (APAC)

This is the report of the ElectroniCast study of conventional optical switch modules and optical switch matrices used for selected fiber optic-based communication applications or for the purpose of the manufacturing of components to be used (consumed) in the selected communication applications.

The global consumption value of photonic switches and switch matrices in 2007 was \$5.69 billion. The consumption value is forecast to increase to \$22.7 billion in 2012, with strongly rising quantity growth partially offset by a continuing decline of average selling prices (ASPs). This DRAMATIC growth will be driven by the expansion of fiber optic transport and access networks, mainly in telecommunications. The private data network as well as the specialty/instrumentation and military/aerospace market segments will also continue to be major switch users.

The forecast for each switch type in each region is in terms of:

- Quantity (unit x 1,000)
- Value (US\$ Million)
- Average price (dollars per each unit)

The category list of each of the switch types is presented in the databases (Microsoft Excel) spreadsheet is presented in Table 1. The category list of each of the selected applications reported in this market forecast study is presented in Table 2.

Table 1
Photonic Switch Product Categories

Photonic Switches & Matrices	
Optomechanical Conventional Switches	
Singlemode	
1X2	
2X2	
1XN	
	1X4
	1X8
	1X16
	1X32
	1X64
	1X128
	1X >128
	Dual Bypass (Quad Ring)
Multimode	
1X2	
2X2	
1XN	
	1X4
	1X8
	1X16
	1X32
	1X64
	1X128
	1X >128
	Dual Bypass (Quad Ring)
Nonmechanical Conventional Switches	
1X2	
2X2	
1XN	
	1X4
	1X8
	1X16
	1X32
	1X64
	1X >128

Table 1
Photonic Switch Product Categories
- Continued -

Optomechanical Matrix Switches

Singlemode

Balanced Matrix (NXN)

2X2
4X4
8X8
16X16
32X32
64X64/72X72
128X128
256X256
1024X1024 & Larger

Unbalanced Matrix (MXN)

2X4
4X8
8X16
16X32
32X64
64X128
> = 128X256
(Other than 1:2 Ratio)

Multimode

Balanced Matrix (NXN)

2X2
4X4
8X8
16X16
32X32
64X64
> = 128X128

Unbalanced Matrix (MXN)

2X4
4X8
8X16
16X32
32X64
> = 64X128

Table 1
Photonic Switch Product Categories
- Concluded -

Nonmechanical Matrix Switches
Balanced Matrix (NXN)
2X2
4X4
8X8
16X16
32X32
64X64/72X72
> = 128X128
Unbalanced Matrix (MXN)
2X4
4X8
8X16
16X32
32X64
> = 64X128

Table 2
Fiber Optic Fusion Splice Application Categories

- Telecommunications
- Premises data networks
- Cable TV
- Military/Aerospace (Commercial and MIL-SPEC)
- Specialty (intra-enclosure, test and measurement, laboratory, other)

Photonic Switch & Switch Matrices

Global Market Forecast

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Market Forecast Data Base – Excel Spreadsheets:

Global
North America
Europe
APAC