

The International Top 30

What struck us most this year was these companies' ability to shave deployment costs and create new business cases for FTTH.

Acome www.acome.fr

This French giant has expertise in plumbing and wiring as well as fiber. Its cable is sold worldwide.

ADC www.adc.com

The company has grown enormously in the past few years, in part by acquisition. It provides wireline, wireless, cable, broadcast, and enterprise networks in more than 130 countries. ADC introduced new MDU-oriented products this spring in its OmniReach line. In Europe, its Krone division has a large presence.

AFL Telecommunications www.afltele.com

Known as AFL Tele around the world, AFL telecommunications is the American-based fiber division of Japan's Fujikura Ltd. Once known more as a supplier of aerial fiber, AFL has blossomed into a full-range vendor of aerial, buried, and inside fiber, closures, termination boxes, signal conversion equipment and test instruments.

Alcatel-Lucent www.alcatel-lucent.com

Alcatel was already an optical networking powerhouse when it joined Lucent last year. The combined company, Alcatel-Lucent, is now engaged in more than 60 FTTx projects around the world, more than 20 of which include GPON. Recent GPON announcements included projects in Sweden, Korea and Singapore. Alcatel-Lucent markets

GPON equipment for both the central office and customer premises, and is of course a major supplier to Verizon.

Arcadis www.arcadis-global.com

This French consulting and construction firm has lately been melding its fiber networking skills with its community planning abilities. In the US, its latest projects are in Georgia (fiber backbone) and in Cary, NC, where two miles of downtown streets are being revitalized.

Bechtel www.bechtel.com

This global engineering giant has long built telecommunications systems, and has made a big promotional push at fiber-related conferences lately. It's privately owned with headquarters in San Francisco, but has 40 offices around the world.

Cisco www.cisco.com

There wouldn't be an Internet without Cisco, and the company has moved smartly into local fiber deployments as well, with recent sales to providers including @Home (Netherlands) and Iliad Group (France). But perhaps its greatest contribution is its vision for the uses to which mobile and remote computing can be put – such as its new TelePresence videoconferencing offering. The vision spurs new networks by others as well.

Corning Cable Systems

www.corningcablesystems.com

Three decades after developing the first optical fiber used in telecommunications, Corning continues to market products worldwide, including not only fiber but network interface devices, test equipment, splice equipment, cable assemblies and fiber-optic connectors. Recent introductions included a pre-stubbed, preconnectorized fiber enclosure and two new hand-held fusion splicers designed for tight working conditions.

Damaka

www.damaka.com

The company is expert at using SIP to move content around the Internet. SIP may eventually displace HTTP as the primary content framework for what is now called the World Wide Web. The company built the world's first SIP based, P2P VoIP software with whiteboarding; it complements Damaka's collaboration suite, which already includes desktop sharing, universal IM, FastFile transfer, and multi-party video. The company offers its white-label software platform to enterprises needing a collaboration solution and to service providers wanting to distribute the software to their customer base.

Dasan

www.da-san.com

Korea Telecom selected equipment from Dasan last year for volume deployment in its FTTH rollout. Korea-based Dasan is majority-owned by Siemens. KT's order from Dasan included both a GePON solution and a coarse wave division multiplexing (CWDM) PON solution.

Draka

www.draka.com

Draka Comteq manufactures optical fiber in Europe, North and South America and Asia. Its newest product, in its Bend-bright line of bend-tolerant fiber, is specifically designed for FTTH and indoor deployment.

Emtelle

www.emtelle.com

A provider of modular solutions for blown fiber and ducted networks, Emtelle offers a wide variety of products for both the PON and Active Ethernet markets. Headquartered in London, Emtelle is involved in FTTH projects in Singapore, Denmark, Sweden and the Netherlands, among others.

Ericsson

www.ericsson.com

Ericsson, which is known primarily for mobile telephony equipment, entered the FTTH market this year with its purchase of Entrisphere, whose GPON solution it had been reselling for the previous year. Ericsson also makes outside plant including fiber optic cable, cable assemblies, distribution frames, duct joints and fiber joint closures. Its acquisition of TANDBERG Television, which is still in progress as of press time, gives it an IPTV solution that is complementary to the GPON solution.

ETRI

www.etri.re.kr/www_05/e_etri

A nonprofit research organization funded by the South Korean government, ETRI has been a leader in promoting fiber-to-the-home in Korea. In the testbed it operates in the Gwangju metropolitan area, 20,000 households are testing commercial and noncommercial applications that range from interactive advertising to a 3D virtual studio for creation of video content.

Fujitsu

www.fujitsu.com

Fujitsu's GePON solution is widely deployed in Asia, where it is a major supplier for Japan's NTT. In addition, the company also markets GPON in North America.

Hitachi

www.hitachi-com.com

This company also provides both GPON and GePON solutions. The GPON systems (as well as earlier APON and BPON) are marketed directly by Hitachi, while its Salira subsidiary markets GePON solutions throughout Asia.

Huber+Suhner

www.hubersuhner.com

The company has roots that go back 150 years in Switzerland, supplying the telegraph industry. Now, the firm's blue "H" logo is a common sight wherever fiber is being laid. Its connectors, splitters and patch cords are sold worldwide. The firm is also big in the WiFi and WiMAX markets.

Leoni Group

www.leoni.com

Germany-based Leoni is a global supplier of wires, cables, wiring systems and related development services. Leoni expanded into fiber optics with a series of recent acquisitions and can now offer solutions including fiber, cables, related components, and the design and setup of fiber-to-the-home networks.

Mitsubishi

global.mitsubishielectric.com/bu/communication

Communications giant Mitsubishi offers a GePON solution that is being used by Japanese telecom provider NTT, among others. For 2005, Mitsubishi was listed by Infonetics Research as the leader in worldwide PON revenue and port market share. Recently the company said it had developed four integrated circuits critical to the development of 10 Gbps fiber-to-the-home networks.

Motorola

www.motorola.com

With a big hand in the GPON ONT market and an impressive suite of integrated tools for wireless, fiber and broadband over powerline, the company's products are showing up worldwide. Verizon is a big customer, but we were more attracted by its ability to bring broadband to rural areas and to older buildings at attractive costs.

Nexans

www.nexans.com

Nexans supplies cabling for everything from heating to power networks – including fiber optic cables and connectors for fiber-to-the-home deployments. Based in Paris, Nexans does business worldwide, and has recently announced sales of fiber optic cabling in Europe and the Middle East.

NTT

www.ntt.co.jp/islab/e/org/as.html

One of the “holy grails” of the fiber business has been the creation of a fiber that's tough enough to stand up to inside-the-home deployments without having to be tacked, immovable, to the walls. NTT Labs, the research arm of the Japanese telecom company, was the first to do it. They've also developed optical curl cord that goes through pipes, PON splitters for MDU basements, in-home connectors and other innovations that reduce the cost of maintaining and operating fiber-to-the-apartment systems.

KT Communication

We Share Your Vision - A Commitment to Quality and Integrity

KT Communication provides digital satellite video programming solutions for C-Band, Bulk, L-Band and Transport.



Our video platform delivers content to independent multi-channel video providers (MVP) that target hard-to-serve and alternative technology markets, including:

- Multi-dwelling and multi-tenant units, such as apartment complexes and duplexes, university residence halls and hospitals, vacation resorts, and real estate investment trusts with multiple units
- Private cable operators
- Wireless cable operators
- Franchise cable operators, particularly operators of small and rural systems



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www.ktcom.tv

OFS

www.ofsoptics.com

Formerly the Optical Fiber Solutions division of Lucent Technologies, OFS is now owned by Furukawa Electric. Despite its name, OFS is about more than just fiber: Its Access ADVANTAGE System also includes outside plant and MDU distribution systems. Its new Slim Line system aims to make fiber easy to install. It introduced an improved line of bend-insensitive fiber last fall. OFS products are marketed and sold worldwide.

PacketFront

www.packetfront.com

A Swedish company with a solid customer base in Scandinavia, the company has expanded throughout Europe, the Middle East, Asia and North America. According to ABI Research, PacketFront had a role in 40 percent of the FTTH ports installed in the EMEA region during 2005. In addition to broadband routers and customer premises equipment, PacketFront also markets a suite of customer management software, including a solution that lets consumers self-provision open-access networks. The American headquarters is in Nashua, New Hampshire.

Samsung

www.samsung.com

Samsung is one of the large suppliers whose GePON equipment was selected in 2006 for Korea Telecom's volume FTTH deployment.

Siemens

www.siemens.com/networks

Siemens, a major provider of both GPON and GePON systems, is preparing for the next generation of GPON: A research team recently transmitted error-free data at 10 Gbps, four times faster than the rate previously possible. At the same time, the range between hub and subscribers was extended to 100 kilometers and the number of subscriber lines per splitter was expanded to 512. Siemens Networks is about to merge into a 50-50 joint venture with the Nokia Networks Business Group to form Nokia Siemens Networks.

Sumitomo Electric Lightwave

www.sumitomoelectric.com

Sumitomo's American-based arm, Sumitomo Electric Lightwave, markets fiber, cables, splicing equipment, pre-connected assemblies, network solutions, training, and design services. Its air-blown solutions are particularly noteworthy, but its catalog of all things fiber is huge. Japan-based Sumitomo Electric Networks (www.sei-networks.com), is the second-place PON vendor worldwide, making GePON equip-

ment that has been widely adopted by major carriers in Asia. Sumitomo introduced the first peelable ribbon cable, now the industry standard in the US.

TVBLOB

www.tvblob.com

An Italian start-up focused on creating TV-oriented products and services that take advantage of the power of the broadband network. Think Slingbox, but you have the option of creating your own video. Its early aim is at corporate telepresence applications, but it expects to be in homes quickly. MVB, the Danish provider (MidtVest Bredband www.mvb.dk), says it expects to add TVBLOB to its residential offerings in the coming year. A typical solution requires a standard television set, an analog or digital video camera, and a broadband connection, along with a TVBLOB Media Center and backend services. These services, such as video communication or video multicasting, can be managed by TVBLOB or internally within a corporate LAN.

UTStarcom

www.utstar.com

UTStarcom's GePON equipment is found in large deployments by Japan's Softbank BB and in China as well. The company also sells an IPTV solution.

Wave7 Optics

www.wave7optics.com

The company's Last Mile Link and Trident7 systems are deployed worldwide. The Trident7 platform is the market's first Optical Line Terminal that supports both IEEE GePON and ITU GPON in the same box.

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