# etherSPLIT™

## The Affordable Way to Deliver Ethernet

**THE NEED FOR SPEED**

The ubiquitous Internet is driving the need for bigger bandwidth to the end user. Dial-up access, at 56Kbps is simply too slow for today's multi-media driven content. While the world waits for economical fiber optic deployments to the end user (with the promise of Gigabit speed), service providers are faced with difficulty in choosing cost-effective options for provisioning high-speed (Megabit) access to those (impatiently) waiting users. xDSL (Digital Subscriber Line) technologies offer the ability to push from two to six Mbps over a single pair of copper wire enabling use of existing building wire. But at what price? Typical xDSL or wireless solutions are often too expensive to provision for the residential market, particularly in MDU (multi-dwelling unit) environments.

**PROBLEMS BECOME OPPORTUNITIES**

xDSL solutions deliver high-speed data over long distances (15-18,000 feet) making these solutions, although expensive, ideal for provisioning services to a building. But delivering that service to multiple units within a building can present a problem. Existing buildings that do not have pre-installed data grade (Category 3 or 5) cable leave the service provider with an often exasperating situation. The cost/benefit ratio of xDSL, or even re-wiring with new cable, often becomes untenable to many providers who wish to extend service to every tenant of a building.

While it may make sense to rewire a business tower for data services due to high user penetration and attractive business-class pricing, it can be difficult for service providers to justify the high cost and inconvenience (not to mention liability) of rewiring in residential MDUs. MDUs are ripe for provisioning, but is it cost effective? That is the question many building owners and service providers wrestle with in deciding whether to install high-speed Internet access to their tenants. Hotel operators face the same question in deciding to offer this amenity to overnight guests.

**etherSPLIT™ TO THE RESCUE**

etherSPLIT™ offers building owners, hotel operators, and service providers a new low-cost alternative to rewiring or use of expensive xDSL or wireless solutions. Services can be provisioned to an entire building, complex, or hotel for less cost than piecemeal deployment of xDSL or wireless alternatives. By eliminating any need to rewire a building, which is often impossible in many MDU situations anyway, etherSPLIT™ removes invasive installation from the equation.

While xDSL and wireless solutions also are non-invasive, only etherSPLIT™ offers economy of scale. etherSPLIT™ stands alone at a fraction of the cost of other solutions. With simplified installation, services can be provisioned in an entire building or complex in a matter of days vs. weeks or months for traditional re-wired installations. By eliminating the need for expensive customer premise and back-end equipment required by xDSL or wireless solutions, etherSPLIT™ also saves the provider precious dollars.

**HOW IT WORKS**

etherSPLIT™ employs a patent-pending system that splits 10BaseT Ethernet and POTS (plain old telephone service) over four wires (straight or twisted pair). This system is unique in contrast to DSL-like solutions that multiplex voice and data over two wires. The vast majority of existing business parks, apartments, and hotels have at least four wires running to end units (which allowed at the time for two telephone lines).

etherSPLIT™ leverages all four wires in existing structures to deliver 10BaseT (10 Mbps) Ethernet as well as one traditional POTS line. The splitter system is enclosed in a simple wall-plate unit on the user end that includes an RJ45 jack for Ethernet, and an RJ11 jack for telephone. This unit, which replaces an existing telephone jack plate, is connected through the building's existing copper wire to an etherSPLIT™ Hub Splitter for connection to any standard 10BaseT hub/switch. The etherSPLIT™ Hub Splitter also has jacks for connection to the telephone company demark for telephone service. etherSPLIT™ connections from the all plate to the hub splitter can run over 250-300 feet which is ideal for most MDU installations.

**WHERE TO GET IT**

etherSPLIT™ is available directly from QLynk Communications, Inc.. For more information and ordering information call QLynk at 979.691-2882 or email info@QLynk.com. Website: www.etherSPLIT.com

### etherSPLIT ESW275 Wall Plate Splitter

The etherSPLIT™ Wall Plate Splitter consists of an RJ45 Ethernet jack, and an RJ11 telephone jack integrated into a standard 2 ¾ by 4 ½ inch faceplate that fits standard wall boxes. The Wall Plate jacks are affixed to a small circuit board that includes an RJ11 etherSPLIT™ jack behind the faceplate.

Existing telephone wire coming into the wall box is crimped to a six-pin RJ11 plug as illustrated above depending on type of wire or phone configuration used. The crimped connector is plugged into the RJ11 etherSPLIT™ Interface jack on the wall plate. The wall plate splitter is then screwed to the utility box in the wall.

Single line, two-wire phone circuits require a four-wire (or two-pair) etherSPLIT™ connection. Multi-line four-wire key-phone systems require a six-wire (or three-pair) etherSPLIT™ connection.


### etherSPLIT ESH120 Single Hub Splitter

The etherSPLIT™ Single Unit Splitter is a compact unit for connecting an etherSPLIT line to a standard 10BaseT Ethernet hub or switch. The splitter has three jacks: an RJ45 Ethernet jack for connection to any standard 10BaseT hub or switch, an RJ11 telephone jack for connection to the telephone company line demarcation or building PBX, and an RJ11 etherSPLIT™ interface jack for connection to an etherSPLIT™ Wall Plate Splitter via the building's existing phone cable.

Existing telephone wire in a building is used to connect between the etherSPLIT™ Single Unit Splitter and each etherSPLIT™ Wall Plate Splitter. Single line, two-wire phone circuits require a four-wire (or two-pair) etherSPLIT™ connection. Multi-line four-wire key-phone systems require a six-wire (or three-pair) etherSPLIT™ connection. Standard RJ11 crimp plugs are used on each end of the connection for ease of installation.

The splitters may be mounted directly to a wall, shelf, or standard 2U 19 inch blank rack plate using an etherSPLIT aluminum mounting bracket. Up to 18 splitters can be accommodated in one bracket, and brackets may be stacked for maximum density.

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