TRUE 75 OHM SOLUTIONS
1.0 / 2.3
BNC
MCX
MINI BNC
MINI SMB
SMB
CUSTOM GANG MATE SOLUTIONS

APPLICATIONS
DS3/DS4 Switching
RBOC - Central Office
Internet Routing & Switching
Optical Networking Equipment
ADSL Extenders
VoIP
Given the rapid pace of the Telecommunications market, service providers need to be able to adapt quickly to changing customer needs. The demand for faster, better and more affordable telecommunications is growing rapidly, with each provider striving to outperform their competitors. The market is being driven by an every-growing internet-savvy populous, which expands by thousands of users daily, each demanding a multitude of services. Because the customer demands more service, new features can develop rapidly and provider networks need to be able to respond in kind.

It has been estimated that Telecommunications companies in the U.S. have over $170 billion worth of cables sunk into the ground and head ends. While much of this older infrastructure cannot handle the need for increased capacity for the demands of Internet users, this is not the case for coaxial cable. A good portion of this investment can be upgraded to support the 75 Ohm end-to-end impedance required to move from DS1/DS2 signals, to faster DS3 and future DS4 performance.

Most companies did not originally create a network structure that can easily take advantage of the newest higher bandwidth protocols and have needed to make major upgrades to their networks to start building on these bandwidth advantages. To add bandwidth to support ADSL, Broadband, voice, VoIP and other applications, many companies are converting their distribution networks to even wider bandwidth fiber. In the process, they are adding a return path, both along the fiber route and further out along the coax distribution connections.

To best capitalize on the enormous potential of DS3 and DS4, often all that is needed are new cable connectors, along with switching equipment capable of handling DS3 and DS4, instead of an entirely new network infrastructure. Amphenol RF offers a full line of 75 Ohm connectors designed to meet the needs for higher performance, impedance-matched cable interconnections. These connectors provide True 75 Ohm performance, ensure low signal distortion, and have been ‘designed in’ industry-leading hardware.

Our connectors are designed for the most popular 75 Ohm cables used in Broadcast, Telecommunications and various other RF applications, and feature crimp-crimp cable affixment.

### Technologies Supported

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<th>Technologies Supported</th>
<th>Description</th>
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<tr>
<td><strong>ADSL Extenders</strong></td>
<td>Extenders strengthen and repeat ADSL signals so they can be brought to homes and businesses.</td>
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<td><strong>Digital Signal</strong></td>
<td>DSX refers to a digital signal crossconnect, and it is essentially a patch panel allowing easy interconnection.</td>
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| **Designators**        | DS0 - Data Rate: 64 Kbps  
                         | DS1 - Data Rate: 1.544 Mbps - 2.048 Mbps, T-Carrier: T1, E-Carrier: E1  
                         | DS2 - Data Rate: 6.312 Mbps - 34.368 Mbps, T-Carrier: T2, E-Carrier: E2/E3  
                         | DS3 - Data Rate: 44.736 Mbps - 139.264 Mbps, T-Carrier: T3, E-Carrier: E4  
                         | DS4 - Data Rate: 139.264 Mbps - 565.148 Mbps, E-Carrier: E5 |
| **Multiplexers**       | In digital signal processing, a multiplexer (often abbreviated to "mux" or "muldex") is a device for taking several separate digital data streams and combining them together into one data stream of a higher data rate. This allows multiple data streams to be carried from one place to another over one physical link, which saves cost. |
| **Routers**            | Routers are specialized computers that send your messages and those of every other Internet user speeding to their destinations along thousands of pathways. |
| **Voice over IP**      | Voice over IP (VoIP) is a technology that allows telephone calls to be made over computer networks like the Internet. VoIP converts analog voice signals into digital data packets and supports real-time, two-way transmission of conversations using Internet Protocol (IP). |

Please visit us online at www.AmphenolRF.com to learn more about our product offering for these markets, or contact your local Amphenol RF sales rep.