Using
MPTL

MODULAR PLUG TERMINATED LINKS

with Ease and Confidence:

The Leviton Warranty Solution

Today's networking systems have evolved. Historically, the majority of network computing devices were in offices or equipment rooms, with the horizontal cabling terminating at a panel or equipment outlet, and devices connected with a conventional patch cord. However, with the Internet of Things (IoT) and intelligent buildings, increasingly more devices — such as security cameras, Wi-Fi access points and IP clocks — are becoming IP enabled and connecting to the copper horizontal cabling infrastructure. Often, it's impractical or unsafe to connect these types of devices to a typical panel.

This is where a Modular Plug Terminated Link or MPTL comes in. With an MPTL, there is just one patch cord in the telecommunications room, and the permanent link is terminated at the other end with a plug, so it can be inserted directly into the device — eliminating the equipment cord.

The benefits of using an MPTL include:

- The cost-effective ability to adhere to the code requirement (when applicable) of only placing plenum-rated products in air-handling spaces

- Better security and aesthetics by avoiding exposed patch cords that can be accidentally or intentionally disconnected

As time goes on, the MPTL application has become more and more common.
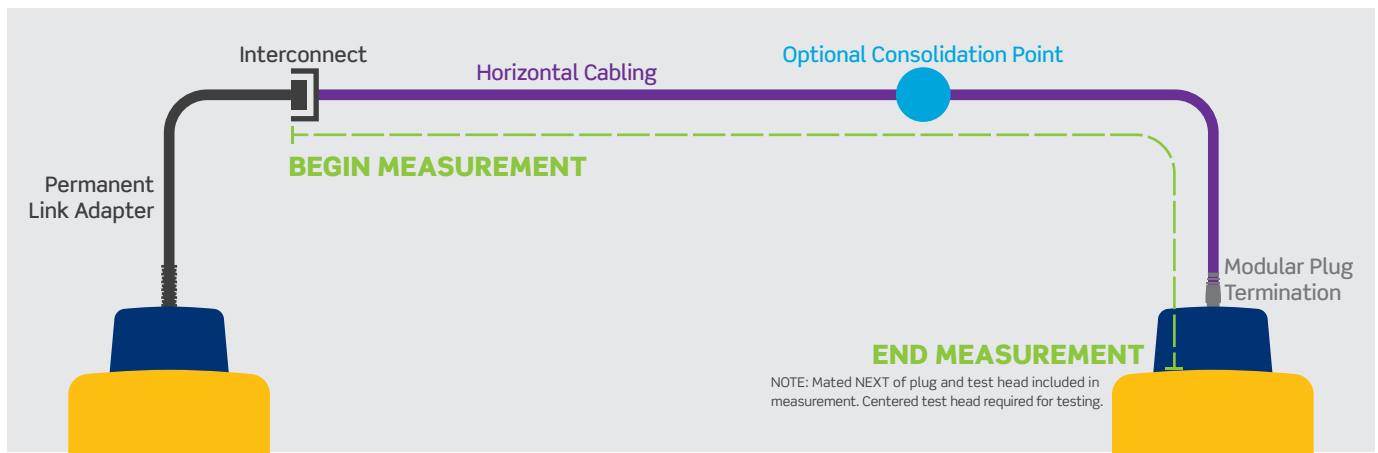
IN THE PAST

While the industry began recognizing the practical use of links that terminate to a plug and eliminate the equipment cord several years ago, there were previously no specific test requirements specified by the TIA. BICSI had recommended that these connections be tested using the Modified Single-Connector Permanent Link testing. This was achieved by attaching the main testing unit at the patch panel with a permanent link adapter, connecting the remote unit at the far end with a channel adapter and then choosing the "Mod 1-Conn Perm. Link" application on the tester. But the problem with using a channel adapter was that the field terminated plug at the far end was excluded from the test.

STANDARDS

In 2018, TIA included an MPTL certification as part of the TIA-568.2-D standard. In 2020, ISO/IEC TR 11801-9910 was approved, which also provides requirements for MPTL configurations. The new, official MPTL test procedure uses a permanent link adapter on the main unit, and a single patch cord adapter on the remote unit at the far end. An MPTL has a maximum length of 90 meters, and the same electrical requirements as a Jack-Jack permanent link. The patch cord adapters used need to match the category of the cable being tested.

Interconnect

Horizontal Cabling

Optional Consolidation Point

BEGIN MEASUREMENT

Permanent
Link Adapter

Modular Plug
Termination

END MEASUREMENT

NOTE: Mated NEXT of plug and test head included in measurement. Centered test head required for testing.

THE LEVITON SYSTEM WARRANTY SOLUTION

MPTLs are eligible for a Leviton System Warranty. This warranty is your assurance that your certified structured cabling system performance will exceed all relevant cabling system standards. If a warranty-related issue arises, our expert staff and technical support are dedicated to quickly resolving any and all warranty-related field issues.

The warranty is contingent upon submission of a test report when installed, and must be done so by Leviton Certified Integrators. The test also must be conducted per ANSI/TIA-568.2-D or ISO/IEC TR 11801-9910 using the MPTL setting and with a permanent link adapter and a patch cord adapter of the correct category rating.

For more information about the warranty, visit **Leviton.com/NS/Warranties**.

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