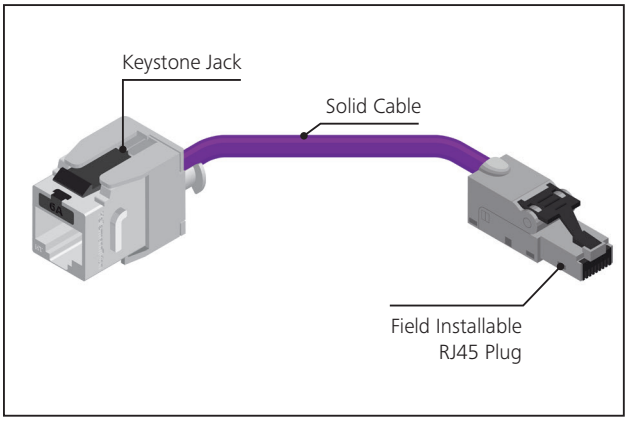
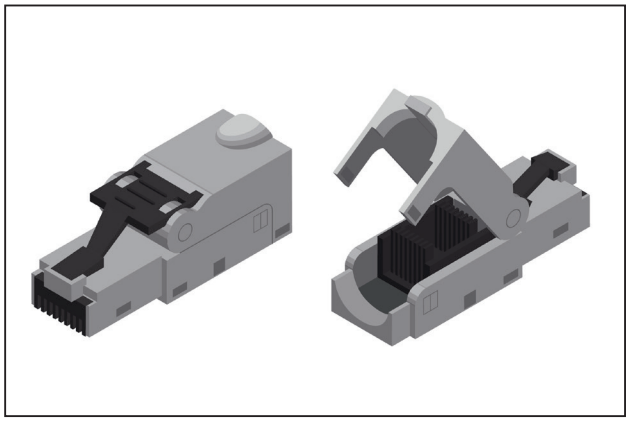
MPTL – Modular Plug Terminated Link
Product Information

In order to successfully apply for a 25 system warranty for a network that utilizes MPTLs requires testing correctly.

Below we explore why testing MPTLs is different from permanent link or channel testing.





Field Terminated Plug

Field Terminated Plug

Historically onsite RJ45 crimping has been straight forward for CAT5E and CAT6 with CAT6A being extremely difficult and unfavored.

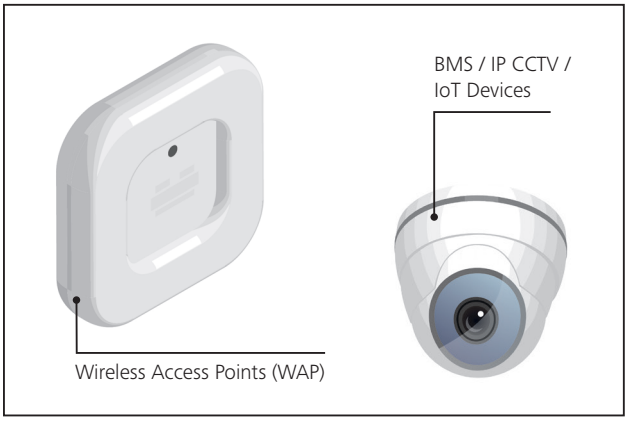
New CAT6A modular plugs have been designed to allow engineers to easily terminate them on-site without the need of a crimp tool. They work in a similar manner to tool free jacks where the conductors are sequenced and inserted finally terminated by closing the lid shut.

MPTL Drivers

Main driver to utilize this type of link can be attributed to the increased demand on higher bandwidth speeds & PoE applications via devices such as Wireless Access Points (WAPS), general building management system devices including CCTV and Access Control where reconfiguration is unlikely.

Updated design standards also recommend installing two CAT6A points for Wireless access points in new installations.

It is considered to be a lower cost link compared with a traditional Jack to jack link plus patchcord scenario.



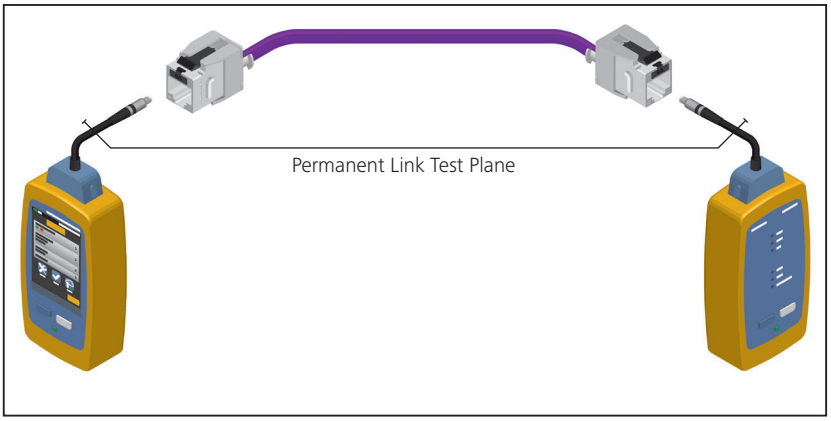
MPTL Drivers

Testing

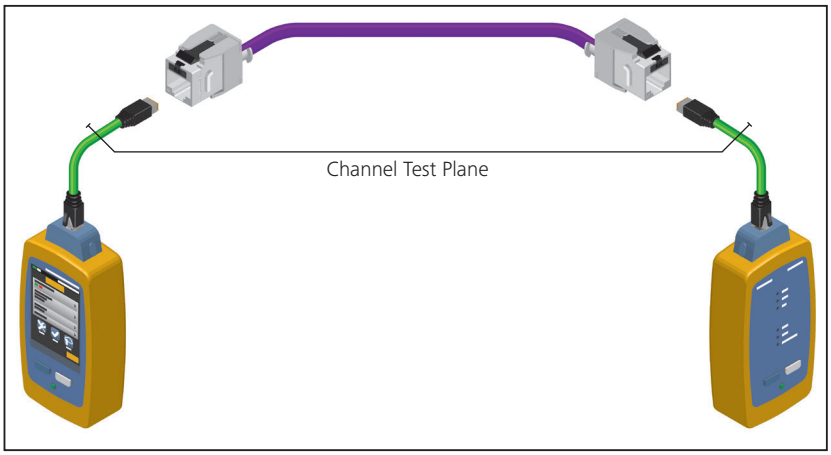
In order to successfully apply for a 25 system warranty for a network that utilizes MPTLs requires testing correctly. Below we explore why testing MPTLs is different from permanent link or channel testing.

Permanent Link Test Plane

The permanent link test measures performance for the fixed link between the first and last interconnections, this includes any optional consolidation point. The test plane excludes any equipment cords.



Permanent Link Test Plane



Channel Test Plane

Channel Test Plane

The channel test measures performance for the fixed link between the first and last connectors which includes any optional consolidation point, just like the permanent link test, except the equipment cords on either side are now included.

The test plane ends at the channel adaptors but does not include the interconnection between the channel adaptor and RJ45 plug.

MPTL Test Plane

It is common for engineers to create a modified permanent link test by utilizing a PLA (Permanent link adaptor) on the main unit and connect a channel adaptor on the remote unit to allow the modular RJ45 plug to be inserted.

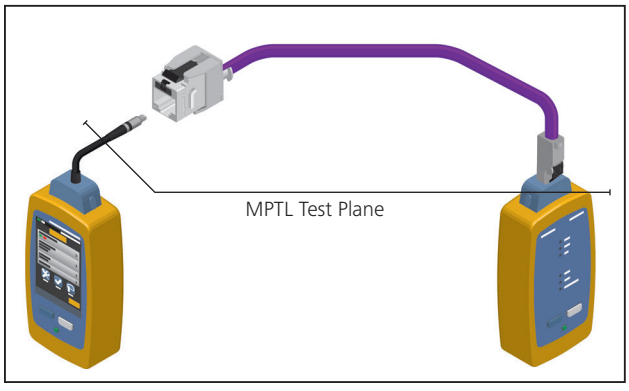
As the channel adaptor does not measure the immediate interconnection, the RJ45 modular plug is automatically excluded from the test plane and therefore the results will not give a true representation of the full Modular Plug Terminated Link (MPTL). Any performance issues relating to termination of the plug will not be shown in the results.

Patchcord Test Adaptor for MPTL

Level four testers now have the option to test MPTL, however, in order to capture the correct test plane the engineer must use a patchcord test adaptor on the remote side (not a channel adaptor)

Patchcord test adaptors are manufactured and supplied by category performance; i.e. you will require CAT6A patchcord adaptors to test a CAT6A MPTL, the adaptors are not backwards compatible.

The patchcord test adaptor allows for the immediate interconnection between adaptor and the RJ45 plug to be included in the test parameters and therefore will produce a true and accurate set of test results.



Patchcord Test Adaptor for MPTL