

Certification Tests of the AMP Communication Outlet System according to the latest draft of ISO/IEC 11801 Class E using FLUKE Handheld Tester DSP-4100™ or DSP-4000™

Today, when testing installed structured cabling systems to the requirements of ISO/IEC 11801 Class E or EN 50173 Class E (up to 250 MHz), the results are often dubious because of unsuitable equipment or wrong components.

This document provides guidelines and a checklist for testing AMP NETCONNECT Class E systems with FLUKE handheld testers.

For AMP NETCONNECT systems, no vendor specific measurement adapters or software solutions are required for the testers. All High Performance Category 5 components have to be testable according to our company specifications only by using standard components which adhere strictly to international, regional and national standards.

These stringent requirements are especially applied to the 250 MHz optimised components as for example the AMP Communications Outlet System.



Figure 1: Fluke DSP-4100™

Installed Cabling:

A Class E link with the AMP Communication Outlet System connectivity requires PiMF cable; 300 MHz (AMP Part No. 57892-1), 600 MHz (AMP Part No. 57893-1) or an equivalent. The maximum link length must not exceed 90 metres in accordance with ISO 11801.

Patch Panel and Outlets:

All kind of patch panels and telecommunications outlets from the AMP Communication Outlet System range can be applied. For correct installation please see the corresponding instruction sheets.



AMP Info

28.06.01

Class E - Link Tests with FLUKE networks DSP-4000 and 4100

Inserts for test measurements:

Testing must be done with single inserts in order to ensure that all the relevant parameters in the latest draft of ISO/IEC 11801 (PSNEXT, PSELFEXT, PSACR etc.) are tested. This insert is Part No. 284584-1 and is for applications up to 250 MHz. Please note that our inserts are designed for 200 mating cycles. After this, we recommend that you use a new one.

Handheld Testers:

These guidelines cover FLUKE DSP-4000™ and DSP-4100™ testers. The correct software must be loaded; version 3.7 for the DSP-4000 or 4.7 for the DSP-4100. These provide the ability to perform full standards compliant permanent link tests. They can be downloaded free of charge (see: <http://www.flukenetworks.com/>).

Two Channel Adapters (FLUKE DSP-LIA012 or 013 – supplied as a standard together with the Handheld Tester) as well as two System Patchcords (AMP PN 346926-8) with a length of 5 meters are required to perform the test.

The testers must be set to EN50173 Ch Class E or ISO11801 Ch Class E so that ‘Autotest’ can be run. The stored parameters comply with the latest draft of ISO/IEC 11801, dated February 2001. Careful use of the Channel Adapter allows for 2000 test cycles. Please be aware that the Patchcord is specified up to 750 mating cycles. This means with one Channel Adapter can be performed more than one million tests.

Checklist:

Installed System:	AMP Communications Outlet System	<input type="checkbox"/> OK
Termination:	In accordance with Instruction sheets	<input type="checkbox"/> OK
Installed Cable:	PiMF Cable 300 MHz or higher	<input type="checkbox"/> OK
Test Insert:	Single Insert Part No. 284584-1	<input type="checkbox"/> OK
Tester:	DSP-4000™ or DSP-4100™	<input type="checkbox"/> OK
Test Adapter:	DSP-LIA012 or DSP-LIA013	<input type="checkbox"/> OK
Software:	Version 3.7 (4000) or 4.7 (4100) or higher	<input type="checkbox"/> OK
Test Setting:	ISO11801 (EN50173) Ch Class E	<input type="checkbox"/> OK

Guaranteed mating cycles:

Patchcord:	750
Channel Adapter:	2000
AMP CO Insert:	200



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Summary:

Permanent Link Tests for the AMP Communication Outlet System with High Performance inserts (250 MHz) according to the latest draft of ISO/IEC 11801 2nd Edition Link Class E (250 MHz) are performed with standard components only! No vendor specific adapters or software solutions are required and therefore the test method is very cost effective and reliable.

The basis for this procedure is the dynamic connector compensation developed by FLUKE, which is used in all DSP's in order to ensure an accurate and standard compliant test of a complete channel.

Contact:

FLUKE

<http://www.flukenetworks.com/>



Notice:

This Test procedure considers the AMP CO System. The same document is also available for the new AMP CO System PLUS with the AMP Shielded Edge Connector MARK II

For additional information or in case of questions please contact your local AMP NETCONNECT Sales representative.

Your NETCONNECT Team.