

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



Figure 1: Fluke DSP-4100™

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 check-list 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 our Category 5, 6 and 7 components have to be testable according to our company specifications which adhere strictly to international, regional and national standards.

These stringent requirements are also applied to the new AMP Communications Outlet System PLUS with Screened Edge Connector Mark II

Installed Cabling:

A Class E link with the AMP Communication Outlet System PLUS 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:

Specific patch panels and telecommunications outlets from the AMP Communication Outlet System PLUS range are chosen. For correct installation please see the corresponding instruction sheets.



AMP Info

28.06.01

Class E - Permanent 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. 336548-1 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 permanent link adapters, FLUKE DSP-LIA101 with PM01 or PM0x, are required in order to test a permanent link. They are available as accessories for the handheld testers. The testers must be set to EN50173 P1 Class E or ISO11801 P1 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 PM (Personality Module) allows for 5000 to 15000 test cycles.

Checklist:

Installed System:	AMP Communications Outlet System <i>PLUS</i>	<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. 336548-1	<input type="checkbox"/> OK
Tester:	DSP-4000™ or DSP-4100™	<input type="checkbox"/> OK
Test Adapter:	DSP-LIA101 with PM01 or PM03	<input type="checkbox"/> OK
Software:	Version 3.7 or 4.7 or higher	<input type="checkbox"/> OK
Test Setting:	ISO11801 (EN50173) P1 Class E	<input type="checkbox"/> OK

Guaranteed mating cycles:

Test Adapter:	5000
AMP CO Insert:	200



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Summary:

Permanent Link Tests for the AMP Communication Outlet System PLUS with Category 6 inserts (Category 6 / 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 test procedure is very reliable because of the very rugged, high-performing and standards compliant construction of the Permanent Link Test Adapter, used with the DSPs series 4000 and 4100.

Contact:

FLUKE

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



Remark:

The PM01-Module is supplied together with the FLUKE LIA101 as a standard. The optional PM03 Module provides about 3 dB better results.

As an alternative to the permanent link test, a channel test can be performed using AMP NETCONNECT System patchcords.

Notice:

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

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

Your NETCONNECT Team.