

NETCONNECT* SL Series Category 5e Jacks**1. INTRODUCTION****1.1. Purpose**

Testing was performed on NETCONNECT* SL Series Category 5e Jacks to determine their conformance to the requirements of Product Specification 108-1990-2 Revision A.

1.2. Scope

This report covers the transmission performance of the NETCONNECT SL Series Category 5e Jacks. Testing was performed at Intertek Testing Services Inc., 3933 US Route 11, Cortland, New York 13045 between 14Feb02 and 12Mar02. The test file number for this testing is 3019525-001. This documentation is on file at and available from the Engineering Assurance Product Test Laboratory under file number CTL 4691-001.

1.3. Conclusion

The NETCONNECT SL Series Category 5e Jacks listed in paragraph 1.5., conformed to the transmission performance requirements of Product Specification 108-1990-2 Revision A.

1.4. Product Description

NETCONNECT Category 5e shielded and unshielded SL 110 jacks are designed for installation into various outlet plates, surface mount boxes, panels, and other similar type fittings. Jacks incorporate IDC terminals for terminating both shielded or unshielded twisted pair communications cable and will accommodate 22 - 24 AWG solid and 24 AWG stranded conductors. The maximum conductor insulation diameter is 1.27 mm [.050 in].

1.5. Test Specimens

Test specimens were representative of normal production lots. Specimens identified with the following part numbers were used for test:

Test Group	Quantity	Part Number	Description
1	30	1375191	NETCONNECT SL Series Category 5e Jacks

Figure 1

1.6. Environmental Conditions

Unless otherwise stated, the following environmental conditions prevailed during testing:

- Temperature: 15 to 35°C
- Relative Humidity: 25 to 75%

1.7. Qualification Test Sequence

Test or Examination	Test Group (a)
	1
Test Sequence (b)	
Attenuation	1
Near end crosstalk (NEXT)	2
Return loss	3
Far end crosstalk (FEXT)	4
Propagation delay	5
Propagation delay skew	6

NOTE (a) See paragraph 1.5.
 (b) Numbers indicate sequence in which tests are performed.

Figure 2

2. SUMMARY OF TESTING

2.1. Attenuation

Attenuation was tested to the requirements of ANSI/TIA/EIA-568-B.2, paragraph 5.4.2.

2.2. Near End Crosstalk (NEXT)

NEXT was tested to the requirements of ANSI/TIA/EIA-568-B.2, paragraph 5.4.3.

2.3. Return Loss

Return loss was tested to the requirements of ANSI/TIA/EIA-568-B.2, paragraph 5.4.4.

2.4. Far End Crosstalk (FEXT)

FEXT was tested to the requirements of ANSI/TIA/EIA-568-B.2, paragraph 5.4.5.

2.5. Propagation Delay

Propagation delay was tested to the requirements of ANSI/TIA/EIA-568-B.2, paragraph 5.4.6.

2.6. Propagation Delay Skew

Propagation delay skew was tested to the requirements of ANSI/TIA/EIA-568-B.2, paragraph 5.4.7.

3. TEST METHODS

3.1. Attenuation

The attenuation of all four-conductor pairs was measured from both ends in accordance with ASTM D4566-98, paragraph 26. Losses due to reflection, radiation, etc. were assumed to be part of the attenuation.

3.2. Near End Crosstalk (NEXT)

NEXT Measurements were made between the six combinations of the four-conductor pairs from both ends in accordance with ASTM D4566-98, paragraph 24.

3.3. Return Loss

Return loss measurements were made on all four-conductor pairs from both ends in accordance with ASTM D4566-98, paragraph 45.

3.4. Far End Crosstalk (FEXT)

FEXT was measured on twelve permutations of four-conductor pairs from one end only, in accordance with ASTM D4566-98, paragraph 25.

3.5. Propagation Delay

Propagation delay was computed in accordance with ASTM D4566-98, paragraph 40.

3.6. Propagation Delay Skew

Propagation delay skew was computed in accordance with ASTM D4566-98, paragraph 40.