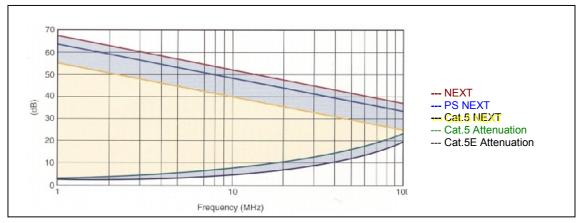


### Introduction:

The AMP NETCONNECT Enhanced Category 5 Cabling System **exceeds** all requirements as specified for the new **Enhanced Category 5 Standards** according TIA/EIA 568, ISO/IEC 11801 and EN 50173 and is therefore the solution to meet both your today's as well as your tomorrow's needs. This margin provides the end user peace of mind and protects his investement for a long term.

As Cables and Connecting Hardware must be designed to work together in a High Speed Cabling System, all parts of the AMP NETCONNECT Enhanced Category 5 Cabling System are engineered from a systems viewpoint.



Enhanced Category 5 LINK Performance

Enhanced Performance is important because in comparison to a classical Category 5 System the AMP NETCONNECT Enhanced Category 5 System provides more than 10 dB margin for NEXT at 100 MHz, a better PowerSum NEXT and a very low Skew. All these parameters are important for applications which deploy multi-pair transmissions like GigaBit Ethernet.

The AMP Enhanced Category 5 - 110 Connect - Cabling System is available **Shielded** (for FTP Cable) as well as an **unshielded** UTP System.

| performance margin giving greater signal integrity, increased reliability<br>and fewer headaches in administering the cabling system |        |  |  |
|--|--------|--|--|
|  | Margin | Benefit  |  |
| NEXT   | 12 dB  | Less Crosstalk                                 |  |
| PowerSum NEXT  | 6 dB   | Better performance in multi-pair applications  |  |
| Attenuation  | 2 dB   | Stronger received signals                      |  |
| ACR  | 6 dB   | Increased operating margin for LAN electronics |  |

The AMP NETCONNECT Enhanced Category 5 System provides a

## The system consists out of the following components:

Enhanced Category 5 Cable:

Enhanced Category 5 Modular Jacks

• Patch Panel: UTP: FTP:

Telecommunication Outelets:

FTP ( PVC & LSZH versions)
UTP ( PVC & LSZH versions)
( shielded & unshielded)

PCB & Discrete Modular Jack versions

Discrete Modular Jack version

Single & Dual (FTP, UTP) with DIN Faceplates Single (FTP, UTP) with 45x45 Faceplates Single (FTP, UTP) with 50x25 Faceplates Office Boxes (1 Port, 2 Ports, 4 Ports)





# **AMP NETCONNECT Enhanced Category 5 System Cables**

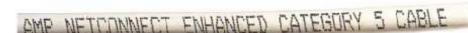
At the center of the system are the Enhanced Category 5 System Cables available both UTP and FTP. These high performance cable exceed the requirements for pair-to-pair as well as PowerSum near end crosstalk (NEXT). PowerSum NEXT is not only important for cable sharing, but also in emerging high speed 4 pair parallel applications like Gigabit Ethernet.

#### **AMP Part Numbers:**

| AMP PN   | Description                    |
|----------|--------------------------------|
| 57535-2  | Enhanced Cat.5 UTP Cable, PVC  |
| 57538-2  | Enhanced Cat.5 UTP Cable, LSZH |
|          |                                |
| 219413-2 | Enhanced Cat.5 FTP Cable, PVC  |
| 219420-2 | Enhanced Cat.5 FTP Cable, LSZH |

# The AMP NETCONNECT Enhanced Category 5 System Cable Performance at 100 MHz

|                  | AMP Enhanced<br>Cat.5 Cable | Category 5<br>Requirements |
|------------------|-----------------------------|----------------------------|
| typ. <b>NEXT</b> | 44 dB                       | 32 dB                      |
| PowerSum NEXT    | 38 dB                       | 32 dB                      |
| max. Attenuation | 22 dB                       | 22 dB                      |
| ACR typ.         | 22 dB                       | 10 dB                      |
| Skew             | < 25 ns                     | 45 ns                      |





### 110 Connect Enhanced Cat.5 Modular Jacks

This new 8 position Modular Jack offers enhanced performance at both the component and the link level. Additionally, to simplify installation and to offer increased flexibility, these jacks allow for termination to either the T568A or T568B wiring pattern. The jack is fully compatible with existing AMP NETCONNECT accessories such as faceplates, wall boxes and patch panels



#### AMP Part Numbers:

| 7 a. c. rta |   |  |
|-------------|---|--|
| AMP PN      | Description   |  |
|             | Enhanced Category 5, non keyed, UTP, universal wiring |  |
| 1116515-1   | Enhanced Category 5, non keyed, FTP, universal wiring |  |

(different colours available upon request)

| 110 Connect Hardware Performance at 100 MHz |              |             |                        |
|---|--------------|-------------|------------------------|
|   | Modular Jack | Patch Panel | Cat. 5<br>Requirements |
| NEXT  | 45.6 dB      | 44.8 dB     | 40.0 dB                |
| PowerSum <b>NEXT</b>                        | 42.0 dB      | 42.6 dB     | 40.0 dB                |
| Attenuation                                 | 0.17 dB      | 0.17 dB     | 0.40 dB                |





### 110 Connect Enhanced Patch Panels

The Enhanced Cat.5 Patch Panels are available in 2 versions

- PCB Patch Panels for UTP Cable
- Modular Patch Panels for UTP & FTP Cable

The **PCB Patch Panels** combine the ease of a 110-style punch down block on the back with the easy plugability of the modular interface on the front into a ready to install patch panel. They provide a universal wiring for T568A & T568B

The **Modular Patch Panels** are a flexible design to accommodate, both shielded and unshielded Enhanced Modular Jacks.

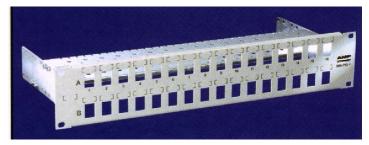
Both types of panels exceed the Enhanced Cat.5 specifiaction according ISO/IEC 11801 and EN50173



Enhanced Cat.5 PCB Patch Panel

### **AMP Part Numbers:**

| AMP PN   | Description                                   |
|----------|---|
| 406390-1 | 12 Port, Cat.5e, PCB Patch Panel, UTP         |
| 406330-1 | 24 Port, Cat.5e, PCB Patch Panel, UTP         |
| 406331-1 | 48 Port, Cat.5e, PCB Patch Panel, UTP         |
| 406332-1 | 96 Port, Cat.5e, PCB Patch Panel, UTP         |
| 966239-5 | 16 Port, Cat.5e, Modular Patch Panel, UTP     |
| 966240-5 | 32 Port, Cat.5e, Modular Patch Panel, UTP     |
|          |   |
| 966239-3 | 16 Port, Cat.5e, Modular Patch Panel shielded |
| 966240-3 | 32 Port, Cat.5e, Modular Patch Panel shielded |



Enhanced Cat.5 Modular Patch Panel

## **Enhanced Category 5 Telecommunication Outlets**

Various Outlets for different applications are available as complete installation kits:

- DIN size outlets (Single & Dual)
- AMP Office Boxes (1, 2 or 4 Port)
- 45x45 Outlets for Legrand Trunking System
- 50x25 Outlets

## AMP Part Numbers:

| AMP PN     | Description   |
|------------|---|
| 966105-3   | Dual Installation Kit, DIN size, shielded, almond                     |
| 2-966105-3 | Dual Installation Kit, Din size, shielded, white                      |
| 966106-3   | Single Installation Kit, DIN size, shielded, almond                   |
| 2-966106-3 | Single Installation Kit, DIN size, shielded, white                    |
| 966105-5   | Dual Installation Kit, DIN size, unshielded, almond                   |
| 2-966105-5 | Dual Installation Kit, DIN size, unshielded, white                    |
| 966106-5   | Single Installation Kit, DIN size, unshielded, almond                 |
| 2-966106-5 | Single Installation Kit, DIN size, unshielded, white                  |
| 183885-2   | AMP Office Box, 1 Port, including UTP Mod. Jack                       |
| 558521-2   | AMP Office Box, 2 Port, without Mod. Jack , almond                    |
| 558522-2   | AMP Office Box, 4 Port, without Mod. Jack , almond                    |
| 183861-1   | 45x45 Single Faceplate without Mod. Jack , white                      |
| 183956-1   | 45x45 Single UTP Installation Kit (incl. unshielded Mod. Jack), white |
| 346856-1   | 50x25 Faceplate, without Mod.Jack, white                              |
| 347021-1   | 50x25 UTP Installation Kit (incl. Unshielded Mod. Jack), white        |
| 1339044-1  | 50x25 UTP Installation Kit - Low Profile, white                       |









## Don't forget the Patchcords .....

Patchcords are playing an inportant role when considering the channel performance of a cabling system. Only high quality connectors in combination with a high performance patchcable provide the end user best performance and highest reliablilty over a long term! Independent tests shows that Enhanced Patchcords provide better performance for your cabling system than standard ones.

Patented AMP manufacturing technologies create Patchcords that provide not only superior performance to any yet achieved outside the test labs, but also more consistent, controlled performance than standard cable assemblies.

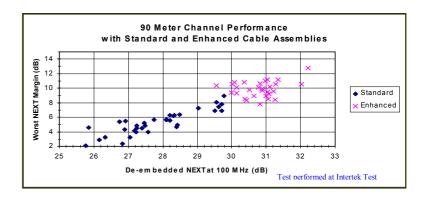


#### **AMP Part Numbers:**

| AMP PN    | Description                   |
|-----------|-------------------------------|
| 941761-x  | UTP Enhanced Cat.5 Patchcord  |
| 1344357-x | FTP Enhanced Cat. 5 Patchcord |

| Available in different len | igths (x): |  |
|----------------------------|------------|--|
|----------------------------|------------|--|

| -9 | 0.5 m | -3 | 4.0 m  |
|----|-------|----|--------|
| -5 | 1.0 m | -8 | 5.0 m  |
| -6 | 2.0 m | 10 | 7.5 m  |
| -7 | 3.0 m | 11 | 10.0 m |



### ..... and finally consider the warranty for your cabling system!

Some suppliers provide you a cable. Some other suppliers provide you connectors and connecting hardware. **AMP provides you a complete cabling system** based on a more than **50 years experience in interconnection systems**. This means that all components of the AMP NETCONNECT Enhanced Category 5 Cabling System are designed together and perform together at the highest possible performance and reliability!

And for that reason, AMP NETCONNECT provides to you as the end user a **25 years warranty** for the complete cabling system, because we are sure that it performs within all specifications over that period of time.

This means you can rely completely on your cabling system and your network will run without problems and with low maintenance costs!

Contact us or our local partners in your country. We will support you any time!

