



**DATA CENTER**

**SOLUTIONS**



# *Data Center*

**Data Center  
Infrastructure Solutions**



**Tyco Electronics**

Our commitment. Your advantage.

# Your source for Data Center Infrastructure Solutions

Data centers are the central nerve centers of connected enterprises. Your data center is more important today than ever. That makes data center growth, design and operation even more challenging. The relentless increases in processing power and bandwidth demand have been checked by the rising costs of power and space. Tyco Electronics offers cost-effective solutions to the performance, power, communications, thermal and mechanical challenges with minimal environmental impact.

## Tyco Electronics Data Center Infrastructure Solutions

Tyco Electronics offers AMP NETCONNECT data center systems that customers use to achieve their performance, financial, and environmental objectives. High density optical fiber and copper modular components offer standards-based performance. MPO and MRJ21 connector systems accelerate the turn-on time for new data centers and improve the time management of data center modifications for today's and tomorrow's data center architectures. Reusable, lead-free, RoHS-compliant products top off the features with a green-friendly advantage.



Modular, High Density, Power-Saving  
Pre-terminated Copper and Fiber Solutions  
Advanced Cable Management Solutions



**Fiber and Copper Systems for  
Your Data Center**



# Tyco Electronics Technology Leadership

Tyco Electronics works with world-leading IT equipment OEMs at the design stage, driving the critical connector technologies for their servers, storage, and networking equipment. For example, Tyco Electronics has joined the Cisco Technology Developer Partner program. Our relationship with Cisco means that customers can depend on Tyco Electronics' products to complement and interoperate with the Cisco hardware in their data centers and business communications networks. AMP NETCONNECT systems leverage Tyco Electronics' innovation - the kind you can only get from the world's largest passive connector company. Our experience in connector design and development gives our customers an advantage in connectivity technology. AMP NETCONNECT systems take that connector technology edge and build complete end-to-end, high performance connectivity and cabling solutions. Our customers employ data center cabling solution technologies that are years ahead of their counterparts, and work with us to anticipate and leverage future technology over the life of their data center.



US\$640M of annual RD&E investment worldwide in 2008

New products of last 3 years account for 34% of sales in 2008

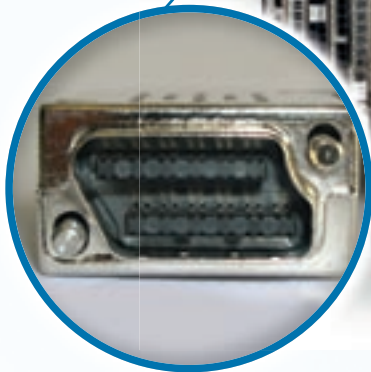
Nearly 8,000 engineers globally

16,000 patents issued or pending

## MPOPTIMATE optical fiber cabling and connectivity



## MRJ21 copper connector



## Tyco Electronics Standards Leadership

Today's standards activities drive tomorrow's new products. Tyco Electronics participates in over 40 different global and regional standards bodies. In fact, Tyco Electronics chaired both relevant subcommittees that produced the foundational TIA-942 and EN50173-5 infrastructure standards for data centers. Tyco Electronics is leading efforts in IEEE, ISO/IEC, CENELEC and TIA that will define tomorrow's high speed transport technologies.

# Tyco Electronics Provides Solutions

*Enhance your data center performance and your competitive edge with innovative Tyco Electronics solutions*

## **AMPTRAC**

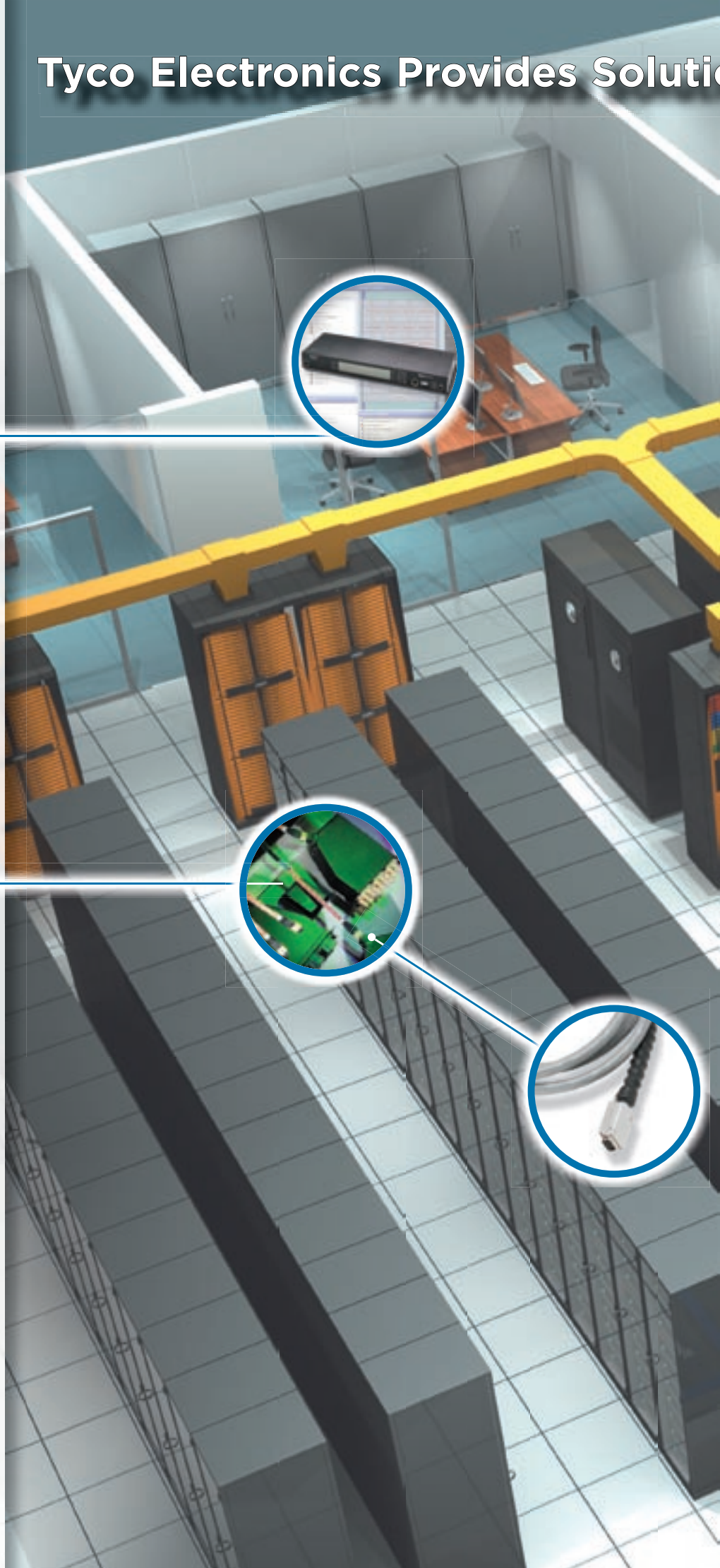
*Real-time, real smart infrastructure management systems*

- *Eliminates costly and time-consuming manual infrastructure documentation*
- *Reduces downtime and increases productivity*

## **MRJ21, MPO AND MPOPTIMATE**

*High density copper and fiber cabling*

- *Increase floor space efficiency*
- *Improve labor efficiency on site*
- *Reduce power consumption*
- *Reusable for moves, adds and changes*
- *MPOptimate equipped for 40/100G*
- *MRJ21 multi-pair modular copper cabling*





# s throughout Your Data Center



## • CABLE MANAGEMENT AND ROUTING

*Universal fiber and copper cable management system*

- Zero U
- High Density Smart Clips
- Complete portfolio of angled panels



## • 10G CABLING

*AMP NETCONNECT XG Cabling*

- Low-profile shielded cabling delivers 10 gigabit ethernet with reduced alien crosstalk
- Power-efficient optical fiber cabling for 10G and beyond



## • SECURE PRODUCTS

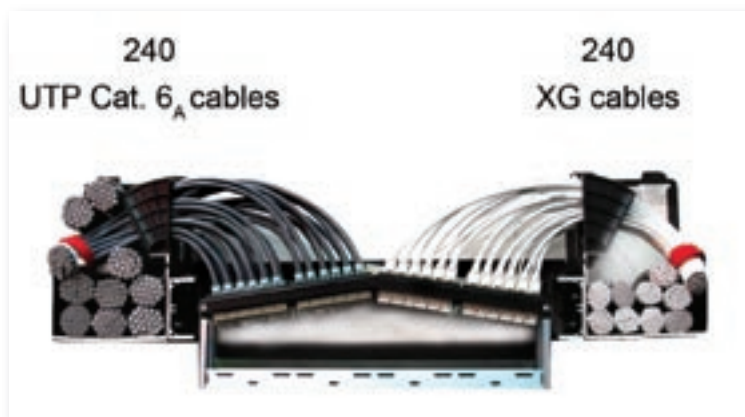
*Keyed copper and optical fiber solutions*

- Manage multiple networks with reduced risks
- Keyed connectors, adapters and cable assemblies prevent improper connections

# Key environmental and economic benefits

Our customers use Tyco Electronics AMP NETCONNECT products to green up their facilities and green up their bottom lines. Today's focus on green initiatives was yesterday's focus on component-level compliance.

Tyco Electronics was an early adopter of numerous green initiatives and today's AMP NETCONNECT products comply with the Reduction of Hazardous Substances (RoHS) initiatives.



**Maximize your rack space**



**More efficient cooling through improved airflow**

Coupling this compliance with the modular and re-usable features of MRJ21 and MPOPTIMATE cabling results in positive action to address green objectives, while also offering savings in installed cost and subsequent costs for data center modifications.

Environmental pressures are also impacting facility size and growth, with continuous pressure to reduce equipment footprint. The high density connectivity solutions require less space in patch panels and thus less floor space for racks, cabinets and servers.

With growing emphasis on operational costs, particularly power consumption, energy efficiency is a top-level concern. The

reduced diameter XG category 6<sub>A</sub> shielded solution and small diameter optical fiber solutions mean less impact on cooling system efficiencies. Shielded solutions also offer possibilities for lower power consumption at the server due to the lower signal-to-noise ratios required to operate shielded copper networks. Optical fiber offers lower power consumption compared to high data rate copper networks.



**RoHS Compliant**



**Reduced energy consumption through port consolidation**

**Today's Tyco Electronics data center solutions are part of successful, cost-effective energy and green compliance programs.**

Reduce floor footprint

Increase cooling efficiency

Reduced diameter cabling

Re-usable modular cabling and connectivity

RoHS compliant

Reduce power consumption



# Serving Customers through Global Design, Manufacturing, and Distribution



## Our global network is your local advantage

Tyco Electronics has a network of over 1,700 authorized AMP NETCONNECT Network Design and Installation (ND&I) partners in 59 countries.

## Global System Warranty



Tyco Electronics provides AMP NETCONNECT 25 year System and Application performance warranties to end user clients, meeting all applicable regional and international standards. See warranty terms for conditions and exclusions.

With approx. 96,000 employees, including 8,000 engineers, in over 50 countries, we can support your company wherever it chooses to go. With knowledge and experience comes understanding. We understand the issues our data center customers are facing and have developed the solutions you need for your technology investment.

Tyco Electronics has global supply chain capabilities and logistics support, with an extensive network of industry-leading distributors to stock AMP NETCONNECT products locally in locations around the globe. In addition, over 150 Tyco Electronics owned warehouses provide additional stocking flexibility.

Because one size does not fit all,  
we welcome the opportunity to meet  
with you and discuss how we can help you  
deliver the data center performance  
you require.

## TE AMP NETCONNECT Regional Sales Headquarters:

**North America**  
**Greensboro, NC, USA**  
Ph: +1-800-553-0938  
Fx: +1-717-986-7406

**Latin America**  
**Buenos Aires, Argentina**  
Ph: +54-11-4733-2200  
Fx: +54-11-4733-2282

**Europe**  
**Kessel-Lo, Belgium**  
Ph: +32-16-35-2190  
Fx: +32-16-35-2188

**Middle East & Africa**  
**Cergy-Pontoise, France**  
Ph: +33-1-3420-2122  
Fx: +33-1-3420-2268

**Asia**  
**Hong Kong, China**  
Ph: +852-2735-1628  
Fx: +852-2735-1625

**Pacific**  
**Sydney, Australia**  
Ph: +61-2-9554 2600  
Fx: +61-2-9554-2519

## TE AMP NETCONNECT in Europe, Middle East, Africa and India:

**Austria - Vienna**  
Ph: +43-1-90560-1204  
Fx: +43-1-90560-1270

**Egypt - Cairo**  
Ph: +20-2-2419-2334  
Fx: +20-2-2417-7647

**Hungary - Budapest**  
Ph: +36-1-289-1007  
Fx: +36-1-289-1010

**Netherlands - Den Bosch**  
Ph: +31-73-6246-246  
Fx: +31-73-6246-958

**Russia - Moscow**  
Ph: +7-495-790-7902  
Fx: +7-495-721-1894

**UK - Stanmore, Middx**  
Ph: +44-208-420-8140  
Fx: +44-208-954-7467

**Belgium - Kessel-Lo**  
Ph: +32-16-35-2190  
Fx: +32-16-35-2188

**Finland - Helsinki**  
Ph: +358-95-12-34-20  
Fx: +358-95-12-34-250

**India - Bangalore**  
Ph: +91-80-4011-5000  
Fx: +91-80-4011-5030

**Norway - Nesbru**  
Ph: +47-66-77-88-99  
Fx: +47-66-77-88-55

**Spain - Barcelona**  
Ph: +34-93-291-0330  
Fx: +34-93-291-0608

**Ukraine - Kiev**  
Ph: +380-44-206-2265  
Fx: +380-44-206-2264

**Bulgaria - Sofia**  
Ph: +359-2-971-2152  
Fx: +359-2-971-2153

**France - Cergy-Pontoise**  
Ph: +33-1-3420-2122  
Fx: +33-1-3420-2268

**Italy - Collegno (Torino)**  
Ph: +39-011-4012-111  
Fx: +39-011-4012-268

**Poland - Warsaw**  
Ph: +48-22-4576-700  
Fx: +48-22-4576-720

**Sweden - Upplands Väsby**  
Ph: +46-8-5072-5000  
Fx: +46-8-5072-5001

**U.A.E. - Dubai**  
Ph: +971-4-321-0201  
Fx: +971-4-321-6300

**Czech&Slovak Rep.- Kurim**  
Ph: +420-541-162-112  
Fx: +420-541-162-223

**Germany - Langen**  
Ph: +49-6103-709-1547  
Fx: +49-6103-709-1219

**Kazakhstan - Almaty**  
Ph: +7-327-244-5875  
Fx: +7-327-244-5877

**Portugal - Evora**  
Ph: +351-961-377-331  
Fx: +351-211-454-506

**Switzerland - Steinach**  
Ph: +41-71-447-0-447  
Fx: +41-71-447-0-423

**Denmark - Glostrup**  
Ph: +45-70-15-52-00  
Fx: +45-43-44-14-14

**Greece/Cyprus - Athens**  
Ph: +30-210-9370-396  
Fx: +30-210-9370-655

**Lithuania - Vilnius**  
Ph: +370-5-213-1402  
Fx: +370-5-213-1403

**Romania - Bucharest**  
Ph: +40-21-311-3479  
Fx: +40-21-312-0574

**Turkey - Istanbul**  
Ph: +90-212-281-8181  
Fx: +90-212-281-8184



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