Cat. 6A EL
Incredibly fast

Get more

Productive
Intuitive installation

Reliable
Dependable connection

Flexible
Wide range of applications
Just a few flicks of the wrist
The more demanding the application the simpler the installation. The more complex the networks the more efficiently the project work proceeds. That is what installers want. R&M fulfills their wish with the RJ45 Cat. 6A EL connection module.

EL stands for Easy Lock. Wiring and installation are finished in a matter of minutes. For experienced installers these tasks involve only a few flicks of the wrist. All they have to do is lay the conductors in the wire guide and slide the block into the jack; then close the wiring cover and shut the strain relief clip. The Cat. 6A connection is finished.

The following factors make the productive solution for structured cabling in offices and buildings so compelling:
- Self-explanatory use
- Quick tool-free assembly
- Dependable connection

Integrated strain relief renders cable ties unnecessary. Pinched cables are avoided as a result. In STP cabling, the strain relief clip simultaneously provides 360° shield connection. This approach eliminates time-consuming work steps. Before, it used to take days to cable a network distributor. With Cat. 6A EL, the task is over in a matter of hours.

“Never has a floor distributor been so quick to install.”

Solution for high-end networks
The Cat. 6A EL module from R&M facilitates the setup of high-end 500-MHz networks. Installers can offer their customers a fast, cost-effective way to the future with 10 Gigabit Ethernet. The module transmits the sensitive frequencies with crystal clarity and has generous reserves. That is because Cat. 6A EL has newly developed means of compensation to optimize signal transmission and attenuation values.

In combination with components from the R&Mfreenet, the module satisfies the specifications and performance requirements for the Class EA channel as stipulated in ISO/IEC 11801. The product’s high level of quality allows it to be certified to the component specifications of IEC 60603-7-41 and IEC 60603-7-51.
Advantageous IDC technology
The Cat. 6A EL module from R&M combines well-toughed installation convenience with top Swiss quality standards. This combination gives installers a sense of security at the start of this new era of Cat. 6A and 10 Gigabit Ethernet. That’s because the cable termination are always works at the first go. Installers can carry out termination flawlessly and without extra training. That saves time, complaints, trouble-shooting and reworking.

The high reliability is especially evident in the wire termination. The Insulation Displacement Contact (IDC) technology developed by R&M is based on sturdy, tinned contact design. They cut through the conductor insulation as precisely as a Swiss knife without damaging it. That means the insulation retains its protective effect and surrounds the IDC and the contact area on the conductor. The connection is consequently:
- Resistant to tensile stresses and vibration; stable at varying temperatures
- Gas-, water- and dust-proof and therefore corrosion-resistant

The defined functional reliability applies to stranded and solid wire buffer (fiber) in like manner In Power over Ethernet (PoE) applications, the contacts do not heat up.

That means:
- The desired performance is available from the very beginning.
- Transmission values comply with standards are reproducible and durably stable.

Tested one-hundred percent
The fully developed production process ensures uniformly high quality in line with the no-compromise principles of R&M. In production, every component is fully tested for return loss (RL), near end crosstalk (NEXT), dielectric strength and inherent short-circuit-proofness. Installers and users alike can rest assured that they are always using a module that fully meets the specifications.

“Excellent signal and attenuation values.”

In addition, there is the 25-year system guarantee for qualified partners under the certification and warranty program.
Flexible.
Versatile applications.

On to the future with Cat. 6A
Structured cabling in offices and buildings will have to deliver substantially greater performances in the future than all earlier installations. Networks will transmit huge, data volumes at ever higher speeds between an increasing number of terminals. Cloud applications and virtualization will require an unprecedentedly high level of service quality. This requires sound performance and robust high-frequency technology on the passive infrastructure. Network operation with 10 Gigabit Ethernet (10 GbE) on all floors of offices will become the standard.

In addition, there will be physical challenges from the more prevalent use of Wireless LAN (WLAN), Internet of Things (IOT) and Power over Ethernet (PoE). Another aspect to keep in mind is the integration of communication, multimedia, safety and building technologies into the Ethernet/IP world (All over IP). Local data networks have to support these trends and diverse applications flexibly and comprehensively. R&M developed the Cat. 6A EL module for precisely this purpose – as a universal solution for structured cabling.

Cat. 6A components and Class EA channel as specified in ISO/IEC 11801 meet future requirements in every respect. They represent what is currently the highest performance category for copper cabling. R&M has the top position in this class, offering an unsurpassed convenience of installation plus groundbreaking quality and operational reliability. That is what the Cat. 6A EL module and other high-end Cat. 6A solutions stand for.

“Unlimited possibility in structured cabling.”

Shielded and unshielded
Planners, installers and users choose unshielded twisted pair (UTP) cabling or shielded twisted pair (STP) cabling based on the application and reliability requirements involved. The Cat. 6A EL module from R&M supports either approach. With the shielded version, the jack consists of a die-cast housing. In the unshielded version, the jack housing is made of a special plastic that suppresses Alien Next (ANEXT).
The 90° solution – when space is crucial

With the Cat. 6a, installers can make structured cabling fit for the increasing demands of local data networks and for 10 Gigabit Ethernet. But in many offices and buildings, there is little space for new installations of this kind. Often times, installers have to house modern connection technology in older narrow ducts. Cabling can hardly be laid in these ducts in radii that comply with the standards. Or pragmatic special solutions must be found on site while construction is going on.

As an option to the Cat. 6a EL module a 90° (right-angled) cable exit is available. It is available as an optional accessory. Using this angled cable exit, installers can avoid manually bending cables in tight outlet boxes and, as a result, prevent diminished efficiency in the LAN.

If required, the 90° (right-angled) solution can be retrofitted with a few flicks of the wrist. Firstly, the strain relief clip on the Cat. 6a EL standard module is removed. The second step is then the familiar wiring procedure. Finally, the 90° angle is attached at the back and the strain relief is closed.

The Cat. 6a EL module retains its full performance capacity when the 90° cable exit is used. The defined guidance of the twisted pairs at an angle prevents diminished performance.

“The module can be wired in no time.”
Compatible with adapters and platforms
The lean and focused Cat. 6A EL program can be integrated seamlessly in the R&M system solutions. For instance, the RJ45 jack fits together with all existing and future components of the modular cabling system R&Mfreenet. An economical total solution from a single source for modern structured cabling. Simplifies planning, logistics, initial installation and expansions of a cabling system.

Together with R&Mfreenet, users assure the optimum overall performance of network cabling. R&M components comply with international standards, so they can be used interoperably. Compatibility also applies to the three-level R&M safety system and the innovative infrastructure management system R&MinteliPhy. Adapters for the first Cat. 6A generation are in perfect harmony with the Cat. 6A EL module, too.

Moreover, R&M offers its partners in the market pre-terminated solutions. For instance, factory-inspected distributors that are tailor-made in terms of size and equipment can be delivered ready to install. That allows projects to be carried out quickly and reliably. Planners and installers profit from unbeatable value for the money and from the always reliable quality, production and distribution to which they are accustomed.

The bottom line: Cat. 6A EL from R&M is the universal and most efficient solution for the next generation of structured cabling.

«We provide connectivity that matters.»
Your benefits.
At a glance.

More productivity
- Efficient solution for sophisticated networks
- Terminated in just a few steps
- Integrated strain relief

More flexibility
- Universal solution for structured cabling
- For all cable types and diameters
- Optional 90° exit
- Can be reterminated

More security
- Self-explanatory, intuitive installation
- Error-free termination
- Transmission performance in compliance with standards
- Reliable insulation displacement contacts (IDC)
- One-hundred percent quality assurance
- PoE-compatible up to 4PPoE

R813504  Cat. 6a, EL connection module, 1xRJ45/s
         Freenet, 10x
R813505  Cat. 6a, EL connection module, 1xRJ45/s
         Freenet, 100x
R813506  Cat. 6a, EL connection module, 1xRJ45/u
         Freenet, 10x
R813507  Cat. 6a, EL connection module, 1xRJ45/u
         Freenet, 100x
R813508  Cat. 6a, EL connection module, 1xRJ45/s
         Special, 10x
R813509  Cat. 6a, EL connection module, 1xRJ45/s
         Special, 100x
R813510  Cat. 6a, EL connection module, 1xRJ45/u
         Special, 10x
R813511  Cat. 6a, EL connection module, 1xRJ45/u
         Special, 100x
R813512  Cat. 6a, EL connection module, 1xRJ45/s
         Keystone, 10x
R823246  Cat. 6a, EL connection module, 10xRJ45/s,
         90° entry
R820784  Cat. 6a, EL wiring tool

R813505  Cat. 6a, EL connection module, 1xRJ45/s
         Freenet, 100x
R813513  Cat. 6a, EL connection module, 1xRJ45/s
         Keystone, 10x
R813514  Cat. 6a, EL connection module, 1xRJ45/u
         Keystone, 100x
R813515  Cat. 6a, EL connection module, 1xRJ45/u
         Keystone, 10x
R813516  Cat. 6a, EL connection module, 1xRJ45/s
         Snap-in, black, 10x
R813517  Cat. 6a, EL connection module, 1xRJ45/s
         Snap-in, black, 100x
R813518  Cat. 6a, EL connection module, 1xRJ45/u
         Snap-in, black, 10x
R813519  Cat. 6a, EL connection module, 1xRJ45/u
         Snap-in, black, 100x
R813520  Cat. 6a, EL connection module, 1xRJ45/s
         Adapter No. 1, 10x
R813521  Cat. 6a, EL connection module, 1xRJ45/u
         Adapter No. 1, 10x
R823247  Cat. 6a, EL connection module, 10xRJ45/u,
         90° entry

For more information and products, visit www.rdm.com